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## Parental leave policy for ophthalmology residents: Results of a nationwide cross-sectional study of program directors

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### Abstract

**Background:** Many residents become parents during residency and the adequacy of parental leave is integrally related to resident wellness.

**Objective:** To understand current parental leave policies in ophthalmology residency programs and program director perceptions of the impact of parental leave on trainees.

**Design:** Cross-sectional study.

**Setting:** Multi-center among all U.S. ophthalmology residency programs.

**Participants:** Ophthalmology residency program directors during the 2017–2018 academic year.

**Results:** Sixty-eight percent (82/120) program directors participated in this study. The majority of programs had written maternity leave policies (89%) and partner leave policies (72%). The typical duration of maternity leave taken ranged from 4–6 weeks while typical partner leave duration taken ranged from 1 day to 2 weeks. Residents who take leave may need to extend training at 72% of programs. Program directors perceived that parental leave negatively impacts resident scholarly activities and surgical skills and volume. Male program directors, relative to female program directors, perceived that becoming a childbearing parent negatively impacts resident dedication to patient care. Program directors raised concerns including local support and policy, extension of residency, impact on residents, impact on programs, consistency and fairness, and desire for national policy change.

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**Conclusions:** Parental leave practices vary significantly among ophthalmology training programs with residents typically taking less leave than permitted. Program directors are challenged to accommodate parental leave while balancing resident training and wellness for all trainees in their program.

### Keywords

Parental leave; Maternity leave; Paternal leave; Childbearing; Parenting

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### Introduction

Residency training coincides with a time in life that many residents plan to become parents<sup>1</sup> and may take parental leave<sup>2</sup>. Ophthalmology ranks number 14 out of 34 of residency specialties with the highest female resident percentage, according to data from the Accreditation Council for Graduate Medical Education (ACGME)<sup>3</sup>. Furthermore, it is the third highest among surgical specialties by female resident percentage<sup>3</sup>. Thus, the topic of maternity leave is particularly relevant to ophthalmology residents.

The ACGME recognizes the need for parental leave and stipulates that each program must allow an appropriate length of absence for residents. However, the policy does not provide any specific operating guidelines, resulting in a wide variability of implementation of parental leave policies across different specialties<sup>4,5</sup> and among different programs within the same specialty<sup>6,7</sup>.

At this study's inception, the American Board of Ophthalmology (ABO) certification guidelines mandated a minimum of one PGY-1 year followed by 36 months of ACGME-accredited residency training in ophthalmology, without specifying specifics for parental leave length<sup>8</sup>. The absence of a guideline pertaining to parental leave leaves each residency program to independently interpret how much time may be taken off for parental leave without extension of training. By this study's conclusion, the ABO amended its guideline to specify that less than 6 months of training at any PGY level is not acceptable for board certification. However, how parental leave should be implemented remains vague.

The American Academy of Pediatrics and American College of Obstetrics and Gynecology recommend 6 weeks minimum of parental leave for residents to promote parental and child well-being<sup>9,10</sup>. A study of residents in all specialties showed improved wellness with 8 or greater weeks of maternity leave<sup>2</sup>. Short maternity leave length and lack of support negatively influenced dermatology resident wellness<sup>11</sup>.

Recommendations also exist to establish 6 weeks minimum of parental leave with intent to move towards 12 weeks, transitioning to competency-based requirements, providing sufficient staffing to reduce burden on colleagues, and developing creative solutions to enhance flexibility for trainee-parents<sup>12</sup>. It is unknown how well ophthalmology residency programs have incorporated recommendations for better parental leave.

This study seeks to understand current parental leave policies and practices among ophthalmology training programs through a comprehensive national survey of program

directors and to understand current attitudes and challenges in accommodating parental leave for trainees. Furthermore, recommendations to minimize the impact of parental leave on residents and training programs are discussed.

## Methods

A questionnaire on resident parental status, parental leave policy and use, and perceived effects of childbearing was developed. Some components were adopted from a survey tool used to evaluate parental leave in obstetrics and gynecology<sup>6</sup>. Our survey had 23 questions (21 multiple choice and 2 free response) (Supplemental Table 1). All questions were required, with the exception of an optional free-response question. This study was reviewed and determined to be exempt by the Johns Hopkins University Institutional Review Board.

The survey was distributed electronically to all 120 program directors of ACGME-accredited ophthalmology residency programs in the United States using Qualtrics (Qualtrics Inc., Provo, UT). Data collection occurred from July 23, 2018, to September 13, 2018. Four reminder emails were sent. Survey participants were informed that completion of the survey served as consent to participate in the study and were offered an optional \$5 gift card. Only fully completed surveys were included. Statistical analysis was performed using Stata version 14.2 (StataCorp LP, College Station, Texas). Free text responses were analyzed using content analysis. Themes were identified through an iterative process involving three authors (DS, BL, and KW) and were reviewed by three additional authors (FW, RS, and ES) for additional input. The three initial authors (DS, BL, and KW) then agreed on a consensus theme.

