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# Parental leave, childcare policies, and workplace bias for hepatology professionals: A national survey

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## Abstract

**Background:** The presence of workplace bias around child-rearing and inadequate parental leave may negatively impact childbearing decisions and sex equity in hepatology. This study aimed to understand the influence of parental leave and child-rearing on career advancement in hepatology.

**Methods:** A cross-sectional survey of physician members of the American Association for the Study of Liver Diseases (AASLD) was distributed through email listserv in January 2021. The 33-item survey included demographic questions, questions about bias, altering training, career plans, family planning, parental leave, and work accommodations.

**Results:** Among 199 US physician respondents, 65.3% were women, and 83.4% (n = 166) were attendings. Sex and racial differences were reported in several domains, including paid leave, perceptions of bias, and child-rearing. Most women (79.3%) took fewer than the recommended 12 paid weeks of parental leave for their first child (average paid leave 7.5 wk for women and 1.7 for men). A majority (75.2%) of women reported workplace discrimination, including 83.3% of Black and 62.5% of Hispanic women. Twenty percent of women were asked about their/their partners' pregnancy intentions or child-rearing plans during interviews for training. Women were more likely to alter career plans due to child-rearing (30.0% vs. 15.9%,  $p = 0.030$ ). Women were also more likely to delay having children than men (69.5% vs. 35.9%).

**Conclusions:** Women reported sex and maternity bias in the workplace and during training interviews, which was more frequently experienced by Black and Hispanic women. As two-thirds of women had children during training, it is a particularly influential time to reevaluate programmatic support to address long-term gender disparities in career advancement.

## INTRODUCTION

There is a broad evidence base supporting the health, well-being, and economic benefits of adequate parental leave for both children and parents, and consequently, multiple medical societies recommend an adequate duration of paid parental leave.<sup>[1-7]</sup> However, there is a discrepancy between the duration of parental leave that is recommended by medical societies and those available in practice.<sup>[5,8,9]</sup> A lack of adequate parental leave has been hypothesized as a major barrier to sex equity in medicine.<sup>[5,8,10-13]</sup> No prior studies have examined the availability and duration of parental leave and impact on child-rearing for hepatologists.

There are several factors of the hepatology workforce and work environment that make issues of workplace equity and parental leave germane to our field. Hepatology is a clinically rigorous specialty and frequently requires a heavy inpatient load and high-intensity outpatient management. Furthermore, hepatologists in the United States are often required to complete

gastroenterology fellowship and hepatology training. Gastroenterology requires performing procedures, which can be physically demanding, particularly in late term pregnancy. The field is also predominantly male, which means that most people in leadership roles have not personally experienced the physical demands of being pregnant.<sup>[14]</sup> Studies of physicians in gastroenterology suggest that inadequate parental leave policies and bias against parental leave and child-rearing contribute to sex-based disparities across all career stages, including training, hiring, retention, mentorship, sponsorship, promotion, and advancement.<sup>[14-22]</sup> In addition to impacting careers, insufficient parental leave has also disproportionately affected female physicians' family planning given the long duration of advanced training.<sup>[17,23,24]</sup> Furthermore, insufficient leave impacts the gastroenterology pipeline, as trainees reported that a major deterrent to pursuing specialty fellowship was concerns about incompatibility with pregnancy and child-rearing.<sup>[25,26]</sup> The upcoming shortage of hepatology providers makes addressing this barrier urgent.<sup>[27]</sup>

Beyond parental leave, there are also no studies in hepatology on work environments designed to accommodate pregnancy and parenthood. Frequent overnight calls and higher procedural volumes have been found in other specialties to be linked to adverse pregnancy outcomes<sup>[28]</sup> but have not yet been studied in hepatology. There are also no studies about accommodations for parents, including time and space for breast milk pumping, as well as the availability of childcare.

In addition, there is also a gap in the knowledge about implicit and explicit bias against pregnancy, parenthood, and parental leave in hepatology. While maternity bias has been documented in other areas of medicine, it has not yet been studied in hepatology.<sup>[6,8,29–31]</sup> Bias and harassment are present throughout medical education for Black physicians and other races underrepresented in medicine; while we did not find published data on racial disparities around maternity leave for physicians, compounding bias for women with intersectional identities may exacerbate existing disparities.<sup>[32,33]</sup> To address these knowledge gaps, we conducted a national survey among trainee and faculty physicians within the AASLD to evaluate the impact of parental leave, child-rearing, and maternity bias.

