

Prevalence and Risk Factors of Adverse Pregnancy Outcomes in Obgyn Residency

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ABSTRACT

Objective: To investigate the prevalence of adverse pregnancy outcomes and describe possible risk factors among female residents in Obstetrics and Gynecology (OBGYN) residency programs in the United States (US).

Methods: This was a cross-sectional study that utilized standardized surveys via an on-line questionnaire website (Survey Monkey). The surveys were sent to all OBGYN residency program coordinators in the US, who were instructed to send emails to their residents in December 2022, March 2023, and June 2023. All statistical analyses were performed on Microsoft Excel. The descriptive analysis was performed to report the survey results.

Results: Total 5,859 OBGYN resident positions were available at the time of first survey distribution; only 117 responded (response rate 2.0%). Of those who responded, one did not meet the inclusion criteria and was excluded from the data analysis. For 116 residents, 52.59% (61/116) were 29-31 years old; 77.59% (90/116) were White; 47.41% (55/116) were in the Mideast area; and 65.52% (71/116) had normal BMI. 24.14% (28/116) were pregnant at some time during their residency. 59.26% (16/27) residents reported any adverse pregnancy outcomes during the residency and 44.44% (12/27) of them ended to be followed by Maternal Fetal Medicine (MFM). Among those 16 residents, 37.50% (6/16) reported hypertensive disorders of pregnancy; 25.0% (4/16) gestational diabetes; 25.0% (4/16) preterm labor; 25.0% (4/16) due to non-reassuring fetal heart tracing; and 12.5% (2/16) due to advance maternal age.

Conclusion: Female OBGYN residents in the US had higher than average adverse pregnancy outcomes compared to the general population. Considering the very low response rate, further studies should be warranted to identify the possible risk factors.

Keywords: Pregnancy, Adverse Outcomes, Residency.

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Accurate

Female obstetrics and gynecology residents have higher than average adverse pregnancy outcomes compared to the general population.

Introduction

A recent journal article was published that noted how female surgeons were at a higher risk of pregnancy difficulties, including still-birth and miscarriages: The rationale behind the adverse outcomes were due to female surgeons being more likely to delay pregnancy and childbearing because of training and establishing early careers [1]. In addition, female surgeons worked excessively, with 57%

of pregnant surgeons noted to work more than 60 hours per week and a third reported taking at least half a dozen overnight calls per month during their pregnancies [2]. Surgeons who were noted to operate more than 12 hours per week during pregnancy had increased risks of pregnancy complications [1]. However, Rangle, et al (2021) and Gellman (2021) have not looked at how being a medical resident affects pregnancy.

Residents tend to spend a considerable amount of time in the operating room to maximize their learning opportunities. The current Accreditation Council for Graduate Medical Ed-

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ucation (ACGME) regulations limit a maximum amount of 80 hours per week for residents [3]. Oftentimes, residents under report work hours so as to not violate ACGME rules and still have work to complete outside of the hospital, such as studying, research projects, preparation for presentations and administrative work. This amount of work undoubtedly causes a lot of stress, affecting not only their performance, but the quality of their personal and professional lives as well [4]. Furthermore, stress and fatigue related to work has been associated with an increased risk of antenatal morbidity [5]. The objective is to investigate the prevalence of adverse pregnancy outcomes and describe possible risk factors among female residents in OB/GYN residency programs in the US. The ultimate goal of this study is to have information that hopefully will change the culture of residency to support pregnancy and to reduce the risk of major pregnancy complications.

Methods

We conducted a cross-sectional study that evaluated questionnaires (See Appendix 1) submitted by anonymous participants. The study protocol was approved by Institutional Review Boards (IRB: 2022-08-010). An online questionnaire website (Survey Monkey) was utilized ensuring not to collect any personal identifiers. Outcomes were measured by the answers provided to the survey questions. The survey did not take longer than 20 minutes to complete. Program coordinators were emailed directly regarding the research on three separate occasions (December 2022, March 2023, and June 2023) and asked to distribute the research information and the survey to their current residents. Participants were sent an online questionnaire and the completion of questionnaires was voluntary. Each participant was assigned a randomized study number that protected their personal identity. Demographic information was obtained, as well as work exposure and pregnancy outcomes. All statistical analyses were performed on Microsoft Excel. The descriptive analysis was performed to report the survey results.