## Results

A total of 82/120 (68.3%) program directors from the 2017–2018 academic year completed the survey, of which 27% (22/82) were females and 73% (60/82) were males. The number of years in residency leadership varied: 9% (7/82) had been in leadership for 0–2 years; 32% (26/82), 3–5 years; 26% (21/82), 6–10 years; and 34% (28/82), over 10 years. Academic programs, defined as programs associated with medical schools, consisted of 88% (72/82) of responses, 7% (6/82) of responses were from nonacademic programs, and 5% (4/82) were from military programs. Maternity leave was defined as leave for a childbearing parent, while partner leave was for a non-childbearing parent. Among programs, 89% (73/82) had written maternity leave policies, and 72% (59/82) had written partner leave policies. Spearman correlation indicated a weak positive correlation between program size and number of residents with children ( $\rho(80)=0.25$ ,  $p=0.02$ ), a moderate positive correlation between program size and number of female residents with children ( $\rho(80)=0.37$ ,  $p<0.001$ ), and no correlation between program size and number of male residents with children ( $\rho(80)=0.02$ ,  $p=0.84$ ).

More ophthalmology residency programs were composed of a higher percentage of male versus female residents (Figure 1a). The overall ratio of male to female residents in the sample was 643 (60.4%) to 421 (39.6%). There were more male residents with children (153) than female residents with children (68) (Figure 1b). Compared to male residents,

female residents were 32% less likely to have children (odds ratio=0.68, 95% CI=0.50–0.93,  $p<0.05$ ).

The majority of program directors reported that within the last 3 years, there were 1–2 residents taking maternity leave and 1–2 residents taking partner leave (Figure 2a). The Kruskal-Wallis test demonstrated that larger program size was correlated with increased maternity leave frequency ( $X^2(3)=12.34$ ,  $p<0.01$ ). However, program size had no correlation with partner leave frequency ( $X^2(3)=1.78$ ,  $p=0.62$ ).

The most common maternity leave length taken by residents was 4–6 weeks; however, the most common maternity leave length allowed was over 8 weeks (Figure 2b). As for partner leave, between 1 day and 2 weeks was most frequently taken but between 2–4 weeks was most commonly allowed. Fisher's exact test showed that the usual time taken for parental leave was correlated to the maximum time allowed for both maternity leave ( $p<0.001$ ) and partner leave ( $p<0.01$ ).

Similarities were found in program directors' responses regarding parental leave (Table 1). Almost all programs (96%, 79/82) require other residents to cover clinical duties for residents on parental leave. Most program directors reported that they would have residents make up missed rotations (73%, 60/82) or extend training depending on how much time is missed (72%, 59/82). However, over the last 3 years, only 15% (12/82) of programs had at least 1 resident and 5% (4/82) had at least 2 residents who extended training.

Overall, program directors perceive that parental leave negatively impacts resident scholarly activities (Figure 3a) and surgical skills and volume (Figure 3b). The Wilcoxon Signed-Rank test showed that program directors perceived a negative impact on resident scholarly activities ( $Z=-4.44$ ,  $p<0.001$ ) and on surgical skills and volume for childbearing parents versus non-childbearing parents ( $Z=-5.11$ ,  $p<0.001$ ). There were no significant perceived differences in resident well-being, non-surgical clinical skills, timeliness, medical knowledge competency, and dedication to patient care. However, the Kruskal-Wallis test demonstrated that male, relative to female, program directors perceived that becoming a childbearing parent had a negative impact on resident dedication to patient care compared to becoming a non-childbearing parent ( $X^2(1)=3.95$ ,  $p<0.05$ ). The sex of program directors or timing of their own parenthood did not significantly affect how the impact of parental leave was perceived.

Content analysis of qualitative free responses ( $n=37$ ) showed that (Table 2) program directors iterated difficulty around residents taking parental leave and around the impact on training (Table 2). Main themes identified include desire for local support and policy changes (43%, 18/37), extension of residency and impact on fellowship (30%, 11/37), impact on residents (46%, 17/37), impact on the program (16%, 6/37), consistency and fairness (14%, 5/37), and desire for national policy change (11%, 4/37). Only one program director expressed that "new parenthood particularly negatively impacts residents and fellows because the demands of their job do not leave much room for anything else." Five program directors expressed that parenthood or parental leave does not negatively affect training (Table 2).

## Discussion

Our results showed that in the last 3 years, most ophthalmology programs had at least one resident take parental leave (Figure 2a). The majority of the responding programs (89%) had written maternity leave policies but fewer (72%) had written partner leave policies. The lack of written parental leave policy may make some trainees more vulnerable to inadequate leave or stigma associated with parental leave<sup>13</sup>. Responding program directors seem to reflect the overall demographics of ophthalmology program directors<sup>14</sup>, including distribution of gender and leadership experience. Program directors thought it was important for residents with children to be informed on parental leave policy when choosing programs and to have local support, including childcare and colleague support (Table 2). Program directors in obstetrics and gynecology made similar comments in another study<sup>6</sup>.

Male ophthalmology residents were more likely than female residents to have children during residency (Figure 1b). This finding may be secondary to studies showing that females physicians delay important life decisions, including childbearing<sup>15</sup>, and that female biomedical researchers are more concerned about repercussions of taking leave and slowed career progress<sup>16</sup>. Interestingly, studies show a lower risk of burnout amongst resident surgeons with children<sup>17</sup> and greater job satisfaction and happiness in surgical residents who are married or have children, although this was largely a male-driven finding<sup>18</sup>.

