Breastfeeding Policies of Otolaryngology Residency Programs

Alyssa Reese,¹ b Lauren DiNardo,² Kristina Powers,³ Nicole Favre,⁴ Meagan Sullivan,⁵ Kristina Powers,³

Abstract

Background: Women entering surgical residencies must determine which programs best fit their career and family goals. The purpose of this study was to determine if breastfeeding policies are available on otolaryngology residency program websites. **Methods:** A total of 122 publicly available otolaryngology residency program websites were reviewed for the presence of a breastfeeding policy and lactation information. The percentage of residents and faculty that are women in each program as well as the program's region, size, and affiliation with a top 50 hospital for ear, nose, and throat care were determined. Frequencies and nonparametric analyses were calculated when appropriate. **Results:** None of the otolaryngology residency programs had a breastfeeding policy posted directly on their website. A link to a Graduate Medical Education (GME) website that contained a breastfeeding policy was present on 20 (16.4%) program websites, and 31 websites (25.4%) had information about lactation facilities on the GME website or another page that could be found through the search bar; 17 (23.0%) of the large residency programs contained the link to the GME website, whereas only 3 (6.25%) of the small programs did (ρ = 0.015). Residency programs that were affiliated with a top 50 hospital for ear, nose, and throat care were more likely to have a link to the GME website with a breastfeeding policy than those not affiliated (13 [29.5%] vs. 7 [8.9%], respectively; ρ = 0.003). **Conclusion:** Otolaryngology residency programs do not provide breastfeeding policies directly on their websites.

Introduction

The number of women choosing to have children during residency is on the rise as the timing of residency overlaps prime childbearing years. Residency programs present unique challenges to these women as a result of the established power dynamic rendering them unable to advocate for themselves and their family. The Accreditation Council for Graduate Medical Education (ACGME) has mandated lactation facilities be established in accredited training hospitals,¹ but there is concern regarding compliance with this mandate and the accessibility of the lactation rooms created.

To assess the issues surrounding breastfeeding in residency, a national survey was conducted among current and recently graduated residents. This study revealed many barriers to lactation. Although nearly all training hospitals have lactation rooms according to residents, a majority of the lactation rooms are not usable due to location or availability.² Overall, more than two-thirds of respondents reported that residency work obligations limited their ability to lactate.²

Within surgical fields similar to otolaryngology, there is a lack of information and resources for breastfeeding available to residents. A recent study found that only 2.8% of the websites for orthopedic surgery residency programs had information about breastfeeding support, with only 1.7% mentioning dedicated lactation facilities.³ A cross-sectional study of obstetrics and gynecology residents similarly found that only 7% believed their program had a breastfeeding policy, even though it was important to 85% of this population of residents.⁴ In addition, two-thirds of breastfeeding residents struggled with low milk supply and stopped breastfeeding early.

Pregnant and postpartum women in surgical residencies continue to face a number of barriers, including access to lactation facilities. Many prospective otolaryngology residents determine which programs will best fit their career and family goals by investigating otolaryngology residency websites. The purpose of this study was to determine if breastfeeding policies are available on otolaryngology residency program websites and identify any associations between the presence or lack of policies based on program characteristics.

- 2 BS. Fourth-year Medical Student, Jacobs School of Medicine and Biomedical Sciences/University at Buffalo, New York, United States
- 3 MD. First-year Resident Physician, Eastern Virginia Medical School, Norfolk, Virginia, United States

5 MD. First-year Resident Physician, Palmetto Health/University of South Carolina School of Medicine, Columbia, South Carolina, United States

About the Author: Alyssa Reese is a first-year resident in the Eastern Virginia Medical School'fourth-year medical student at the University at Buffalo's Jacobs School of Medicine and Biomedical Sciences. She will be graduating Summa Cum Laude with Research Honors in April 2024 and was awarded Alpha Omega Alpha membership.