Results

A total of 117 responded (response rate 2.0%) from 3 attempts. On December 2022, 87 responses were received. On March 2023, 22 more responses were collected. In June 2023, 8 more responses were collected. The demographics were obtained (See Table 1). The ages ranged from 25-37 years old with the majority aged 26-31 years old with only 2.58% as 35 years old and older, also known as advanced maternal age. The majority of the participants (77.59%, 90/117) were also White or Caucasian. In addition, the majority of the participants were in a residency located in the Mideast (defined to include Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania (47.41%, 55/117), normal BMI (65.52%, 76/117), married (56.90%, 66/117), nulliparous (69.23%, 81/117) with no known comorbidities (54.39%, 62/117). Of note, OBGYN residents who did get pregnant during residency did so during their Post Graduate Year (PGY) 2 (51.72%) and PGY3 (37.93%) years. When they got pregnant in residency, the ages ranged mostly from 27-33 years old, and two participants were 36 years old.

Table 1. Demographics

Demographic Variable		N (%)
Age (years)	23-25	1 (0.86)
	26-28	40 (34.48)
	29-31	61 (52.59)
	32-34	11 (9.48)
	35-37	3 (2.58)
	38+	0 (0)
Ethnicity	White or Caucasian	90 (77.59)
	Asian or Pacific Islander	16 (13.79)
	Black or African American	10 (8.62)
	Hispanic or Latino	5 (4.31)
	Native American or Alaskan Native	1 (0.86)
	Middle Eastern	1 (0.86)
	Prefer Not to Respond	1 (0.86)
Geographical Area of Residency*	Mideast	55 (47.41)
	New England	17 (14.66)
	Southeast	15 (12.93)
	Great Lakes	13 (11.21)
	Southwest	9 (7.76)
	Plains	4 (3.45)
	Far West	3 (2.59)
	Rocky Mountain	0 (0)
BMI	Underweight	2 (1.72)
	Normal	76 (65.52)
	Overweight	27 (23.28)
	Obese	11 (9.48)
PGY Status	Transitional Year	0 (0)
	PGY1	25 (21.55)
	PGY2	38 (32.76)
	PGY3	31 (26.72)
	PGY4	22 (18.97)
	PGY5 and above	0 (0)
	Research Gap Year	0 (0)
Marital Status	Single	20 (17.24)
	In a Relationship	29 (25)
	Married	66 (56.90)
	Separated	0 (0)
	Divorced	1 (0.86)
	Widowed	0 (0)
Comorbidities	None	62 (53.44)
	Anxiety	37 (31.89)
	Depression	24 (20.69)
	Hypertension	4 (3.49)
	Asthma/OSA	3 (2.59)
	Hypothyroidism	3 (2.59)
	ADHD	2 (1.72)
	Type I Diabetes	1 (0.86)
	Sickle Cell Disease	1 (0.86)
	Hyperlipidemia	1 (0.86)
	Rheumatoid Arthritis	1 (0.86)
	Psoriasis, Vitiligo	1 (0.86)

BMI: Body Mass Index, PGY: Post Graduate Year, ADHD: Attention Deficit Hyperactivity Disorder

*New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Mideast (Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania), Great Lakes (Illinois, Indiana, Michigan, Ohio, Wisconsin), Plains (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota), Southeast (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia), Southwest (Arizona, New Mexico, Oklahoma, Texas), Rocky Mountain (Colorado, Idaho, Montana, Utah, Wyoming), Far West (Alaska, California, Hawaii, Nevada, Oregon, Washington)

In addition to demographics, pregnancy outcomes were obtained. Of those who got pregnant during residency, 4.35% had a miscarriage occurring on average at 6 weeks gestational age. On average, OBGYN female residents gave birth at 37 weeks and 3 days gestational age. However, 27% of the deliveries were preterm, ranging from 32-36.1 weeks. This is higher than the national average for preterm deliveries, which is 12% [7]. Additionally, 33.33% of infants had to be evaluated by the Neonatal Intensive Care Unit (NICU) with 19.05% of infants needing to be admitted to the NICU, the main reason being prematurity. Additionally, 35.29% of female pregnant OBGYN residents had to go to the emergency department for an OB related condition, while 45% of pregnancies ended in a spontaneous vaginal delivery, 30% had to be induced with a result of vaginal delivery and 25% was a nonscheduled primary cesarean section (due to failed trial of labor, nonreassuring fetal heart tracing (NRFHT), etc.). Only 19.05% had complications with the delivery itself, the majority due to a hemorrhage.