The American Academy of Pediatrics and the American Congress of Obstetricians and Gynecologists recommend providing residents with 6 weeks minimum of paid parental leave<sup>9,10</sup>. The typical maternity leave length frequently was less than the recommend 6-week leave, although most program policies allowed 8 weeks or more of leave (Figure 2b). The typical partner leave length was also significantly shorter than the typical maternity leave length and the amount of leave permitted. Partner leave length showed a bimodal distribution, with one peak centered on 2–4 weeks and another on 8 or more weeks, illustrating the diverse policies employed by various institutions. In other specialties, barriers to parental leave include concerns with negative stigma during pregnancy<sup>19,20</sup> and perceptions that parental leave burdens colleagues<sup>13,21,22</sup>.

While program directors try their best to grant adequate parental leave for residents, our survey revealed barriers and challenges that program directors face when making such accommodations. Despite frequent need for parental leave (Figure 2a), the ACGME policy lacks specific operating guidelines for leave<sup>4,5</sup>. Similarly, the ABO does not define how parental leave should be handled and what activities count towards training time. In our survey, some program directors indicated a need for national policy or clarification set by the ABO regarding minimum requirements (Table 2). Program directors also balance time taken for leave with the need for extension of training and inability to start fellowship on time. ABO guidelines have changed since survey distribution from originally mandating 36 months of ophthalmology training to requiring a minimum of 6 months of training per year. This flexibility provides program directors more discretion to utilize competency-based training requirements rather than time-based requirements. Other professional organizations have clearly defined leave policies for new parents. The American Board of Surgery (ABS) specifies that in a standard 5-year residency, residents may take parental leave as long as

they complete 142 weeks of training in the first three years and 94 weeks in the last two years of training<sup>23</sup>. It remains to be seen whether the changes in ophthalmology policies and recommendations influence the frequency and time that parental leave is both provided and or utilized among trainees.

In addition, program directors also expressed concerns over issues of fairness to trainees who do not take leave (Table 2). Finding coverage for the resident on leave is challenging<sup>6</sup> because most programs rely on co-residents to provide coverage (Table 1). Ophthalmology residency programs have fewer residents than other specialty residency programs<sup>3,24</sup>, thereby increasing the relative burden in ophthalmology placed on co-residents. The incorporation of currently underrepresented advanced practice providers, such as physician assistants, in ophthalmology could be a possible solution to reduce work burden on co-residents in the future<sup>25,26</sup>. Additionally, transitioning to integrated internships in ophthalmology might lessen the impact of redistributed work by increasing the total number of residents in the program.

Some residency programs, such as the pediatric residency program at University of California, San Francisco (UCSF)<sup>27</sup>, implement a Flexible Option (FO) where residents have additional time for parental leave, electives, research, or moonlighting. FO also creates a larger pool of co-residents to provide coverage; our results demonstrated a correlation between increasing frequency of maternity leave with a larger program size. However, training is extended for all residents, which might not be desirable to trainees. The ABS also has a 6-year surgical residency option<sup>23</sup> which also provides residents more flexibility to take additional time for parental leave, similar to FO at UCSF.

It is concerning that program directors held an overall negative perception of the effects of parental leave on scholarly activities and on surgical skills and volume (Figure 3). Studies in other specialties showed that taking parental leave did not decrease publication numbers<sup>28</sup>, total case numbers, board pass rates, and program graduation rates<sup>29</sup>. In ophthalmology, parental leave did not decrease surgical numbers<sup>30</sup>; however, surgical numbers are lower for females compared to males irrespective of parental leave<sup>30</sup>. Similar findings in other specialties<sup>6,7</sup> also demonstrated program directors held negative perceptions of childbearing on resident performance. However, only 9% of general surgery program directors held negative perception of the impact on scholarly activities<sup>7</sup>, compared to 60% in our study.

It is further concerning that we found male program directors, relative to female program directors, have a greater negative perception of the impact of being a childbearing parent compared to being a non-childbearing parent. Studies show that faculty gender affects resident evaluations<sup>31</sup> and that evaluations of male and female residents contain differences in qualitative feedback<sup>32,33</sup> and milestone attainment<sup>32,34</sup>. Thus, evaluator gender may bias assessments of male versus female trainees. It is possible that this bias contributes to the perception held by male program directors regarding the negative impact of becoming a childbearing parent versus a non-childbearing parent. Furthermore, it is unknown if the greater negative perception of childbearing is rooted in gender bias, since childbearing parents consist of only female residents while non-childbearing parents may more frequently be male. It is possible that this negative perception of parental leave impact on childbearing

residents is a reflection of underlying gender bias as opposed to the actual need for parental leave.

While our study is the first evaluation of parental leave policies for ophthalmology training programs, there are several limitations. Although there was a healthy response rate of 68%, it is unknown whether parental leave policies and practices might be significantly different at non-responding programs. Furthermore, policies are fluid and may be further updated, evidenced by the recent change in ABO policy. Paid versus unpaid leave was not explored; however, finances of leave are another burden for trainees warrants consideration. Usage of vacation time for parental leave and leave length prior to extension of training were not specifically addressed. Thus, some programs may have reported maximum parental leave while others may have reported parental leave plus maximum vacation time. This study also did not explore adoption versus childbearing; however, policies set forth by the Family Medical Leave Act (FMLA) of 1993<sup>35</sup>, American Board of Surgery<sup>23</sup>, American Academy of Pediatrics<sup>9</sup>, and American College of Obstetrics and Gynecology<sup>10</sup> treat childbearing and child adopting leave as the same. Generalizability is only limited to the scope of ophthalmology, and our results may not apply to residents in other specialties. Future studies might explore trainee perceptions of parental leave. In addition, examination of the impact of parental leave on objective measures of resident performance might help inform and modify program director perceptions of parental leave on trainees.