Correspondence:

Alyssa Reese Address: 955 Main St, Buffalo, NY 14203, EE. UU. Email: <u>adreese@buffalo.edu</u> Editor: Francisco J. Bonilla-Escobar Student Editors: Alice Wanjiru Muritu Copyeditor: Kiera Liblik Proofreader: Laeega Manji Layout Editor: Julian A. Zapata-Rios Submission: Feb 6, 2024 Revisions: Jul 15, 2024 Responses: Jul 23, 2024 Acceptance: Sep 16, 2024 Publication: Dec 30, 2024 Process: Peer-reviewed

BA, BS. Fourth-year Medical Student, Jacobs School of Medicine and Biomedical Sciences/University at Buffalo, New York, United States

⁴ MD. First-year Resident Physician, Jacobs School of Medicine and Biomedical Sciences/University at Buffalo, New York, United States

⁶ DDS, MD, PhD. Clinical Professor, Jacobs School of Medicine and Biomedical Sciences/University at Buffalo, New York, United States

Methods

Subject selection

A list of 125 otolaryngology residency programs in the United States was accessed through the American Medical Association Fellowship and Residency Electronic Interactive Database. Three programs were excluded because they did not have a website linked on the database or they had no information on their webpage. Therefore, 122 publicly available otolaryngology residency program websites were reviewed for the presence of a breastfeeding policy and lactation facility information. This study was considered non-human subject research and exempt from University at Buffalo Institutional Review Board approval.

Data Collection

Five of the authors (AR, LD, MD, KP, and NF) searched for a total of seven different criteria on the websites: presence of a written breastfeeding policy on the otolaryngology residency website, presence of a link to an institutional Graduate Medical Education (GME) website which discussed the lactation policy, presence of information on lactation facility availability, number of residents in the program that are women, total number of residents in the program, number of surgeon faculty that are women, and total number of faculty. The gender identity of the surgeon faculty and residents was ascertained based on appearance in posted photos.

Program size was determined based on the number of otolaryngology residents accepted into each program per year. Programs were considered "large" if they accepted 3 or more residents and "small" if they accepted 2 or fewer residents per year; those accepting two to three residents per year were classified as small. The US News and World Report also aided in the classification of each program based on its association, or lack of association, with one of the top 50 ranked hospitals for ear, nose, and throat (ENT) care; only 2 of the 50 hospitals did not have an associated residency program. The location of each program was categorized as Northeast, Midwest, West, or South according to the US Census Bureau classification.⁶

Data Analysis

Frequencies and nonparametric comparisons were calculated when appropriate with SPSS version 27 (IBM Corporation, Armonk, NY). The methods of this study were based on a prior study that evaluated breastfeeding criteria on orthopedic residency program websites.³ A p value of <0.05 was considered statistically significant.

Results

Information on the residency program region, size, and affiliation with a top 50 otolaryngology hospital (according to US News and World Report⁵) can be found in <u>Table 1</u>. The mean number of residents per year was three. <u>Table 2</u> shows the gender distribution of residents and surgeons at the residency programs analyzed. Based on photos provided on the majority of the otolaryngology residency program websites, a mean of 38.3% of the residents at each program were women and a mean of 25.2% of the otolaryngologist faculty were women.

Table	1.	Characteristics	of	the	122	Otolaryngology	Residency
Progra	m	s in the US.					

Characteristic	N (%)				
Region					
Northeast	32 (26.2)				
South	36 (29.5)				
West	33 (27.0)				
Midwest	21 (17.2)				
Program size					
Large (>3 residents/year)	74 (60.7)				
Small (<3 residents/year)	48 (39.3)				
Affiliated with a top 50 USNWR-ranked hospital for ENT care					
Yes	44 (36.1)				
No	78 (63.9)				

 $\textit{Legend: "ENT, ear, nose, and throat; UNSWR, United States News & World Report.$

Information on breastfeeding policies was not directly available on any of the otolaryngology residency program websites. A link to a GME website that contained a breastfeeding policy was present on 20 websites (16.4%), and 31 websites (25.4%) had information about lactation facilities on the GME website or another page that could be found through the search bar on the residency program website. No statistically significant relationship was found between the number of residents and otolaryngologists that were women and the presence of breastfeeding or lactation policies on the otolaryngology residency program websites (p > 0.05).

Table 2. Representation of Women at Residency Program Institutions in the US.

Category	Mean value
Otolaryngology residents per year at each institution (<i>n</i>)	3.0
Residents in the otolaryngology residency program that are women $(n [\%])$	6.0 (38.3)
Attending otolaryngologists at the institution that are women $(n [\%])$	5.5 (25.2)

The number of otolaryngology residency programs characterized by region, large or small program, and affiliation with a top 50 hospital can be found in *Table 3* Large residency programs were significantly more likely to contain the link to a GME website with breastfeeding policy information ($\rho = 0.015$). There were 17 (23.0%) large programs that contained the link compared to 3 (6.25%) of the small programs. Residency programs that were classified as a top 50 hospital for ENT care were also statistically more likely to have the link to the GME website ($\rho = 0.003$). There were 13 (29.5%) top 50 hospitals that had the link compared to 7 (9.0%) of the programs that were not in the top 50. There was no significant relationship between the residency program's region and the presence of a link to breastfeeding and lactation facility information ($\rho > 0.05$). *Table 3.* Otolaryngology Residency Programs with Lactation Policies or a Link to a Graduate Medical Education Website with Breastfeeding Policies in the US.