## METHODS

### Survey population

The survey was delivered through electronic mail (email) by the AASLD to their email database of 5402 contacts. The initial email was distributed on January 4, 2021, and one reminder email was sent on January 11, 2021. The database includes providers, industry personnel, and donors; however, the survey aimed to solicit responses only from physicians. The survey was anonymous and voluntary, and no incentives were offered for participation.

The population of interest for this study was physicians though the listserv data do not allow differentiation between physicians and nonphysician providers. The distribution list classified members by “primary role,” which includes a provider category: physician (38.0%), surgeon (2.9%), physician-scientist (13.4%), trainee (resident, fellow, nurse practitioner, physician assistant, or postdoctoral fellow) (16.0%), and student (medical school, nursing school, or undergraduate) (13.0%). People in these categories are not necessarily physicians but provide the most inclusive estimate to ensure that we are encapsulating all possible physicians into our response rate denominator.

### Survey design

The survey included 33 total items, utilizing skip logic to tailor relevant questions appropriately (Supplement 1, <http://links.lww.com/HC9/A408>). Survey content

captured demographics and career stage at childbirth(s), perceived workplace bias, need for modified training or career pathways, family planning, weeks of paid and unpaid leave, workload modifications during pregnancy or child-rearing, childcare services, and pregnancy outcomes. These topics were selected through discussion among AASLD’s Women’s Initiatives Committee based on prior studies of workforce gender equity in medicine and of the committee members’ lived experiences. Questions were then written by the first author who has training in quantitative methodology and survey instrument writing. For demographic questions, respondents were requested to select all ethnicities that they identify with. The survey was written by the first author and edited with input from coauthors with expertise in gender equity research. The survey was then transferred to RedCap 10.5.2 (Vanderbilt University), a secure web platform for building and managing online surveys. After drafting the web-based survey, the survey was piloted with hepatologists to assess clarity and ease of use. Feedback from pilot testers was then incorporated. The study was submitted to the University of Washington Institutional Review Board and deemed exempt (STUDY00011576). All research was conducted in accordance with both the Declarations of Helsinki and Istanbul. Written consent was given electronically by all subjects.

### Statistical analysis

Data were analyzed by IBM SPSS Statistics Version 26, and Descriptive statistics tests, Chi-squared, and Mann-Whitney *U* test were employed where appropriate with statistical significance considered as  $p < 0.05$ .

## RESULTS

The initial email (January 4, 2021) was sent to 5402 contacts, with a 40% open rate and a 4% click through rate (221 contacts). The second email (January 11, 2021) was sent to 5412 contacts, with a 38% open rate and a 2% click through rate (105 contacts). Overall, there were 308 unique clicks on the survey link.

### Cohort characteristics

An inclusive estimate of possible physicians on the listserv includes 83.32% of the contacts, a total of 4509 contacts. Our survey was completed by 349 respondents, with a response rate of 7.7%.

The survey was answered by 199 US-based respondents with an MD or DO credential. There was a wide distribution of respondents across 30 states (Figure 1). Demographic characteristics are listed in Table 1. Respondent gender included 130 women (65.3%) and

69 men (34.7%), with no respondents selecting gender nonbinary. The age range was between 29 and 84 years old, with a mean of  $43.9 \pm 11.3$ . The ethnicity of respondents is reported in [Table 1](#).

Current practice settings include academic—primarily clinical practice (69.8%,  $n = 139$ ), academic—primarily research (19.6%,  $n = 39$ ) and private practice (5.5%,  $n = 11$ ), industry (0.5%,  $n = 1$ ), and other (4.5%,  $n = 9$ ). Respondents were asked their years in practice since they completed clinical training (either gastroenterology fellowship or transplant hepatology fellowship, whichever was completed most recently) ([Table 1](#)).