Of those who were not planning on getting pregnant during residency, 85.14% reported their main reason was the work hours of medical residency, 71.62% reported stress of medical residency, 47.30% said financial reasons. Additionally, of those who had an elective abortion in residency, the two leading causes were finances and residency.

Among 116 residents, 27 participants (24.14%) were pregnant during OBGYN residency. Of those pregnant, 59.26% (16/27) had adverse pregnancy outcomes (Table 2, Figure 1). Of the complications, 37.50% (6/16) were due to hypertensive disorders of pregnancy, 25.0% (4/16) were due to gestational diabetes, 25.0% (4/16) were due to preterm labor and 25.0% (4/16) were due to NRFHT.

Table 2. Pregnancy Complications Outcomes

Pregnancy Complications reported by 16 residents	N (%)
Pregnancy Induced Hypertension	6 (37.50)
Gestational Diabetes	4 (25.00)
Advanced Maternal Age	2 (12.50)
Multigestation	2 (12.50)
Preterm Labor	4 (25.00)
Preterm Premature Rupture of Membranes	1 (6.25)
Anemia requiring blood/iron transfusions	1 (6.25)
Infections	1 (6.25)
Hyperemesis Gravidarum	2 (12.50)
Nonreassuring Fetal Heart Tracing	4 (25.00)
Other*	4 (25.00)

*Other: first trimester bleeding, 2 vessel cord, low lying placenta, Sickie Crisis

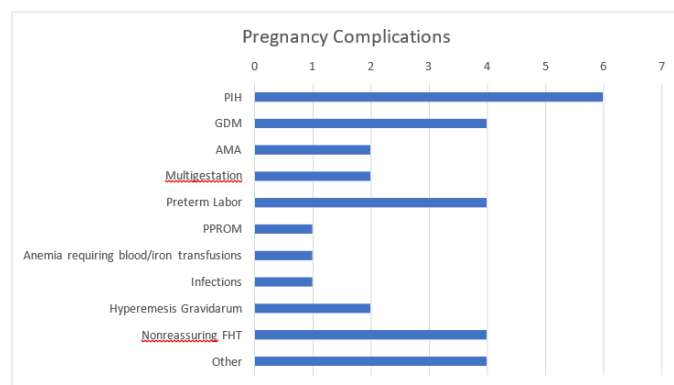


Figure 1: Pregnancy Complications Outcomes

PIH: pregnancy induced hypertension, GDM: gestational diabetes mellitus, AMA: advanced maternal age, PPROM: preterm premature rupture of membrane, FHT: fetal heart tracing

*Other: first trimester bleeding, 2 vessel cord, low lying placenta, Sickie Cell Crisis.

Lastly, within this study population, the exposure to work was analyzed when looking at OBGYN residents with pregnancy complications compared to OBGYN residents without pregnancy complications (Table 3). Those with pregnancy complications were found to work more average hours per week in their first trimester when compared to those without pregnancy complications (70.67 hours vs 69.5 hours, $p=0.789$) and second trimester (71.33 vs 70.5 hours, $p=0.84$) (Figure 2) but without statistical significance for both trimesters.