Parental leave can impact resident wellness. Depression, burnout, or suicide with reasons related to family and health<sup>36</sup> affect up to 68% of ophthalmology residents<sup>37</sup>. Gradual return to rotations after having children may help minimize stress for residents<sup>38</sup>. The benefits of providing generous parental leave include increased parent wellness, infant health, and employee productivity<sup>39,40</sup>. Barriers associated with generous parental leave include increasing work burden on co-residents, completing training requirements, and graduating on time for fellowship.

## Conclusions

Policies and practices pertaining to parental leave for ophthalmology residents vary significantly among residency programs; in many cases, residents are taking less than the recommended 6 weeks of parental leave. Program directors must do their best to accommodate parental leave while balancing resident training and wellness for all trainees. Our study also demonstrates a negative perception among ophthalmology program directors of the impact of parental leave on resident training which warrants further investigation.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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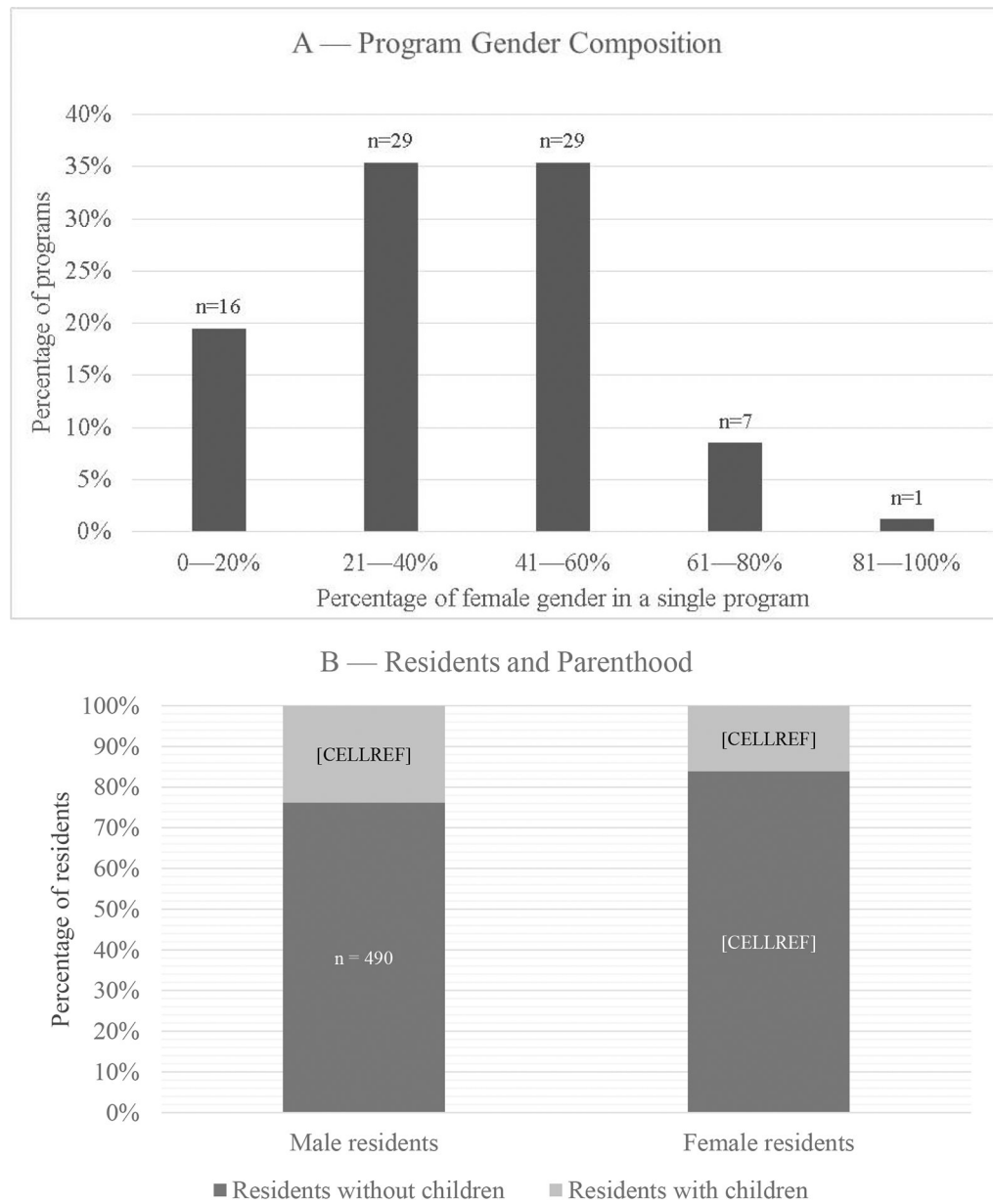
## References