## Bias

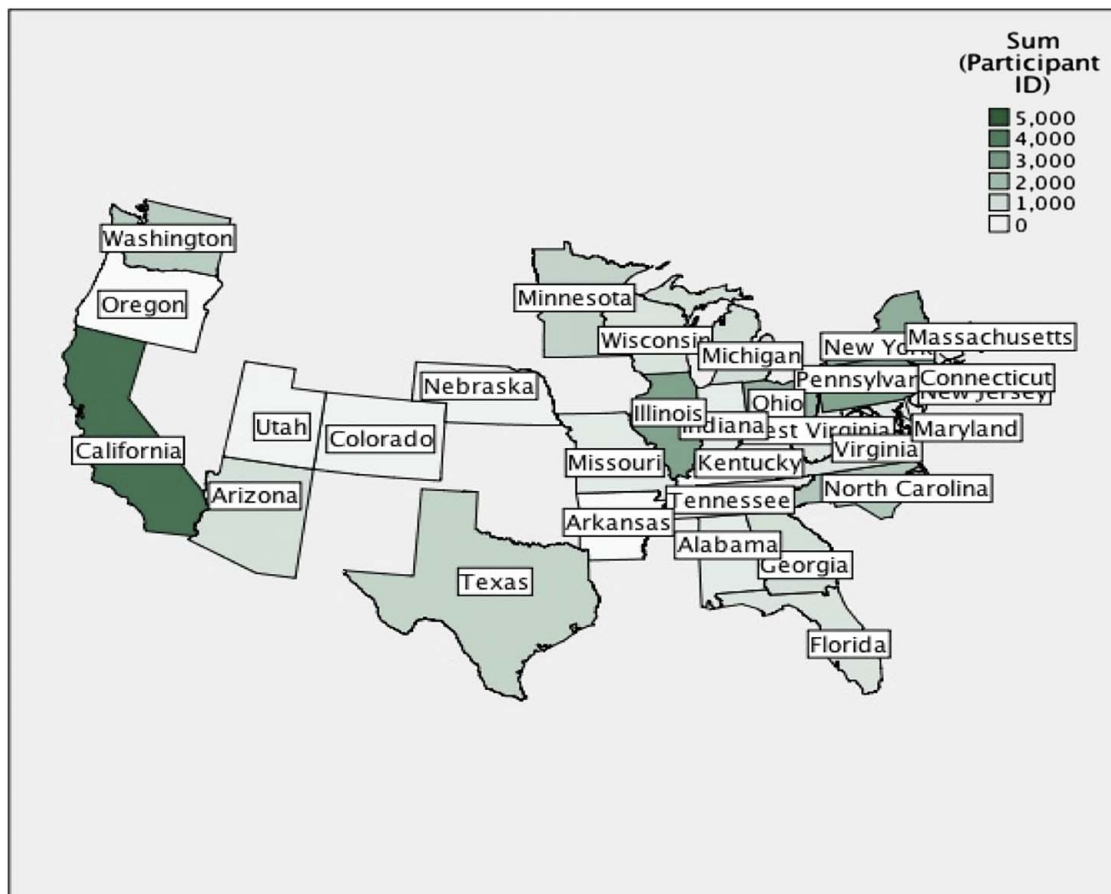
Three-quarters (75.2%) of women reported having experienced workplace discrimination compared with one-third (37.3%) of men ([Figure 2](#)).

Regarding differences by race/ethnicity, Black, and Hispanic women more frequently reported types of workplace discrimination compared with White counterparts. Overall, 83.3% of Black women and 62.5% of Hispanic women reported discrimination. Types of discrimination more frequently reported by Black and

Hispanic women included unequal pay or benefits (50.0% Black women, 50.0% Hispanic women, and 41.1% White women) and unfair lack of consideration for promotion or management (50.0% Black women, 25.0% Hispanic women, and 17.8% White women).

Participants were also asked specifically if they have perceived negative bias from colleagues or supervisors regarding child-rearing or parental leave. Forty-six percent of all respondents (46.5%) had perceived bias about either their own parental leave or child-rearing, or that of others. Of respondents with children, almost half of women reported experiencing bias about their own parental leave or child-rearing (43.4% of women versus 9.8% of men) and experienced bias about the parental leave or child-rearing of others (39.4% of women vs. 18.0% of men) ([Figure 3](#)). Of respondents without children, 46.7% of women experienced bias about the parental leave or child-rearing of others compared with zero men.

