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Publication Date

2023-07-01

DOI

10.1016/j.contraception.2023.110005

Peer reviewed

Contraception 123 (2023) 110005

Contents lists available at ScienceDirect

Contraception

journal homepage: www.elsevier.com/locate/contraception

Original Research Article

Complex Family Planning fellowship graduates' intended practice plans and barriers to practicing in areas of unmet need☆,☆☆,★

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ARTICLE INFO

Article history:
Received 27 December 2022
Received in revised form 27 February 2023
Accepted 1 March 2023

Keywords:
Abortion
Complex Family Planning
Fellowship
Training

ABSTRACT

Objectives: To describe practice patterns and challenges encountered by Complex Family Planning (CFP) fellowship graduates.
Study design: We invited all 110 obstetrics and gynecology physicians who graduated from the CFP fellowship from 2017–2020 via email to complete an anonymous online survey. We inquired about demographics, intended and obtained postfellowship positions, and successes and challenges in obtaining jobs. We used Fisher's exact test to assess if the proportion of graduates who grew up, attended residency, and completed fellowship in a US region (Northeast, Midwest, South, and West) and practiced in that same region differed.
Results: Ninety-nine (90.0%) graduates completed the survey. When entering fellowship, most (n = 92 [92.9%]) expected to practice in an academic environment. About half (n = 49 [49.5%]) pursued fellowship with the intent to practice in a location with an unmet need for abortion providers, of which 22 (44.9%) did so. Forty-nine (49.5%) respondents did not practice after fellowship where they initially intended, citing common challenges of job availability, family-related concerns, safety concerns, and relationship status changes. We found associations between regions where graduates completed residency and currently practice (p = 0.004), driven primarily by higher associations in the South (76.9%) and West (70.6%) and a lower association in the Midwest (22.7%). We found no association between current practice region and where graduates grew up (p = 0.15) or completed fellowship (p = 0.23).
Conclusions: CFP fellowship graduates from 2017–2020 primarily intended to practice in academic environments with half planning to practice in underserved locations. However, more than half of those who entered fellowship hoping to fill an unmet need for abortion providers did not do so.
Implications: About half of CFP fellowship graduates from 2017–2020 intended to obtain positions in areas they defined as having an unmet need for abortion provision. Personal life and job barriers prevented many from serving in such positions after fellowship. Practice location intentions and outcomes may be different in a post-*Dobbs* environment.

1. Introduction

The Complex Family Planning (CFP) fellowship is a 2-year postgraduate training program for individuals who have completed an Obstetrics and Gynecology residency. The first fellowship started in the Department of Obstetrics, Gynecology and Reproductive Sciences at the University of California, San Francisco in 1992, and has grown to 29 similar programs currently [1,2]. The curriculum includes training in clinical skills, research, and teaching of complex abortion and contraception care. The fellowship trains the nation's next generation of leaders and experts in these clinical services, with the ability to expand training and expertise to programs without these types of specialists [1]. No formal evaluation of practice

☆ Conflicts of interest: None.
☆☆ Funding: The study received funding from the Melissa Cooke Johnsen Family Planning and Reproductive Health Fund. M.D.P. and M.D.W. were supported by the National Center for Advancing Translational Sciences, National Institutes of Health, through grant number UL1 TR001860. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.
★ Presented in part as a poster abstract at the American College of Obstetricians and Gynecologists 2022 Annual Clinical meeting.
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https://doi.org/10.1016/j.contraception.2023.110005
0010-7824/

patterns and jobs sought after graduating from the CFP fellowship is available to date.

Graduates from the CFP fellowship are the first-line candidates to fill clinical leadership positions in states with few abortion providers. They graduate with the skills needed to practice as experts, even in underserved locations where they may not have access to much clinical or institutional support. However, data do not exist documenting graduates' intended practice types or locations, nor the outcome of whether fellowship graduates practice as they initially intended.