1. Blair JE, Mayer AP, Caubet SL, Norby SM, Connor MIO, Hayes SN. Pregnancy and Parental Leave During Graduate Medical Education. 2016;91(7):972–978.
2. Stack SW, Mckinney CM, Spiekerman C, Best JA. Childbearing and maternity leave in residency : determinants and well-being outcomes. 2018:1–6.
3. ACGME Data Resource Book, 2017–2018. [https://www.acgme.org/Portals/0/PFAAssets/PublicationsBooks/2017-2018\\_ACGME\\_DATABOOK\\_DOCUMENT.pdf](https://www.acgme.org/Portals/0/PFAAssets/PublicationsBooks/2017-2018_ACGME_DATABOOK_DOCUMENT.pdf). Accessed April 25, 2019.
4. Riano NS, Linos E, Accurso E. Paid Family and Childbearing Leave Policies at Top US Medical Schools. JAMA. 2018;319(6):611–614. [PubMed: 29450516]
5. Varda BK, Glover IV M. Specialty Board Leave Policies for Resident Physicians Requesting Parental Leave. JAMA. 2018;320(22):2374–2377. [PubMed: 30535211]
6. Hariton E, Matthews B, Burns A, Akileswaran C, Berkowitz LR. Pregnancy and parental leave among obstetrics and gynecology residents: results of a nationwide survey of program directors. Am J Obstet Gynecol 2018;(May):1–8.
7. Sandler BJ, Tackett JJ, Yoo PS. Pregnancy and Parenthood among Surgery Residents : Results of the First Nationwide Survey of General Surgery Residency Program Directors. 2016:1090–1096.
8. American Board of Ophthalmology. <https://abop.org/become-certified/requirements/>. Accessed April 25, 2019.
9. Fussel JJ, Johnson LW. Parental Leave for Residents and Pediatric Training Programs. Pediatrics. 2013;131(2):387–390. [PubMed: 23359582]
10. Statement of Policy. Exec Board Am Coll Obstet Gynecol Am Congr Obstet Gynecol.
11. Mattessich S, Shea K, Whitaker-Worth D. International Journal of Women’s Dermatology Parenting and female dermatologists ‘ perceptions of work-life balance. Int J Women’s Dermatology. 2017;3(3):127–130.
12. Weinstein DF, Mangurian C, Jagsi R. Parenting during graduate medical training - Practical policy solutions to promote change. N Engl J Med. 2019.
13. Rangel EL, Lyu H, Haider AH, Castillo-Angeles M, Doherty GM, Smink DS. Factors Associated with Residency and Career Dissatisfaction in Childbearing Surgical Residents. JAMA Surg. 2018;153(11):1004–1011. [PubMed: 30073246]
14. Kloosterboer A, Yannuzzi NA, Gedde SJ, Sridhar J. Residency Program Directors of United States Ophthalmology Programs: A Descriptive Analysis. Am J Ophthalmol. 2020;209:71–76. [PubMed: 31525356]
15. Bering J, Pflibsen L, Eno C, Radhakrishnan P. Deferred Personal Life Decisions of Women Physicians. J Women’s Heal. 2018;27(5):584–589.
16. Villablanca AC, Beckett L, Nettiksimmons J, Howell LP. Career Flexibility and Family-Friendly Policies : An NIH-Funded Study to Enhance Women’s Careers in Biomedical Sciences. 2011;20(10):1485–1496.
17. Shanafelt TD, Balch CM, Bechamps GJ, et al. Burnout and Career Satisfaction Among American Surgeons. Ann Surg. 2009;250(3).
18. Sullivan MC, Yeo H, Roman SA, Bell RH, Sosa JA. Striving for Work-Life Balance. Ann Surg. 2013;257(3).
19. Rangel EL, Smink DS, Castillo-angeles M, et al. Pregnancy and Motherhood During Surgical Training. 2018:1–9.
20. Bourne DA, Chen W, Schilling BK, Littleton EB, Washington KM, De La Cruz C. The Impact of Plastic Surgery Training on Family Planning and Prenatal Health. Plast Reconstr Surg. 2019;144(5):1227–1236. [PubMed: 31688771]
21. Magudia K, Ng TSC, Bick AG, et al. Parenting While in Training: A Comprehensive Needs Assessment of Residents and Fellows. J Grad Med Educ. 2020;12(2):162–167. [PubMed: 32322349]
22. Altieri MS, Salles A, Bevilacqua LA, et al. Perceptions of Surgery Residents about Parental Leave during Training. JAMA Surg. 2019.