We assessed the frequency with which respondents were asked about their pregnancy intentions or child-rearing plans during interviews. One out of 5 (20.0%) women and 4.4% of men reported being asked about their or their partners' pregnancy intentions or child-rearing plans during interviews for training programs. During interviews for attending positions, 13.8% of women and



**FIGURE 1** Geographic distribution of survey respondents.

**TABLE 1** Demographic data of survey respondents

Demographic variable	n (%)
<b>Sex</b>	
Woman	130 (65.3)
<b>Age (y)</b>	
Mean	43.9 y ± 11.3
<b>Ethnicity</b>	
Asian or Pacific Islander	53 (26.6)
Black or African American	9 (4.5)
Hispanic or Latinx	11 (5.5)
Native American or Alaskan Native	1 (0.5)
White or Caucasian	120 (60.3)
Prefer not to answer	3 (1.5)
Other	5 (2.5)
<b>Practice setting</b>	
Academic—primarily clinical practice	139 (69.8)
Academic—primarily research	39 (19.6)
private practice	11 (5.5)
Industry	1 (0.5)
Other	9 (4.5)
<b>Years practicing since completing clinical training</b>	
Currently a trainee (resident or fellow)	30 (15.1)
1–9 y	88 (44.2)
10–19 y	36 (18.1)
20–29 y	25 (12.6)
30–39 y	12 (6.0)
40–49 y	4 (2.0)
50–59 y	1 (0.5)

5.9% of men reported being asked about their or their partners' pregnancy intentions or child-rearing plans.

## Training and career plans

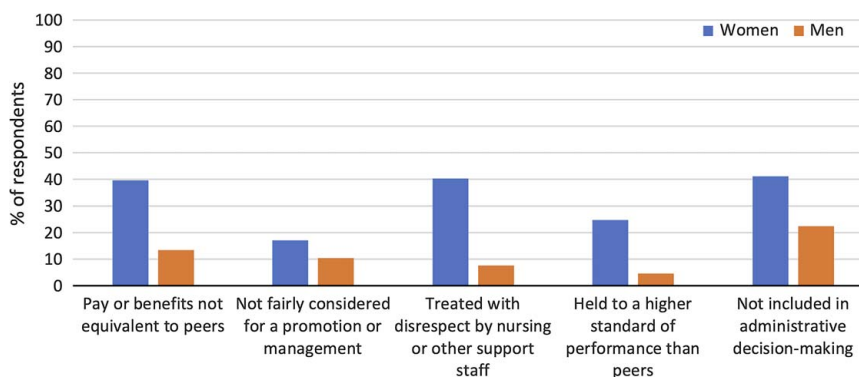
Respondents were asked if they altered their career plans or their training because of child-rearing, pregnancy, or adoption. Significantly more women than men

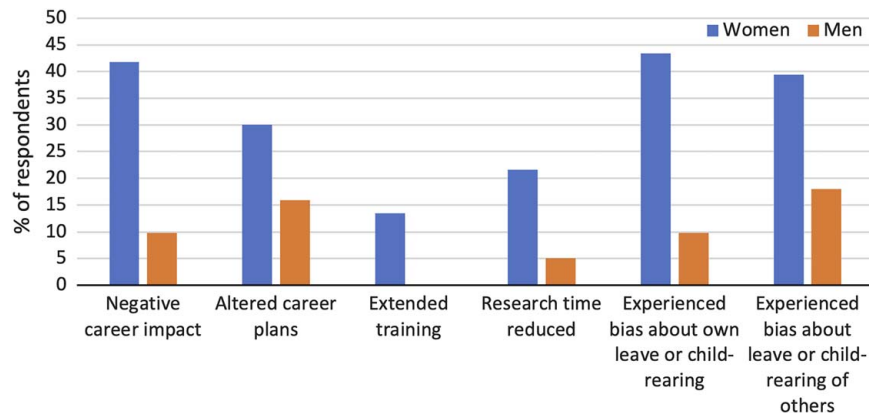
altered their career plans because of child-rearing, pregnancy, or adoption (30.0% of women vs. 15.9% of men,  $p = 0.030$  Table 2).

If respondents were a trainee during pregnancy, adoption, or birth of a child, they were asked whether they adjusted their training because of pregnancy or child-rearing plans. Men were significantly more likely to report that their training path did not change due to pregnancy or child-rearing (women 35.1% vs. men 57.6%;  $p = 0.006$ ). Respondents were asked about specific ways in which training was changed due to pregnancy or child-rearing (Figure 3). Many women reported “my training was extended (eg, I completed training later than planned)” (women: 13.4%; men 0%), “my research time was reduced (women 21.6%; men 5.1%),” and “my ability to pursue an additional degree was affected” (women 3.1%; men 1.7%). Many respondents reported that this was not applicable since pregnancy/adoption did not occur during training (women 27.8%; men 35.6%). Excluding those for whom this was not applicable (pregnancy/adoption did not occur during training), over half (52.9%) of women reported that their training was changed due to pregnancy or child-rearing plans, including 30.0% reporting that their research time was reduced.