Table 3: Comparison of work between OBGYN residents with pregnancy complications vs OBGYN residents without pregnancy complications

		Without Complications	With Complications	p-value
Hours worked per week (hours)	1st trimester	69.5	70.67	0.79
	2nd trimester	70.5	71.33	0.84
	3rd trimester	70.5	70.33	0.97
24-hour calls per month (in frequency)	1st trimester	3	1.93	0.23
	2nd trimester	2.44	1.97	0.3
	3rd trimester	2.44	1.77	0.17
Days off per week (days)	1st trimester	1.15	1.33	0.26
	2nd trimester	1.15	1.27	0.45
	3rd trimester	1.35	1.37	0.93
Average sleep per night (hours)		6.7	6.12	0.03
Longest shift (hours)		25.1	25.07	0.99

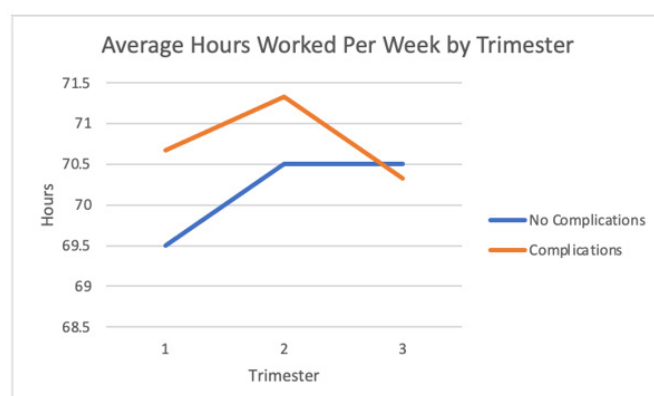


Figure 2: Average hours worked per week by Trimester

In contrast, this was not the case for the third trimester, where both residents without complications and those with complications worked similar number of hours (70.5 hours on average per week and 70.33 hours on average per week, $p=0.97$), (Figure 2). Our data also showed that those without complications worked more 24- hour calls per month when compared to those with complications in all three trimesters although not statistically significant (3 vs. 1.93 in 1st trimester ($p=0.226$), 2.44 vs 1.97 in 2nd trimester ($p=0.3$), 2.44 vs 1.77 in 3rd trimester ($p=0.165$), (Figure 3). On average, those with complications were also getting more days off per week, when compared with those without complications without statistical significance (1.33 vs 1.15 in 1st trimester ($p=0.257$), 1.27 vs. 1.15 in second trimester ($p=0.45$), 1.37 vs 1.35 in third trimester ($p=0.93$), (Figure 4). On average, those without complications were statistically significantly getting 6.7 hours of sleep per night whereas those with complications were getting an average of 6.12 hours of sleep per night ($p=0.026$).

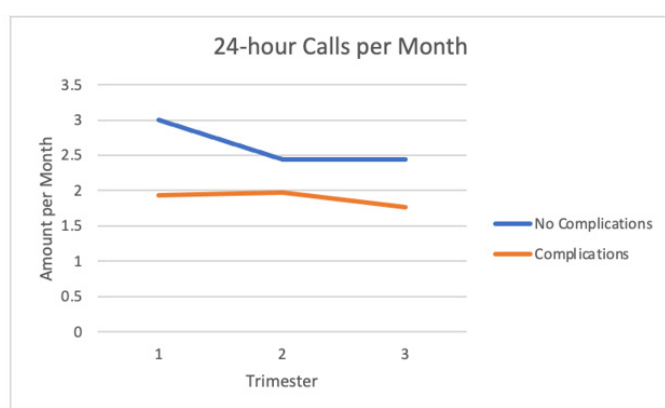


Figure 3: Number of 24-hour Calls per Month by Trimester

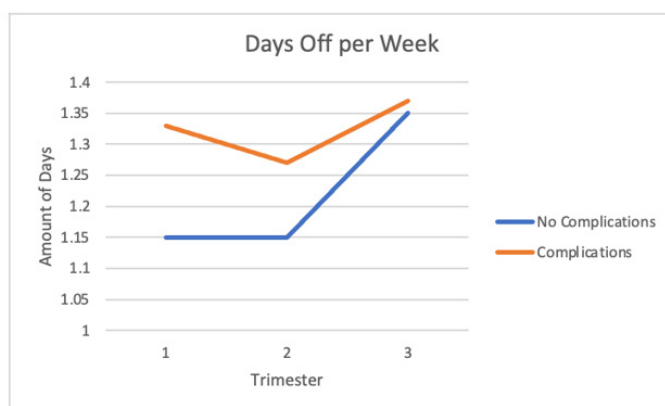


Figure 4: Number of Days Off per Week by Trimester

Furthermore, the longest shift worked for those without complications was on average slightly longer than those with complications but without statistical significance (25.1 hours vs 25.07 hours, $p=0.99$).

