The Impact of COVID-19 on Family Building Among Physicians and Trainees



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INTRODUCTION

During the COVID-19 pandemic, fertility care in the USA was put on hold temporarily to minimize transmission of infections. Prior to the pandemic, physicians were more likely than non-physicians to experience fertility challenges. The impact of the pandemic on family building among physicians is unknown. As part of a larger study on fertility, we examined family building challenges posed by the pandemic for physicians and trainees.

METHODS

A cross-sectional study design was used to administer a fertility questionnaire between April and May 2021 to physicians and physicians-in-training. A non-probabilistic sample of participants was recruited using an infographic advertisement leveraging social media (Twitter, Instagram, Facebook, and LinkedIn networks of the authors and AMWA (American Medical Women's Association) including Facebook groups (e.g., Physician Moms Group, Gay Men Physicians Group)). Survey participants provided socio-demographic and workrelated characteristics. Using an open-ended question, survey participants were asked, "How has COVID-19 affected your family planning?" An inductive thematic analysis was conducted.³ A group of three independent coders developed the codebook by coding responses until thematic saturation was reached (n = 200), two coded all responses, and differences were resolved by discussion. Quantitative analyses were conducted using SPSS Version 25 (IBM Corp). The study was approved by the University of Miami IRB.

RESULTS

Out of 3116 (90.6% women, n = 2824) survey participants, 1885 responses physicians and trainees (60.5%; see Table 1) responded to the free-response item about how COVID-19

affected their family planning. Of these participants, 37.3% (n = 703) said their family planning was impacted by COVID-19.

Our analysis identified seven major themes: delay, mental health, pregnancy experience, childcare, partnership, social support and isolation, and benefits (Table 2). Reasons stated for the most prominent theme, delaying family building, included fertility treatment challenges, inability to see their partner, delays in weddings, deliberate pauses in childbearing, COVID-19 vaccination, adoption delays, financial stressors, and change in desire to have children. Fertility treatment access challenges included scheduling appointments, fear of COVID-19 exposure, and lack of work coverage. Describing access to in vitro fertilization, one participant said: "I had a lot of frustration as someone who was putting themselves on the line every day to help people during a pandemic and who was then denied access to my own care."

Participants voiced mental health concerns associated with adding a child to their family or being pregnant during the pandemic (i.e., COVID-19 exposure, isolation, and miscarriages). Pregnancy-related difficulties included fear and anxiety related to miscarriages, absence of support at appointments and delivery, and getting COVID-19 while pregnant. Participants had difficulties obtaining childcare and/or provided childcare themselves while working from home which was stressful and prohibitive for having additional children during the pandemic.

While most comments were made by women (91.6%), our themes did not vary across gender identities, nor did they vary by race or ethnicity.

DISCUSSION

It is critical to address the impact of the COVID-19 pandemic on the well-being of physicians, including the ability to build a family. In this first large-scale survey of physicians and trainees, the family planning of almost one-quarter of all respondents to the survey (and over one-third of those responding to the item analyzed here) was impacted by COVID-19. This finding is consistent with a national survey of the general population which showed many delayed milestones such as parenthood and marriage due to the pandemic. While our study is limited due to gender imbalance among participants and potential sampling bias that may slightly overestimate the impact of the pandemic, the data remain informative.

Table 1 Socio-demographic and Work-Related Characteristics Among Survey Participants Who Answered the Question, "How Has COVID-19 Affected Your Family Planning?"

n(%) Characteristic Gender[†] 1729 (91.7) Woman Man 140 (7.4) Nonbinary 9 (0.5) Agender 1(0.1)Genderfluid 1 (0.1) Genderqueer 4 (0.2) Prefer to describe 1(0.1)Sex[‡] Female 1741 (92.4) 142 (7.5) Male Prefer to describe 1(0.1)Prefer not to answer 1 (0.1) Age Years (± SD) $37.1 (\pm 8.8)$ Title Medical student 356 (18.9) Resident 234 (12.4) Fellow 132 (7.0) Independent practitioner 1143 (60.6) Prefer to describe 18 (1.0) Prefer not to answer 2(0.1)Location 1748 (92.7) USA International 124 (6.6) Relationship status 228 (12.1) Single Widowed 4 (0.2) Divorced 35 (1.9) 9(0.5)Separated 1344 (71.3) Married Significant other 213 (11.3) Domestic partnership 44 (2.3) Polyamorous 5 (0.3) Prefer to describe 1(0.1)Have children 1054 (55.9) Yes No 831 (44.1) Race/ethnicity Asian 261 (13.9) American Indian or Alaskan Native 2 (0.1) Black or African American 151 (8.0) Hispanic, Latinx, or Spanish origin 21 (1.1) Middle Eastern or North African 49 (2.6) Multiracial§ 127 (6.7) 1235 (65.5) White Prefer to describe 22 (1.2) COVID impacted family planning Medical student 118 (33.1) Resident 111 (47.4) Fellow 75 (56.8) Independent practitioner 394 (34.5) Prefer to describe 4 (22.2)