	Lactation Policy Present					
Characteristic	On website or by search tab n (%)	Via link to institutional GME website n (%)				
Region						
Northeast	7 (21.9)	3 (9.4)				
South	11 (30.6)	9 (25)				
Midwest	6 (18.2)	5 (15.2)				
West	7 (33.3)	3 (14.3)				
Program size						
Small (<3 residents/year)	14 (31.82)	13 (29.5)				
Large (≥3 residents/year)	17 (21.8)	7 (8.9)				
Affiliated with a top 50 USNWR-ranked hospital for ENT care						
Yes	20 (27.0)	17 (23.0)				
No	11 (22.9)	3 (6.3)				

 $\textit{Legend:}\ ^{a}\text{ENT, ear, nose, and throat; UNSWR, United States News & World Report.$

Discussion

Women in surgical residencies continue to face a number of barriers, including sufficient time for parental leave, access to lactation facilities, and difficulty finding childcare.⁷ A 2020 survey of 312 female residents found that only 21% reported access to usable lactation rooms and 73% indicated that residency activities limited their ability to lactate.¹ Thus, to determine whether otolaryngology residency programs have addressed this lack of support, this study sought to determine if breastfeeding policies are available on otolaryngology residency program websites.

Not a single one of the 122 otolaryngology residency program websites that were analyzed in this study contained a breastfeeding policy directly on their website. This suggests that applicants and residency program directors do not believe that breastfeeding policies are relevant to the interview process. Kraus et al.⁸ recently highlighted the clear disconnect between what residency program directors believe applicants want to see during the recruitment process and what applicants actually want: 37% of residency program directors believed that parental leave policies were not relevant, whereas 92% of residency applicant respondents reported that they would prefer parental leave policies to be formally addressed during their interview. Our data suggest that this disconnect extends to the desire to see breastfeeding policies on residency websites.

It is important to note that the majority of the residency program directors included in the aforementioned study were male, and the results may have differed if more residency program directors that are women were surveyed. Wynn et al.³ found that the odds of having a written breastfeeding policy on orthopedic surgery residency websites increased with the number of female

Breastfeeding Policies of Otolaryngology Residency Programs

attendings (odds ratio, 1.1, p = 0.01). However, our study found no statistically significant relationship between the presence of breastfeeding policies and the number of otolaryngology residents and faculty members that were women. This may be due to the fact that the number of otolaryngology and orthopedic surgery faculty and residents that are women still does not match the number of residents and faculty that are men in both specialties.

Wynn et al.³ found an average of two female attendings per program (range 0–19). In this study, women made up a mean of only 25.2% of otolaryngologist faculty members and a mean of 38.3% of otolaryngology residents at each institution. A crosssectional analysis of otolaryngology data in 2019 revealed that 34.7% of residents and 24.5% of faculty were female and only 5 (4.2%) department chairs and 31 (26.5%) residency program directors were female.⁹ Thus, the differences in outcomes between our study and those of the study of orthopedic surgery residency websites by Wynn et al.³ may be attributed to the low number of faculty and residents that are women in these programs that makes it difficult to find a precise and accurate statistical relationship between breastfeeding information and number of attendings and residents that are women.

Notably, the websites for larger otolaryngology residency programs as well as those affiliated with a hospital listed among the top 50 for ENT care were more likely to have a link to a GME website with breastfeeding policy information. This may reflect the extra resources and greater attention to educational policies at larger and more well-known hospitals. Moreover, larger programs have more residents and thus a greater likelihood for pregnant residents. A qualitative study of three female otolaryngology residents who had given birth within the past 12 months at a single institution found that all residents reported mild dissatisfaction regarding privacy and facilities for breastfeeding.¹⁰ Additionally, these residents reported that they did not attempt to remedy the situation until after the postpartum period; however, once it was brought to the program director's attention, a private, secure lactation room was provided.¹⁰ This suggests that advocacy plays a critical role in policy changes. Therefore, the first step residency programs can take is to openly advertise breastfeeding policies on a publicly available platform. Next, establishing a strong foundation of open communication at the start of residency training can lead to a positive environment for trainees seeking breastfeeding accommodations. Lastly, the findings of this study suggest that amplifying the concerns of pregnant otolaryngology residents through the support of female otolaryngologist faculty could positively impact the expansion and visibility of breastfeeding policies on otolaryngology residency program websites.