## Promotion and career advancement

Many women reported their choice to have children negatively impacted promotion or career advancement. Of women who were pregnant and/or had children, 41.8% believed that having children had a negative impact, 55.1% believed that it had a neutral impact, and 3.1% believed that it had a positive impact (Figure 3). Of men whose partner was pregnant and/or had children, 9.8% stated they believed that it had a negative impact, 88.5% believed that it was neutral, and 1.6% believed that it had a positive impact. The majority of respondents without children thought that their decision to not have children had a neutral impact on their promotion (96.8% women; 100% men).

**FIGURE 2** Discrimination reported by hepatology physicians, by sex.



**FIGURE 3** Career impact and bias for respondents with children, by sex.

## Family planning

When asked if they had in the past delayed, or are currently delaying, having children, 69.5% of women and 35.9% of men reported that they had delayed or were currently delaying having children (Figure 4). Two-thirds (65.6%) of men selected that they have not delayed having children compared with less than one-third (31.3%) of women.

For current trainees, the most common reasons for delaying having children included “career concerns” (69.6% of women; 71.4% of men) and “concern about lack of parental leave or lack of sufficient parental leave” (39.1% of women; 28.6% of men).

Respondents were asked if job-related stressors or responsibilities contributed to an adverse outcome of pregnancy or in getting pregnant. One-third of women (35.4%) reported yes, and 16.9% said that this was not applicable since they or their partner have not been pregnant or tried to become pregnant. Ten percent of men reported yes, and 13.0% reported not applicable.

## Parental leave and child-rearing

### Child-rearing

The majority of respondents (77.9%) currently had children, and additional 2.5% were pregnant or their partner was pregnant, without current children. Men were significantly more likely to have children, and/or they/their partner were currently pregnant (88.4% of men, compared with 76.2% of women;  $p = 0.038$ ). Of respondents with children, the average number of children was  $2.1 \pm 0.8$ , and men had a significantly higher number of children than women (men: mean  $2.4 \pm 0.9$  vs. women mean  $1.9 \pm 0.7$ ;  $p < .001$ ). Of respondents without children, 56.4% plan to

have a child, and 50.0% were actively trying to have a child.

Respondents with children were asked about their age, career stage, and practice setting at the birth of each child. Women hepatologists were older than their male counterparts when having children, with a non-significant trend for the average age at birth of their first child (mean for women: 33.2 y vs. men: 32.8 y), and statistical significance for their second child (women: 35.9 y vs. men: 34.0;  $p = 0.013$  (full results in Table 2)). For the first child of women, the highest percentage had their first child during fellowship (43.3%), followed by an attending (30.9%), then residency (24.7%), and then medical school (1.0%). For the first child of men, the highest percentage had their first child as an attending (36.2%), followed by during fellowship (32.8%), then residency (25.9%), and then medical school (5.2%).

### Parental leave weeks, paid and unpaid

Respondents were asked about their parental leave, including paid leave, unpaid leave, and weeks taken from other protected time off. For women’s first child, the average leave included a mean of  $7.5 \pm 3.5$  weeks of paid leave and  $3.7 \pm 4.5$  weeks of unpaid leave. Mean  $4.1 \pm 2.8$  weeks were taken from other protected time (eg, vacation, sick days, or research time). For men’s first child, the average leave included  $1.7 \pm 2.4$  weeks of paid leave and  $0.8 \pm 1.8$  weeks of unpaid leave. A mean of  $1.1 \pm 2.3$  weeks was taken from other protected times. For women’s second child, the average leave included a mean of  $8.3 \pm 3.7$  weeks of paid leave and  $4.0 \pm 4.8$  weeks of unpaid leave, with  $4.4 \pm 3.5$  weeks taken away from other protected time. For men’s second child, average leave included  $1.7 \pm 2.8$  weeks of paid leave and  $0.5 \pm 1.0$  weeks of unpaid leave, with  $0.9 \pm 1.2$  weeks taken from other protected time.