Discussion

This study summarized the higher-than-average pregnancy complications compared to the general population. In this study, there was an astonishing 59.26% of the pregnancies with complication. 37.50% (6/16) of complications were due to hypertensive disorders of pregnancy, which globally, preeclampsia only

complicates 2-8% [8]. Additionally, 25.0% (4/16) of complications were due to gestational diabetes compared to only 2-10% in the US [9]. Furthermore, 25.0% (4/16) were due to preterm labor compared to only 12% in the US [10]. Lastly, 25.0% (4/16) were due to NRFHT compared to 15% in the general population [11]. Finally, 23.81% of female OBGYN residents suffered from postpartum depression, while postpartum depression occurs in about 6.5-20% of women in the US [12].

In our otherwise healthy study population with minimal risk factors (not AMA, normal BMIs, no medical comorbidities, White/Caucasian), the higher-than-average complication rates in this study population may be attributable to the hours of work. Previous studies showed that over half (57%) of female surgeons worked more than 60 hours per week during pregnancy and over a third (37%) took more than six overnight calls [1]. Our study showed that for female OBGYN residents, the average number of hours per week during the first trimester was 70.09 hours/week, during the second trimester was 70.92 hours/week, and during the third trimester was 70.42 hours/week. (Table 3). Fortunately, there was a downward trend in the number of 24- hour calls worked per month, being 2.45 calls per month in the first trimester, 2.205 calls per month in the second trimester, and 2.11 calls per month in the third trimester (Table 3). Our data also showed that those with adverse pregnancy outcomes worked more hours on average per week in the first and second trimesters.

However, our data demonstrated that those without complications had more 24-hour calls per month, less days off per week, and longer shifts. However, these differences were very small and not statistically significant.

Our study found that the female OBGYN resident works more than an average female surgeon as demonstrated by the average number of hours worked per week, number of 24-hour calls per month, and shift length. Furthermore, female OBGYN residents have higher adverse outcomes in comparison to the general population, including pregnancy induced hypertension, gestational diabetes, preterm labor, NRFHT, and postpartum depression. However, a larger sample size is needed in order to yield more significant results. In addition to increasing the sample size, broadening the study population to encompass other medical and surgical specialties will help make more generalizable results.

The strengths of our study include that, up to our knowledge, this is one of the largest studies in existence to investigate how an OBGYN medical residency affects pregnancy outcomes. Additionally, not only does the use of online questionnaires pose no medical risk and protect all privacy of participants, but it also enables an extremely accessible and convenient way to increase survey responses and data points. The weakness of our study includes that despite trying three times over the span of 7 months to reach out to all OBGYN residency programs in the US, the response rate of all OBGYN female residents in the US was very low. The meaningful statistical analysis could not be performed due to very small numbers of participants. It is also non-generalizable, as the study population is limited to OBGYN surgical residents and excludes other surgical specialties as well as other nonsurgical specialties.

Further studies are warranted to identify the possible risk factors of adverse pregnancy outcomes during the residency. The authors hoped that the information obtained from this survey has a positive impact on future residents as it supports that overall, residency conditions must improve in order to enable a welcoming environment conducive to pregnancy.