Limitations

The format of each otolaryngology residency program website varied, and this study only looked for criteria available directly on the program website or through a search tab or GME website link. Thus, breastfeeding policies may have been present elsewhere on the hospital website. The number of surgeons and residents that were women was determined solely on the basis of their

Original Article

Reese A, et al.

appearance, which can be biased and inaccurate. Additionally, an individual's physical presentation as a woman does not always align with one's ability or desire to breastfeed or carry a child. Thus, the authors acknowledge that this is a main limitation of the study and the number of women in each program may be an overestimate of individuals interested in breastfeeding their children. Future studies that assess gender as well as a desire to breastfeed a child in a more accurate way, potentially through a cross-sectional survey, should be considered. This study also did not look at residency program websites of specialties other than otolaryngology. While similar themes may exist across surgical specialties, this can not be ascertained from the present study.

Conclusion

Otolaryngology residency programs do not provide breastfeeding policies directly on their websites. Program support for breastfeeding and resident success in breastfeeding in otolaryngology programs is unknown. Additional research is necessary to see if applicants desire to have these policies on program websites.

References

 Accreditation Council for Graduate Medical Education. Common program requirements. <u>https://www.acgme.org/globalassets/PFAssets/ProgramRequirements/C</u>

PRResidency2019.pdf. Accessed 21 June 2022.

- Peters GW, Kuczmarska-Haas A, Holliday EB, Puckett L. Lactation challenges of resident physicians- results of a national survey. BMC Pregnancy Childbirth. 2020;20(1):762.
- Wynn M, Caldwell L, Kowalski H, Lawler E. identifying barriers: current breastfeeding policy in orthopedic surgery residency. Iowa Orthop J. 2021;41(1):5-9.
- Orth TA, Drachman D, Habak P. Breastfeeding in obstetrics residency: exploring maternal and colleague resident perspectives. Breastfeed Med. 2013;8(4):394-400.
- U.S. News & World Report. Best hospitals for ear, nose & throat. https://health.usnews.com/best-hospitals/rankings/ear-nose-and-throat. Accessed 21 June 2022.

- 6. United States Census Bureau. <u>https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf</u>. Accessed 21 June 2022
- Rangel EL, Smink DS, Castillo-Angeles M, Kwakye G, Changala M, Haider AH, et al. Pregnancy and motherhood during surgical training. JAMA Surg. 2018;153(7):644-652.
- Kraus MB, Reynolds EG, Maloney JA, Buckner-Petty SA, Files JA, Hayes SN, et al. Parental leave policy information during residency interviews. BMC Med Educ. 2021;21(1):623.
- Grewal JS, McClain K, Williams AM, Jones LR, Pucket KN, Moultree M, et al. Gender distribution in otolaryngology training programs. J Otolaryngol Rhinol. 2022;8(1):116.
- Cole S, Arnold M, Sanderson A, Cupp C. Pregnancy during otolaryngology residency: experience and recommendations. Am Surg. 2009;75(5):411-5.

Acknowledgments

None

Conflict of Interest Statement & Funding

The Authors have no funding, financial relationships or conflicts of interest to disclose.

Author Contributions

AR, LD, MC. Data Curation: AR, LD, KP, NF, MS. Formal Analysis: AR, LD. Investigation: AR, LD, KP, NF, MS, MC. Methodology: AR, LD, MC. Project Administration: AR, LD, MC. Supervision: MC. Writing - Original Draft: AR, LD, KP, NF, MS. Writing - Review Editing: AR, LD, KP, NF, MS, MC.

Cite as

Reese A, DiNardo L, Powers K, Favre N, Sullivan M, Carr M. Breastfeeding Policies of Otolaryngology Residency Programs. Int J Med Stud. 2024 Oct-Dec;12(4):437-440.

This work is licensed under a Creative Commons Attribution 4.0 International License

ISSN 2076-6327 This journal is published by <u>Pitt Open Library Publishing</u>

> Pitt Open Library Publishing