**TABLE 2** Pregnancy, child-rearing, and career impact

Topic	Subgroup	Answer	Women		Men	
			N	%	N	%
Asked about pregnancy intentions or child-rearing plans during interviews	Women	Interviewing for training programs	26/130	20%	3/68	4.4%
		Interviewing for attending positions	18/130	13.8%	4/68	5.9%
		No	92/130	70.8%	61/68	89.7%
Impact of presence or absence of children on their promotion or career advancement	Without children	Negative impact	1/31	3.2%	0/8	0%
		Neutral	30/31	96.8%	8/8	100%
		Positive impact	0/31	0%	0/8	0%
	With children or expecting a child	Negative impact	41/98	41.8%	6/61	9.8%
		Neutral	54/98	55.1%	54/61	88.5%
		Positive impact	3/98	3.1%	1/61	1.6%
Altering career plans because of child-rearing, pregnancy or adoption?		Yes	39/130	30.0% <sup>a</sup>	11/69	15.9% <sup>a</sup>
		No	91/130	70.0%	58/69	84.1%
Number of children		0	31/130	23.8%	8/69	11.6%
		I or my partner are currently pregnant or adopting a child (6)	13/130	10.0%	4/69	5.8%
		1	24/130	18.5%	9/69	13.0%
		2	53/130	40.8%	22/69	31.9%
		3	19/130	14.6%	23/69	33.3%
		4	0/130	0%	3/69	4.3%
		5+	0/130	0%	2/69	2.9%
		Age at birth		First child	Mean 33.2	± 3.8
Second child	35.9 <sup>a</sup>			± 3.6	34.0 <sup>a</sup>	± 4.5
Third child	38.3			± 2.4	35.6	± 5.6
Fourth child	n/a			n/a	39.0	± 7.3
Career stage at birth of first child		Medical school	1/97	1.0%	3/58	5.2%
		Residency	24/97	24.7%	15/58	25.9%
		Fellowship	42/97	43.3%	19/58	32.8%
		Attending	30/97	30.9%	21/58	36.2%

<sup>a</sup>*p* = <0.05.

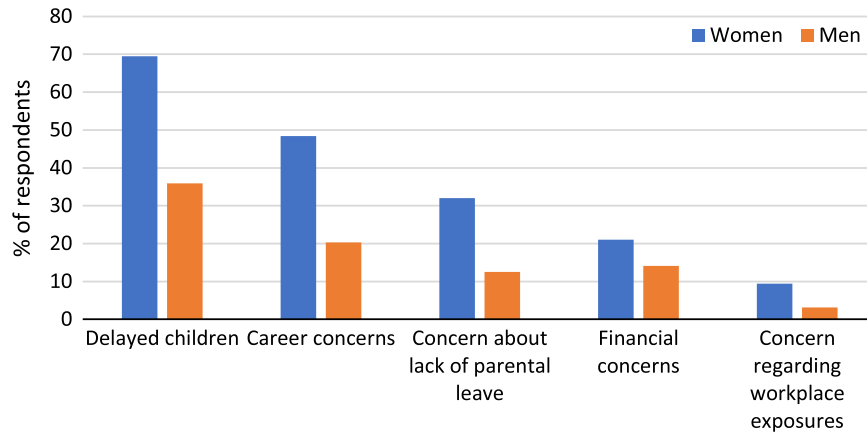
The duration of paid leave was significantly longer for women in primarily research academic positions (mean 9.1 wk) than those in primarily clinical academic positions (mean 7.1 wk), *p* = 0.02.

For all women who provided their parental leave length, 79.3% had fewer paid weeks than the American Academy of Pediatrics recommended 12 weeks of leave. When the number of weeks taken away from other protected time (such as research and vacation) was subtracted from the number of weeks of paid parental leave, 90.9% had fewer than 12 weeks of dedicated paid parental leave.

## Health and pregnancy/child-rearing accommodations

### Health issues

Respondents with children who were pregnant partners were asked about health issues during pregnancy and delivery. For their first child, 15.8% reported health issues during pregnancy, and 18.9% reported health issues during delivery. Two-thirds (67.4%) reported no health issues. For their second child, 22.9% reported health issues during pregnancy, and 7.1% reported



**FIGURE 4** Delayed child-rearing, by sex.

health issues during delivery. Over two-thirds (72.9%) reported no health issues.

### Overnight call

Respondents were asked how often they had overnight call responsibilities in their third trimester of pregnancy. For their first child, only one-fifth of women pregnant with their first child did not have any overnight calls in their third trimester of pregnancy (19.6%), while all the others had an increasing number of overnight calls. For subsequent children, the frequency of overnight calls during the third trimester decreased, with a quarter reporting no call for their second (26.5%) and third (26.3%) child. Weekly calls decreased to just over half for their second child (51.5%) and third child (52.6%).