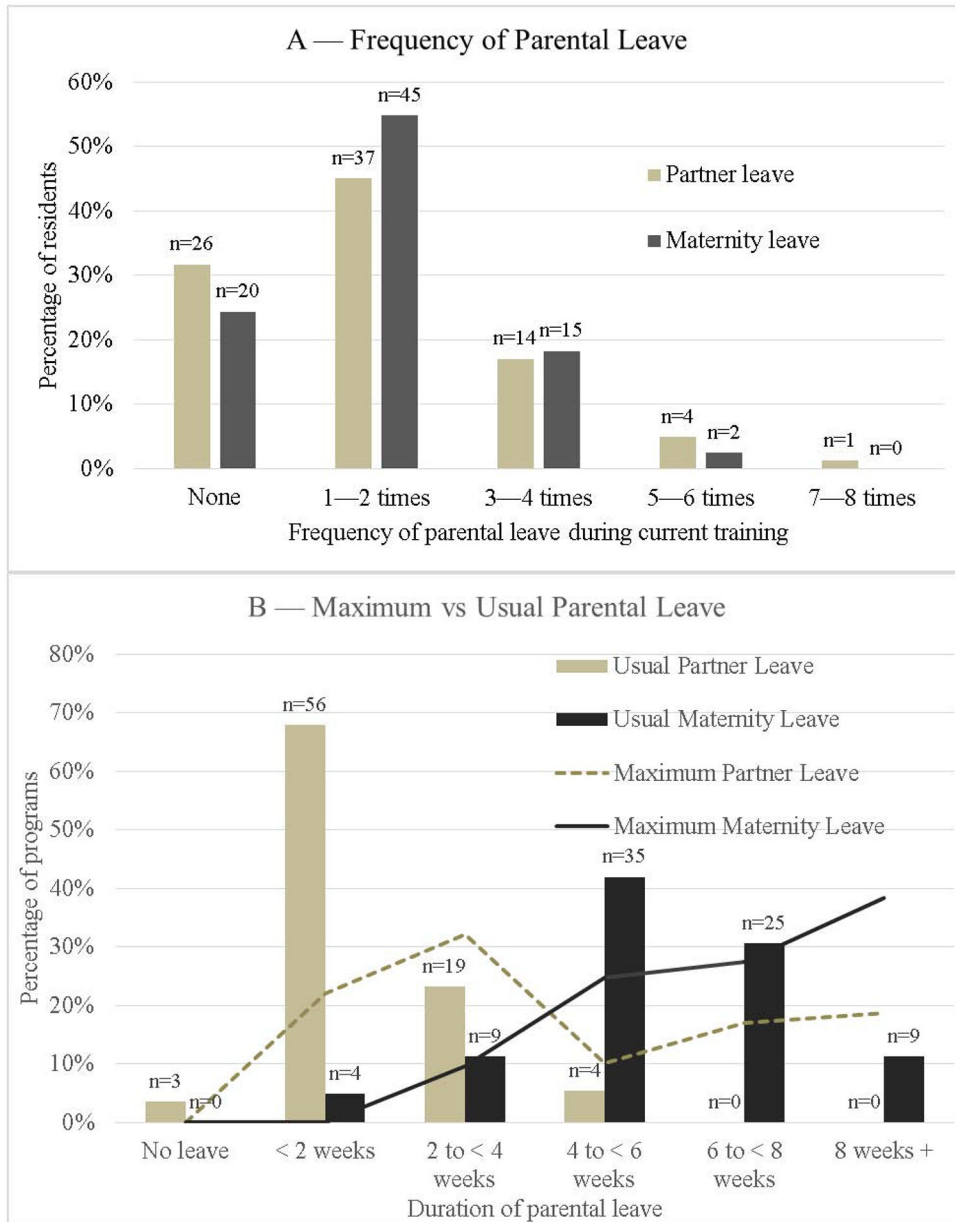
23. American Board of Surgery. Booklet of Information - Surgery.; 2019. <http://www.absurgery.org/xfer/BookletofInfo-Surgery.pdf>.
24. Ophthalmology Residency Match Summary Report 2018.; 2019. <https://www.sfmach.org/PDFFilesDisplay/OphthalmologyResidencyStats2018.pdf>.
25. Lee B, D'Souza M, Singman EL, et al. Integration of a Physician Assistant Into an Ophthalmology Consult Service in an Academic Setting. *Am J Ophthalmol*. 2018.
26. Lee B, McCall TC, Smith NE, D'Souza MA, Srikumaran D. Physician Assistants in Ophthalmology: A National Survey. *Am J Ophthalmol*. ([published online ahead of print April 28, 2020]).
27. Kamei RK, Chen HC, Loeser H. Residency Is Not a Race : Our Ten-Year Experience with a Flexible Schedule Residency Training Option. 2004;447–452.
28. Holliday EB, Ahmed AA, Jagsi R, et al. Pregnancy and Parenthood in Radiation Oncology , Views and Experiences Survey (PROVES): Results of a Blinded Prospective Trainee Parenting and Career Development Assessment. *Radiat Oncol Biol*. 2015;92(3):516–524.
29. Brown EG, Galante JM, Keller BA, Braxton J, Farmer DL. Pregnancy-Related Attrition in General Surgery. *JAMA Surg*. 2014;149(9):893–897. [PubMed: 25029501]
30. Gong D, Winn BJ, Beal CJ, et al. Gender Differences in Case Volume Among Ophthalmology Residents. *JAMA Ophthalmol*. 2019;137(9):1015–1020.
31. Rand VE, Hudes ES, Browner WS, Wachter RM, Avins AL. Effect of evaluator and resident gender on the American Board of Internal Medicine evaluation scores. *J Gen Intern Med*. 1998.
32. Mueller AS, Jenkins TM, Osborne M, Dayal A, O'Connor DM, Arora VM. Gender Differences in Attending Physicians' Feedback to Residents: A Qualitative Analysis. *J Grad Med Educ* 2017.
33. Loeppky C, Babenko O, Ross S. Examining gender bias in the feedback shared with family medicine residents. *Educ Prim Care*. 2017.
34. Dayal A, O'Connor DM, Qadri U, Arora VM. Comparison of male vs female resident milestone evaluations by faculty during emergency medicine residency training. *JAMA Intern Med*. 2017.
35. Family and Medical Leave Act.; 1993.
36. Lu DW, Hartman ND, Druck J, Carolina N. Why Residents Quit : National Rates of and Reasons for Attrition Among Emergency Medicine Physicians in Training. *West J Emerg Med*. 2019;20(March):351–356. [PubMed: 30881556]
37. Tran EM, Scott IU, Clark MA, Greenberg PB. Resident Wellness in US Ophthalmic Graduate Medical Education. *JAMA Ophthalmol*. 2019;02903(6):695–701.
38. Landon E, Selk A. Understanding the Experiences of Obstetrics and Gynaecology Residents Who Take Parental Leave During Training in Canada: A Needs Assessment. *J Obstet Gynaecol Canada*. 2018.
39. Rossin M The effects of maternity leave on children's birth and infant health outcomes in the United States. *J Health Econ*. 2012;30(2):221–239.
40. Avendano M, Berkman LF, Brugiavini A, Pasini G. Social Science & Medicine The long-run effect of maternity leave benefits on mental health : Evidence from European countries. *Soc Sci Med*. 2015;132:45–53. [PubMed: 25792339]