To explore these issues, we conducted a survey of obstetrics and gynecology CFP fellowship graduates from 2017–2020 to evaluate prefellowship practice plans compared to where they ultimately accepted a job after fellowship. We sought to explore challenges they encountered that influenced their ultimate decision of where to practice after fellowship and to evaluate if fellows who planned to practice in areas of unmet need did so. From 2017–2020, 27 programs existed nationally for obstetrics and gynecology subspecialty training, in addition to two programs specific to family medicine residency graduates. In 2021, the obstetrics and gynecology programs became board-certified fellowships within the American Board of Medical Specialties and American College of Graduate Medical Education.

2. Materials and methods

We invited all CFP fellowship graduates from 2017–2020 via email to participate in this survey study. We accessed graduate emails through multiple listservs related to the fellowship. We sent a prenotification message, an invitation to the survey hosted by SurveyMonkey.com, and up to three reminders from April to July 2021. Respondents could opt to receive a $10 Amazon gift card for which we obtained contact information through a separate link at the end of the survey that did not connect to their survey responses. We disposed of contact information once the Amazon gift card was dispersed. The study survey contained no identifying information. The UC Davis Institutional Review Board reviewed the study and considered it exempt.

The study survey consisted of 74 multiple-choice and open-ended questions. Questions explored respondents' demographics, including age, gender (with nonbinary options), ethnicity, partnered status, region of training, and residence. A series of open-ended questions asked respondents where they thought they would practice before starting fellowship, and where they ultimately went on to practice. Questions about postfellowship employment included both region and practice type (academic, independent clinic, etc.) and allowed for more than one response to account for multiple concordant positions. We asked respondents whether they pursued fellowship with the intent to practice in a location with an unmet need for abortion providers, allowing respondents to interpret the idea of "unmet need" for themselves. For those who answered affirmatively, the survey further asked them to describe the region, city, or state, including any plans to work internationally as specifically as possible. We also included multiple-choice and open-ended questions to explore barriers encountered to finding jobs that matched their initially intended practices.

We planned inclusion of all responses from surveys with at least 50% of questions answered. We provide outcomes descriptively except for open-ended questions, which we categorized into shared themes. We assessed the impact of where graduates grew up, attended residency, and completed fellowship on practice location in two ways. First, we used Fisher exact test to assess if the proportion of graduates who grew up, attended residency, and completed fellowship in a US region (Northeast, Midwest, South, and West based on US census determinations [3]) and practiced in that same region differed. Second, we used Bowker's symmetry test [4,5] for paired proportions to assess if graduates practice in a different region than where they grew up, attended residency, and completed fellowship. We used Chi-square analysis to assess the relationship between graduation year and practicing in the location intended before fellowship. We conducted these analyses using SAS software version 9.4 for Windows (SAS Institute Inc., Cary, NC).

Table 1
Characteristics of US Complex Family Planning fellowship graduates (2017–2020) (N = 99)[a]

Characteristic	n (%) or mean ± standard deviation
Age (years)	36.1 ± 2.6
Gender identity	
Female	94 (94.9%)
Male	5 (5.1%)
Race	
White	68 (68.7%)
Asian	19 (19.2%)
Black	7 (7.1%)
Other	5 (5.1%)
Hispanic ethnicity	6 (6.1%)
Partner Status	
Life partner when started fellowship	84 (84.8%)[b]
Life partner when completed fellowship	91 (91.9%)
Children	
Had children when started fellowship	18 (18.2%)
Had children when completed fellowship	37 (37.4%)
Job Status	
In original postfellowship job	81 (81.8%)
Changed since original postfellowship job	18 (18.2%)
Home region[c]	
Northeast	34 (34.3%)
Midwest	20 (20.2%)
South	27 (27.3%)
West	16 (16.2%)
International	2 (2.0%)
Residency region[c]	
Northeast	43 (43.4%)
Midwest	24 (24.2%)
South	13 (13.1%)
West	18 (18.2%)
No response	1 (1.0%)
Fellowship region[c]	
Northeast	31 (31.3%)
Midwest	16 (16.2%)
South	13 (13.1%)
West	38 (38.4%)
No response	1 (1.0%)

[a] 110 graduates, 99 respondents.
[b] 82 (97.6%) respondents had the same life partner at start and end of fellowship.
[c] Regions based on Census Regions and Divisions of the United States [3].