A higher percentage of those who worked 6 or more overnight calls per month in their third trimester reported health issues during pregnancy (22.2%, compared with 13.8%) and in delivery (22.2%, compared with 18.5%).

### Changes to call or work schedule before and after birth

Respondents were asked if they changed their call or work schedule because of pregnancy and child-rearing. Over half of women changed their schedule before birth, during pregnancy (55.2%, compared with 18.6% of men). Of those who changed their schedule during pregnancy, they were asked what changes were made. Analysis of these open responses shows that, for women, over half (56.0%) increased the difficulty of their schedule to “front-load,” meaning that they would decrease calls during birth or delivery, or for some in their third trimester. This increased their call and service burden during pregnancy compared with their original schedule. A third (32.0%) reduced their

call or endoscopy burden, and for 12%, changes were made but without a clear impact on the difficulty of their schedule. After the birth of their child, one-third of women (33.3%) and one-fifth of men (22.4%) reported changing their schedule.

Respondents were also asked about changes to procedural volume and type if they performed procedures during their pregnancy. One-fifth decreased their procedural volume (21.3%), while two-thirds did not make changes to procedural volume (69.7%), and none reported increasing their procedural volume. Fifteen percent (15.7%) made changes to the types of procedures they performed, such as decreased procedures with fluoroscopy.

### Breastfeeding and pumping

Respondents reported whether or not they breastfed and their breastfeeding duration. Of those who breastfed, one-fifth breastfed for <6 months (21.6%), one-third breastfed between 6 months and 11 months (33.0%), 40% between 1 and 2 years (40.9%), and 4.5% breastfed for 2 years or more.

Only half of the women who breastfed reported adequate space for pumping breast milk (50.0%), with 20.7% reporting no space and 29.3% having inadequate space. Only 17.1% reported adequate time allotted for pumping, with 54.9% reporting no time and 28.0% inadequate time allotted for pumping. Twenty-nine percent (29.3%) reported adequate space for storing breast milk, whereas almost half reported that there is no space for storing breast milk (46.3%), and 24.4% reported that there is space for storing breast milk, but it is inadequate.

### Dedicated childcare

Respondents with children were asked whether there was a nursery or childcare center affiliated with the hospital/clinic. Almost a quarter reported that there was a

nursery/childcare center affiliated with the hospital/clinic but not located on the hospital premises (23.2%), and 17.4% reported that there was a nursery/childcare center on the hospital/clinic premises. Almost half (47.7%) reported that there was no nursery/childcare center affiliated with the hospital/clinic.

## DISCUSSION

Sufficient parental leave and a family-friendly culture in hepatology are critical to promote sex equity and improve the well-being of all physician parents. Broadly, women hepatologists experienced bias around pregnancy and parenthood, and took a short duration of parental leave. Women reported altering their training and career plans to accommodate child-rearing and family planning due to career concerns. In addition, work schedules during pregnancy were often more rigorous to attempt to cover time for parental leave. They reported that their return-to-work environment provided limited time and space for lactation, and few were provided childcare.

Two-thirds of respondents with children had their first child before becoming an attending, making fellowship program leave policies and accommodations for pregnancy, postpartum, and breastfeeding physicians critically important. Our findings support the conclusion that the career and family planning decisions of trainees are commonly impacted by inconsistent, and often inadequate, policies for parental leave.<sup>[17,23]</sup> New policies released in 2021 by the Accreditation Council for Graduate Medical Education and the American Board of Medical Specialties to require 6 weeks of parental leave during training offer some potential improvement to this situation; however, it should be noted that this is still half of the leave duration that is recommended by the American Academy of Pediatrics.<sup>[34–36]</sup> In addition, the updated American Board of Medical Specialties policy excludes transplant hepatology fellowships, as they are 1-year fellowships.<sup>[35]</sup> Our findings reinforce that more women than men reported the need to change their training due to pregnancy and parental leave, including extending time to graduation and decreasing research time, with a potential long-term impact on their careers and the talent pipeline for hepatology physician-scientists.

In addition, respondents reported challenging work environments with minimal accommodations for pregnancy and child-rearing. Respondents reported a short average leave duration, with women indicating that a high percentage of their leave came from other protected time—with potential consequences on research time, vacation, and time available for sick leave. Ninety percent of women had fewer than the 12 weeks of dedicated paid parental leave time that is recommended by the American Academy of Pediatrics and is increasingly commonly mandated by state

laws.<sup>[1,37,38]</sup> Women frequently reported increasing call and service burden during pregnancy to take parental leave. Concerningly, widespread bias against pregnancy, child-rearing, and parental leave was reported.