Table 2 Themes Emerging from Inductive Analysis of "How Did COVID-19 Affect Your Family Planning?" Among Participants of the Fertility Survey (n = 1885)

Theme	Code	Example quote
Delay	Fertility treatment	"I was shut out of fertility treatment for 3 months and then my clinic wouldn't allow me to cycle because I was seeing COVID patients so had to switch
	Unable to see partner	clinics." "Partner was not in state during COVID and unable
	Stopped trying	to see him." "Delayed attempt for another child due to uncertainty."
	Vaccine Wedding	"Waited for vaccine." "Delayed wedding and therefore conception planning."
	Adoption	"Put plans to pursue
	Financial stress	adoption on hold." "Financial insecurity made us wait a bit longer to start
	Change in desire to have children	trying." "COVID has made us more unsure of whether we want to have children. The world seems so dangerous
Mental health	Unspecified Mental health	and it has highlighted how little people care about each other in modern times." "Delayed it." "Increased stress on me and my partner making it difficult to have conversations about
Pregnancy experience	Delivered during pandemic	starting a family." "Almost wasn't able to have my husband present at my baby's birth. What
	Miscarriage	an ordeal." "I had a miscarriage 4/3/2021. My husband got a
	Pregnant during pandemic	vasectomy the same day." "I had COVID while 6 weeks pregnant in July 2020."
	Trying for baby	"Tried to squeeze in a second baby during the mandated shutdown of most travel and social
Childcare	Childcare issues	activities (and succeeded)." "Daycare got more unreliable which made it even harder to juggle kids and work. We waited to
	At home more—stress of caring for children	get pregnant longer." "Kids are home from school and I'm glad I only
Partnership	No partner/dating	have 2!!" "Not able to date much which I think has slowed my trajectory in terms of meeting someone who I could exentually marry."
	Divorce/breakup	could eventually marry." "Caused a breakup in my relationship."
Social support and isolation	Isolation—at appointments	"My partner is not allowed to be with me for my fertility treatments including when I had a miscarriage."

 $[^]st$ Total numbers may vary due to item non-response or missing.

[†]Additional response options, which no participants in this sample selected, included Gender queer and Prefer to describe.

[‡]Additional response options, which no participants in this sample selected, included Intersex and Prefer to describe.

[§]Participants who selected more than one option are considered multiracial for the purpose of this study.

Percentages calculated among those who responded to the item analyzed in this manuscript, representing the proportion of each group that indicated COVID-19 had impacted their family planning

Table 2. (continued)

Theme	Code	Example quote
	Social support from family	"Limited access to family support. Made making decisions regarding childcare for young infant very very hard."
Benefit	Made family planning easier At home more—benefit to fam- ily plan	"Started a family sooner than planned." "Having everything online for school made it a lot easier to be pregnant during didactic years."
	At home more—decided to have a child	"We canceled our big travel plans and made a baby instead."

It is worth emphasizing that prior to the pandemic, physicians faced a higher rate of infertility and delayed childbearing compared to the general population.² For some, additional delay due to the pandemic could be the difference between having a child and not. Our findings suggest healthcare employers should take active measures such as encouraging fertility check-ups, providing insurance coverage for fertility treatment, and educating leaders about the importance of supporting family building financially and with flexible schedules for physicians and trainees.⁵ Institutions that want to reverse the negative impact of the pandemic on women physicians must be intentional about incorporating these recommendations alongside other efforts such as addressing bias and harassment, improving childcare and parental leave, and providing additional research funds for women researchers.⁶

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Author Contribution Levy and Salles had full access to all of the data in the study and took responsibility for the integrity of the data and the accuracy of the data analysis. Concept and design: Levy, Kelly, Brown, Arora, and Salles. Acquisition, analysis, or interpretation of data: all authors. Drafting of the manuscript: Levy, Arora, Caban-Martinez, and Salles. Critical revision of the manuscript for important intellectual content: all authors. Statistical analysis: Levy, Kelly, Arora, Caban-Martinez, and Salles. Administrative, technical, or material support: Caban-Martinez, Arora, and Salles. Supervision: Caban-Martinez, Arora, and Salles.

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Declarations:

Ethics Approval: The study protocol was reviewed and approved by the University of Miami, IRB (#20210222).

Conflict of Interest: The authors declare that they do not have a conflict of interest.

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