**Highlights**

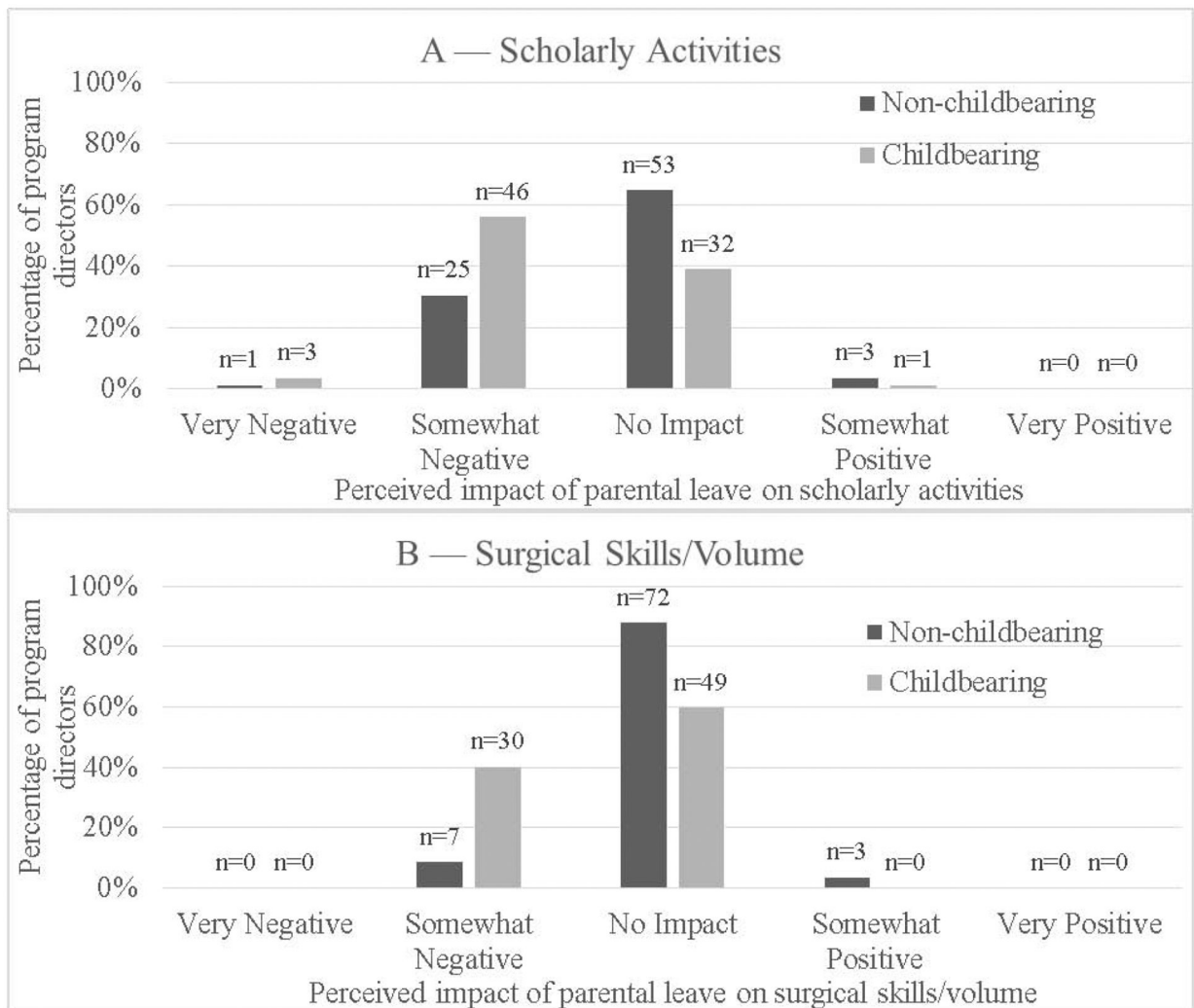
- Parental leave policies vary significantly among residency programs.
- Parental leave taken is commonly less than the recommended 6-week minimum.
- Program directors associate a negative impact on training with parental leave.
- Male program directors perceived more a negative impact caused by childbearing.