Upon returning to work postpartum, half of women hepatologists reported no or inadequate space allotted for pumping and storing breast milk (50.0%), and 82.9% reported no or inadequate time allotted. Over half of the women stopped breastfeeding before 1 year. This situation is despite the fact that the US Fair Labor Standards Act requires that employers provide time and space to pump breast milk.

Women also frequently reported that their work environment and career concerns led to altered family planning. Women reported delaying child-rearing, most commonly due to concerns about the impact on their careers and inadequate parental leave. Predictably, women hepatologists were less likely to have children, had children when older, and had fewer children compared with their counterparts who are men. Studies across other medical disciplines have identified that physicians delay pregnancy more than nonphysician comparators, even when comparators were restricted to the highest income quintile.<sup>[39]</sup> This delay was pronounced for specialist physicians.<sup>[39]</sup>

Our findings are consistent with literature from other areas of medicine, which have shown widespread bias against pregnancy and parenthood, as well as work environments that are incompatible with child-rearing.<sup>[8,13,31]</sup> Cardiology is a similar medical subspecialty that is often procedurally based, and a recent study identified three-fourths of cardiologists reported practices surrounding their maternity leave, which are illegal in many circumstances.<sup>[40]</sup>

Our study has several limitations. First, the response rate of 7.7% is low but is consistent with other studies distributed through large email contact lists without incentives for participation.<sup>[41,42]</sup> In addition, the representativeness of our sample size is limited by a lack of gender diversity, with no respondents reporting that they are nonbinary, as well as an overrepresentation of female and White respondents. Furthermore, several of our findings may be reflective of medical training more broadly and may not be unique to hepatology. In addition, members of the email listserv may have been more likely to respond to a survey on pregnancy, child-rearing, and work environments if they have opinions on these issues. Our respondents are representative of a large age range, which suggests that some of the experiences reported here may be reflective of years ago when these respondents had children. It is possible that experiences have improved over time as more attention has been paid to sex-related issues. Nevertheless, it does provide some initial insight into the perceptions of many in our profession and suggests a need for further exploration of this topic

to maximize both individual opportunities and an equitable, diverse, and inclusive workforce.

There are several pathways within hepatology and beyond that can improve work environments for hepatologists who are parents. Given our findings regarding issues with parental leave in hepatology training, the creation of clear parental leave policies for hepatology fellows, which allows for equity in career opportunities and preserves research time, should be considered. The hepatology community can provide a statement about how best to implement recent Accreditation Council for Graduate Medical Education regulations that require sponsoring institutions to provide a minimum of 6 weeks of paid parental leave.<sup>[34]</sup> There is an ongoing discussion regarding competency-based medical education versus time-based medical education that may provide increased flexibility regarding parental leave.<sup>[43,44]</sup> In addition to protections for trainees, department and division leadership should consider pregnancy accommodations to mitigate high rates of pregnancy complications, including reduced overnight calls and a reduced clinical load, which are both associated with adverse pregnancy outcomes.<sup>[28]</sup> Those who participate in endoscopy should be allowed to adjust their endoscopic volume without financial penalty.<sup>[28]</sup> Parental leave policies should be transparent and accessible, as well as equitable for diverse family units, including availability for all genders. Furthermore, the creation of a family-friendly return-to-work environment should include flexible scheduling options and assistance with childcare.<sup>[45]</sup> In addition, we should discuss as a hepatology community what steps can be taken to allow pregnancy, parental leave, and child-rearing without overburdening either parents or colleagues.<sup>[46]</sup> Sufficient ancillary staffing and improved family leave policies would provide benefits to not only parents but also all hepatologists who need to balance career and family responsibilities. Ultimately, reforms beyond the hepatology community are likely needed to support workforce equity. The hepatology community could join in advocacy efforts with the medical societies of other specialties that have called for legislation in the US supporting paid family leave.<sup>[47]</sup>

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Monika Sarkar received grants from GlaxoSmithKline and Zydus Pharmaceuticals. Janet Gripshover is on the speakers' bureau for AbbVie and Gilead. Jennifer Au consults for Genentech. Lauren Nephew received grants from Delfi. Norah Terrault consults for DSMB Moderna, EXIGO, and Saol Therapeutics. She received grants from Durect, Genentech-Roche, Gilead, GlaxoSmithKline, and Helio. The remaining authors have no conflicts to report.

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