3. Results

We invited all 110 CFP fellowship graduates from 2017–2020 to participate and received responses from 99 (90.0%) after removing one obviously duplicate response. All respondents answered > 50% of the questions, so we included all surveys in the analysis. Response rates per year were 22/28 (78.6%), 26/28 (92.9%), 28/28 (100%), and 23/26 (88.5%), respectively. The respondents' characteristics are presented in Table 1.

3.1. Prefellowship practice expectations

We asked respondents to reflect on their practice expectations before starting fellowship; 44/99 provided more than one response. Most (92 [92.9%]) described an expectation to practice in an academic environment, with fewer mentioning an independent clinic (20 [20.2%]), community hospital (17 [17.2%]), nonprofit organization (10 [10.1%]), or other practice environment (4 [4.0%]). Forty-nine

Table 2
US geographic distribution of practice region based on where US Complex Family Planning fellowship graduates (2017–2020) grew up (A), completed residency (B), and completed fellowship (C)

A. Region where respondents grew up (n = 95)[a,b]

	Region where respondents grew up[b]					
Region where respondents are currently practicing[b]	Northeast (n = 31)	Midwest (n = 20)	South (n = 26)	West (n = 16)	Non-US (n = 2)	Total
Northeast	**18 (58.1)**	3 (15.0)	4 (15.4)	4 (25.0)	1 (50.0%)	30
Midwest	2 (6.5)	**6 (30.0)**	1 (3.8)	2 (12.5)	–	11
South	3 (9.7)	3 (15.0)	**16 (61.5)**	1 (6.3)	–	23
West	8 (25.8)	8 (40.0)	5 (19.2)	**9 (56.3)**	1 (50.0%)	31

B. Region where respondents completed residency (n = 94)[b,c]

	Region where respondents completed residency[b]				
Region where respondents are currently practicing[b]	Northeast (n = 42)	Midwest (n = 22)	South (n = 13)	West (n = 17)	Total
Northeast	**24 (57.1)**	4 (18.2)	1 (7.7)	0	29
Midwest	5 (11.9)	**5 (22.7)**	1 (7.7)	0	11
South	3 (7.1)	5 (22.7)	**10 (76.9)**	5 (29.4)	23
West	10 (23.8)	8 (36.4)	1 (7.7)	**12 (70.6)**	31

C. Region where respondents completed fellowship (n = 94)[b,d]

	Region where respondents completed fellowship[b]				
Region where respondents are currently practicing[b]	Northeast (n = 30)	Midwest (n = 14)	South (n = 13)	West (n = 37)	Total
Northeast	**21 (70.0)**	3 (21.4)	1 (7.7)	4 (10.8)	29
Midwest	2 (6.7)	**6 (42.8)**	2 (15.4)	1 (2.7)	11
South	4 (13.3)	3 (21.4)	**10 (76.9)**	6 (16.2)	23
West	3 (10.0)	2 (14.3)	0	**26 (70.3)**	31

Data presented as n (%).

[a] Excludes four respondents who identified practicing in multiple regions. Association between region currently practicing and region where grew up (Fisher exact test), $p = 0.15$ (excluding non-US fellows; see online Appendix). Change from childhood region to practice region (Bowker's symmetry test), $p = 0.18$ (excluding non-US fellows).

[b] Regions based on Census Regions and Divisions of the United States [3].

[c] Excludes four respondents who identified practicing in multiple regions and one respondent who did not indicate residency location. Association between region currently practicing and region where completed residency (Fisher exact test), $p = 0.004$ (see online Appendix). Change from residency region to practice region (Bowker's symmetry test), $p < 0.001$.