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Print Appendix

Adverse Pregnancy Outcomes

Appendix 1: Online Questionnaire

1. Are you reproductively female and a current OB/GYN resident?

- a. Yes
 - b. No
2. What is your current age (in years)? [fill in blank]
 3. What is your ethnicity? Select all that apply
 - a. Asian or Pacific Islander
 - b. Black or African American
 - c. Hispanic or Latino
 - d. Native American or Alaskan Native
 - e. White or Caucasian
 - f. Other:
 4. What geographical area is your residency located:
 - a. New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont
 - b. Mideast: Delaware, District of Columbia, Maryland, New Jersey, New York and Pennsylvania
 - c. Great Lakes: Illinois, Indiana, Michigan, Ohio and Wisconsin
 - d. Plains: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota
 - e. Southeast: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia
 - f. Southwest: Arizona, New Mexico, Oklahoma and Texas
 - g. Rocky Mountain: Colorado, Idaho, Montana, Utah and Wyoming
 - h. Far West: Alaska, California, Hawaii, Nevada, Oregon and Washington
 5. What is your BMI?
 - a. Underweight, BMI <18.5
 - b. Normal range, BMI 18.5-24.9
 - c. Overweight, BMI 25-29.9
 - d. Obese, BMI >30
 6. What is your PGY status?
 - a. Transitional year
 - b. PGY1
 - c. PGY2
 - d. PGY3
 - e. PGY4
 - f. PGY5
 - g. PGY6 and above
 - h. Research/gap year
 7. What is your marital status?
 - a. single
 - b. In a relationship
 - c. Married
 - d. Separated
 - e. Divorced
 - f. Widowed
 8. What is your gravida? (Please write as G _) [fill in blank]
 9. What is your para? (Please write as P) [fill in blank]
 10. Which of the following comorbidities do you have? (Select all that apply)
 - a. Type I Diabetes
 - b. Type II Diabetes
 - c. Hypertension
 - d. Depression
 - e. Anxiety

- f. None
- g. Other (please specify)
11. Have you been pregnant during residency?
- a. yes
- b. no
- c. prefer not to respond
- 11 a) If your question to Q11 is no, are you planning on getting pregnant during residency?
- a. Yes
- b. No
- Unsure
- 11 b) If no, what was/is your main concern?
- a. Marital status
- b. Financial reasons
- c. Lack of social support
- d. Work hours of medical residency
- e. Stress of medical residency
- f. Prefer not to respond
- 11c) If your answer to Q11 is yes, was the pregnancy during residency unintentional and/or desired?
- a. Unintentional and undesired
- b. unintentional and desired
- c. Intentional and undesired
- d. Intentional and desired
- e. Prefer not to respond
12. What year of your residency did you get pregnant?
- a. Transitional year
- b. PGY1
- c. PGY2
- d. PGY3
- e. PGY4
- f. PGY5
- g. PGY6+
13. What was your age (in years) when you got pregnant during residency? [fill in blank]
14. When you got pregnant during residency, was it your first pregnancy? (Select all that apply)
- a. Yes
- b. No, I had been pregnant before and got an elective abortion prior to starting residency
- c. No, I had been pregnant before and had a miscarriage prior to starting residency
- d. No, I had been pregnant before and gave birth to a child/multiple children prior to starting residency
- e. No, prefer not to give additional information
15. Until what gestational age (in weeks) did you work? [fill in blank]
16. On average, how many hours per week were you working during your first trimester? [fill in blank]
17. On average, how many hours per week were you working during your second trimester? [fill in blank]
18. On average, how many hours per week were you working during your third trimester? [fill in blank]
19. On average, how many 24 hour calls per month were you working your first trimester? [fill in blank]
20. On average, how many 24 hour calls per month were you working your second trimester? [fill in blank]
21. On average, how many 24 hour calls per month were you working your third trimester? [fill in blank]
22. On average, how much sleep (in hours) were you getting per night? [fill in blank]
23. What was the longest number of hours in a row did you have to work? [fill in blank]
24. On average, how many days off did you get per week during your first trimester? [fill in blank]
25. On average, how many days off did you get per week during your second trimester? [fill in blank]
26. On average, how many days off did you get per week during your third trimester? [fill in blank]
27. Did your medical residency allow you to go to prenatal visits (including office visits, ultrasounds, stress tests, etc.) without taking PTO?
- a. Yes, I never had to use my PTO to attend prenatal visits
- b. Yes, I was allowed up to a certain amount of visits before I had to use my PTO to attend prenatal visits.
- c. No, I always had to use my PTO to attend prenatal visits
- d. Prefer not to respond
28. On a scale of 1-5, rate the level of support by your attendings/faculty/program directors.
- a. 1 = Strongly unsupported
- b. 2 = Somewhat unsupported
- c. 3 = Neutral
- d. 4 = Somewhat supported
- e. 5 = Strongly supported
29. On a scale of 1-5, rate the level of concern you had about being removed or held back from residency.
- a. 1 = Highly concerned
- b. 2 = Somewhat concerned
- c. 3 = Neutral
- d. 4 = Somewhat unconcerned
- e. 5 = Not concerned at all
30. On a scale of 1-5, rate the level of support by your coresidents.
- f. 1 = Strongly unsupported
- g. 2 = Somewhat unsupported
- h. 3 = Neutral
- i. 4 = Somewhat supported
- j. 5 = Strongly supported
31. When did you return to work postpartum? (Please answer as postpartum day number _) [fill in blank]
32. Did your residency program give you maternity leave or did you have to use PTO?
- a. I was given enough maternity leave and did not need to use PTO
- b. I was given some maternity leave, the rest I had to use PTO
- c. I was given no maternity leave and had to use PTO for all my leave
- d. I was not given maternity leave and did not use my PTO
- e. Prefer not to respond
33. Any specific comments you would like to add about your residency regarding your pregnancy? [fill in blank]
34. Did you have a miscarriage during residency?
- a. Yes
- b. No
- c. Prefer not to respond
- 34a) If you had a miscarriage during residency, at what gestational age did you miscarry? (Please answer in weeks) [fill in blank]
35. Did you have an elective abortion during residency?