**Figure 1:** Characteristics of ophthalmology residents. A. Female gender composition among surveyed programs. B. Prevalence of parenthood among residents divided by gender. Total sample number (n) is displayed corresponding to each category.



**Figure 2:** Parental leave taken by residents. A. Frequency with which programs needed to arrange parental leave for residents over past 3 years. B. maximum allowed parental leave versus average length of parental leave taken by residents. Total sample number (n) is displayed corresponding to each category.



**Figure 3:** Perceived impact of parental leave by program directors. A. Perceived impact of parental leave on scholarly activities. B. Perceived impact of parental leave on surgical skills and volume. Total sample number (n) is displayed corresponding to each category.

**Table 1:**

Program director responses.

Questions and responses	% (N)
Does your program have a written policy regarding maternity leave?	
Yes	89 (73)
No	7.3 (6)
Not Sure	3.7 (3)
Does your program have a written policy regarding partner leave?	
Yes	72 (59)
No	19.5 (16)
Not Sure	8.5 (7)
Typically, who would cover for residents in your program who take parental leave? (check all that apply)	
Other residents	96.3 (79)
Fellows, attending physicians	18.3 (15)
Moonlighters, hired coverage	0 (0)
Coverage typically not necessary	18.3 (15)
Typically, when would residents who take maternity leave make up missed call?	
Before maternity leave	4.9 (4)
After maternity leave	6.1 (5)
Before and after maternity leave	70.7 (58)
Call does not need to be made up	18.3 (15)
Are residents required to make up missed rotations if they take parental leave, separate from vacation and sick time?	
Yes	7.3 (6)
No	8.5 (7)
Depends on the rotation	11 (9)
Depends on the amount of time missed	73.2 (60)
Are residents required to extend their training if they take parental leave, separate from vacation and sick time?	
Yes	8.5 (7)
No	9.8 (8)
Depends on the competency of the resident	9.8 (8)
Depends on the length of parental leave taken	72 (59)
Over the last 3 years, how many residents have extended their residency training due to parental leave, separate from vacation and sick time?	
None	85.4 (70)
1	9.8 (8)
2	4.9 (4)
3+	0 (0)
Does your program accommodate female residents with break time to pump breast milk during clinical duty?	
Yes	95.1 (78)
No	2.4 (2)
Not Sure	2.4 (2)

**Table 2:**

Themes identified in the Free Responses from Program Director with selected direct quotes from responses.

<b>Answers from program directors (n = 37)</b>	
Desire for local support and policy change (n = 18; 43.2%)	Our institution does not provide support for parental leave, which is egregious. Would definitely appreciate any efforts to support resident parents, especially if child-bearing.
	Residents need to know when entering training what the policies are and how parental leave may impact length of training. Many residents feel they do not have enough information for family planning.
Extension of residency and impact on fellowship (n = 11; 29.7%)	If there weren't fellowship matches and start dates, the issue of extending training would not be as big a deal, but the current educational system is very inflexible.
	I try my best to make parental leave as painless a process for the residents as I can. I leave it up to them how much leave they want to take, and have them make up time after their residency ends if needed. Most of our residents are fellowship bound and do not elect to take extended family leave because they want to graduate on time.
Impact on the resident (n = 17; 45.9%)	We allow residents to use all accrued sick leave and vacation and apply it towards maternity leave--this usually amounts to approximately 6 weeks of time off. If this is all that they use, then they can graduate on time, provided that they have met their surgical numbers. Most residents choose this option, as they want to graduate on time, particularly so that they can start fellowship on time. However, our policy does allow up to 3 months of maternity leave, but in this case, they will need to extend their residency to make up for the extra time taken and will not graduate on time.
	I have not perceived any major differences in knowledge base and clinical or surgical skills for the residents who have taken leave. If anything, most of them seem extra motivated to not fall behind. In fact, one of our residents had to take the OKAPs one month early due to anticipated maternity leave during the spring, and she had one of the highest scores in the program.
Impact on the program (n = 6; 16.2%)	The responsibility is currently passed on to the program and PD to work with residents who become parents so that they meet ABO requirements while avoiding an extension in training if possible. This often strains the relationship with the program.
	My experience has been that all of the childbearing parents taking leave are very concerned about how their maternity leave will be perceived by others (both attendings and residents) and how it may affect the workload of their co-residents. I often spend a lot of time reassuring them that we will make it work and encourage them to not feel guilty about taking leave.
Consistency and fairness (n = 5; 13.5%)	Our leave policy is directed by the institutional GME. Maternity leave is maximum of 6 weeks with 3 weeks vacation plus 3 weeks of sick time. There is no paternity leave. We have looked the other way at the time of the birth of a child and fathers take 1 week of "academic leave" where we ask them to do some scholarly activity during this time to justify it back to GME (of course they do not). I would like to see the paternal leave formalized as I am always conflicted about skirting the rules. They are supposed to use vacation time.
	Maternity leave is a very sensitive topic and seems to be treated differently, i.e., more leniency for time off, than other types of leave, including other sick leave.
Desire for national policy change (n = 4; 10.8%)	We need a clearer mechanism or national protocol to make up time. ABO eligibility has specific months of training listed; not clear how maternity leave that usually reduced the training time below this threshold.
	There should be an ABO policy that is clear and fair to allow residents who have children to take the necessary time off but then provide the funding and resources that allow an extension of training as needed.