[d] Excludes four respondents who identified practicing in multiple regions and one respondent who did not indicate fellowship location. Association between region currently practicing and where completed fellowship (Fisher exact test), $p = 0.21$ (see online Appendix). Change from fellowship region to practice region (Bowker's symmetry test), $p = 0.19$.

(49.5%) respondents indicated that they pursued fellowship with the intent to practice in a location with an unmet need for abortion providers. The survey prompted those who intended to practice in an area of unmet need to "elaborate on the location and type of practice you intended"; 48 (98.0%) responded. Themes that emerged (respondents could provide more than one answer) included geographic intentions (n = 37 [77.1%]), plans to travel to abortion deserts part-time or periodically (n = 6 [12.5%]), to work in an academic institution with training needs (n = 3 [6.3%]), to pursue international work (n = 3 [6.3%]), and to seek work in "hostile environments" (n = 2 [4.2%]). Of the 37 who specified specific geographic areas of unmet need, most mentioned intentions to practice in the South (n = 15 [40.5%]) or Midwest (n = 13 [35.1%]).

3.2. Postfellowship practice patterns

Postfellowship practice locations (by US region) are presented in Table 2. Fifty (50.5%) graduates reported that they now practice in the location they initially planned to prior to fellowship. Of the 49 respondents who did not practice in their intended location, open-ended responses included themes of job availability (n = 18 [37%]), relationship-related concerns (n = 11 [22.4%]), familial concerns (n = 7 [14.3%]), Coronavirus Disease–19 (n = 2 [4.1%]), and hesitancy to practice in region without support/regions with safety concerns (n = 2 [4.1%]). We found associations between regions where graduates completed residency and currently practice (p = 0.004), mostly driven by those that complete residency in the South and West being very positively associated and those that complete residency in the Midwest being negatively associated. We found no association between current practice region and where fellows grew up (p = 0.15) or where fellows completed fellowship (p = 0.21). When using Bowker's test to assess change patterns in practice, we found similar results. We found no overall association between respondents' current practice location being where they intended and graduation year or when looking specifically at 2020 versus all other years (Table 3).

When reporting their current practice environment, 35 of the 99 respondents provided more than one answer. Most (n = 70 [70.7%]) practiced in an academic environment, 25 (25.3%) in an independent clinic, 22 (22.2%) in a community hospital, 11 (11.1%) in a nonprofit organization, and 11 (11.1%) "other," which included correctional facility, federally qualified health center, and 2 who have joined private practices.

Impact of relationship, family concerns, and job availability on postfellowship job selection are reported in Table 4. Graduates responded that the single most important factor in choosing the job they took after fellowship was the type and/or location of practice (n = 47 [47.5%]), filling unmet need for abortion providers (n = 11 [11.1%]), opportunities for career advancement (n = 9 [9.1%]), research support and funding (n = 6 [6.1%]), and mentorship (n = 6 [6.1%]).

Of the 49 CFP fellowship graduates who indicated prefellowship intent to practice in an area with unmet need for abortion providers, 22 (44.9%) responded that they now practice in a location they intended. The survey asked the 27 graduates who intended to practice in an area with unmet why they didn't practice where they intended. Themes that emerged (respondents could be coded into more than one category) included job availability (n = 8 [29.6%]), change in

Table 3
US Complex Family Planning fellowship graduates (2017–2020) practicing in location intended when started fellowship by graduation year[a]

Graduation year	Number	Current practice in intended location[b]
2017	22	11 (50.0%)
2018	26	15 (57.7%)
2019	28	16 (57.1%)
2020	23	8 (34.8%)

Data presented as n (%).
[a] 110 graduates, 99 respondents.
[b] *p* Value = 0.35 overall and 0.09 when comparing 2017–2019 and 2020 (Chi-square analyses).