- A. yes
B. no
C. prefer not to respond
- 35a) If your question to Q35 is yes, what was the reason for the elective abortion? Select all that apply.
- a. Finances
b. Relationship status
c. Residency
d. Other (please specify)
36. At what gestational age did you give birth? (please answer in weeks) [fill in blank]
37. Did your baby have to be evaluated by NICU?
a. Yes
b. No
38. Was your baby admitted to the NICU?
a. Yes
b. No
- 38a) If yes, why was your baby admitted to NICU? (select all that apply)
- a. Premature
b. Respiratory distress syndrome
c. Sepsis/infection (including chorio)
d. Hypoglycemia
e. Other (please specify)
39. Did you ever go to the Emergency Department for an OB related emergency (bleeding, abdominal pain, N/V, etc)?
a. Yes
b. No
c. No, but I considered it
40. Did you have any complications of pregnancy?
a. Yes
b. No
- 40a) If yes, what complications did you have? Select all that apply
- a. Hypertensive disorders of pregnancy (gestational htn, pre eclampsia, PreE with severe features, HELLP)
b. Gestational Diabetes
c. Advanced maternal age (being pregnant at 35yo or older)
d. Multigestation (Twins, triplets)
e. Oligohydramnios
f. IUGR
g. Preterm labor
h. PPROM
i. Cervical insufficiency
j. IUFD / stillbirth
k. Anemia
l. Infections (UTI, chorioamnionitis)
m. Exposure to substances (alcohol, drugs)
n. Hyperemesis gravidarum
o. Nonreassuring FHT
p. Other:
41. Did you need to be followed by MFM?
a. Yes
b. No
42. How did you deliver?
a. Vaginal delivery – spontaneous
b. Vaginal delivery – induced
c. Primary cesarean section - Scheduled (ie breech, multigestation, etc)
d. Primary cesarean section – Nonscheduled (after failed trial of labor, NRFHT, etc)
e. Repeat cesarean section - Scheduled (elective, breech, multigestation, etc)
f. Repeat cesarean section - Nonscheduled (after failed TOLAC, presented with labor, ruptured membranes, etc.)
43. Any complications from your delivery?
a. Yes
b. No
44. What complications did you experience from your delivery? (Select all that apply)
- a. Hemorrhage
b. Intrauterine infection requiring antibiotics
c. Uterine rupture
d. Shoulder dystocia
e. Amniotic fluid embolism
f. Placental abruption
g. Operator vaginal delivery (forceps, vacuum)
h. 3rd degree/4th degree perineal tear
i. Retained placenta
j. Other (please specify)
45. Did you suffer from post partum depression?
a. Yes
b. No
c. Prefer not to respond
- 45a) If yes, did you require medication for your post partum depression?
a. Yes
b. No
c. Prefer not to respond
46. Did you breast or bottle feed during residency?
a. Bottle feed exclusively
b. Breast feed exclusively
c. both
- 46a) If you breast fed, please rate your experience with pumping at work during residency?
a. Extremely difficult
b. Somewhat difficult
c. Neutral
d. Somewhat easy
e. Extremely easy