Table 4
Impact of relationship, family concerns, and job availability on US Complex Family Planning postfellowship job selection, graduates 2017–2020 (N = 99)[a]

Factor	Response
Relationship status	
Yes	16 (16.2%)
No	83 (83.8%)
Family-related concerns	
Yes	45 (45.5%)
No	53 (53.5%)
No answer	1 (1.0%)
Job availability	
Yes	50 (50.5%)
No	49 (49.5%)

[a] 110 graduates, 99 respondents.

respondents' career goals (n = 8 [29.6%]), relationship-related concerns (n = 5 [18.5%]), familial concerns (n = 3 [11.1%]), and hesitancy to practice in region without support/safety concerns (n = 2 [7.4%]).

4. Discussion

We found that the majority of CFP fellowship graduates from 2017–2020 practice in an academic environment and only half practice in the location/environment that they planned to prior to fellowship. Of those that intended to practice in an area with unmet need for abortion providers, less than half (45%) went on to practice in their intended locations. Job availability was the most commonly cited factor that prohibited graduates from practicing in their intended areas. However, while 48% are from the Midwest or South, only 39% of CFP graduates now practice in those regions, which are historically regions with unmet need for abortion providers [6]. More than 75% of graduates who completed residency or fellowship in the South practiced in the South as compared to 61.5% of graduates that grew up in the South. Lower percentages of graduates practiced in the Midwest with 30% or less who grew up or completed residency in the Midwest practicing there compared to 54.5% of those who completed fellowship in the Midwest. Overall, where graduates practice was most highly associated with where they completed residency. All of these factors may be key to finding fellows that will work in areas of unmet need.

While the desire to work in an area with unmet need for abortion providers is important to some CFP fellowship graduates, only 11% cited it as the most important factor in selecting a job. Job availability, family-related concerns (including safety concerns), and relationship status changes ultimately sway many graduates from seeking and accepting jobs that allow them to work in areas they consider have unmet need. In the end, only 45% of those who intended to practice in an area of unmet need did so and comprised only 22% of all respondents.

The study outcomes demonstrate that some CFP fellows experience conflict between their work environment expectations and the personal factors they weigh when accepting a job. Those that intend to fill an unmet need ultimately also consider the safety, well-being, and job opportunities of their family members. When we designed this study, we purposely did not define 'unmet need' in the survey. Although respondents demonstrated different interpretations, they most commonly mentioned geography (77%), with specific references to US regions that have historically had fewer abortion providers or areas with hostile political climates towards abortion. However, providing abortions in the US involves an inherent commitment to working with underserved populations. The low proportion of CFP fellowship graduates that indicated they practiced in areas of unmet need infers that training fellows is not the best means to supply providers in these areas. Where fellows attended residency was most highly associated with postfellowship practice location, so training fellows from residency programs located geographically in areas of unmet need may maximize those that return to these areas, especially in the Southern US. While it is possible that CFP fellows may not be the clinicians who provide abortion care in areas of unmet need, these fellowship graduates will be the leaders that can train other clinicians who can serve this purpose. Importantly, how residents entering a CFP fellowship defined unmet need in 2017–2020 may be different now following the *Jackson v Dobbs* Supreme Court decision [7].

Although our response rate of 91% is very high, we must consider that those few who chose not to respond may have a unique viewpoint not represented in our data. In addition, the largely subjective, retrospective line of questioning in our survey, including multiple open-ended questions, is subject to recall bias (i.e., if someone does not practice in an area of unmet need, they may be less likely to identify that this was initially a goal before entering fellowship). A way to mitigate this issue for future evaluations would be to survey CFP Fellows before and after their fellowships, for a direct comparison of their intentions with their experience.

This study gives us a glimpse into the motivations of CFP fellowship graduates and their conviction to expand abortion access in their postfellowship jobs. More research is needed, particularly in a post-*Dobbs* environment, to determine how the CFP fellowship, fellowship directors, and their associated academic institutions can best position fellows to find and accept jobs that align with their initial motivation to seek CFP subspecialty training.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.contraception.2023.110005.

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