Safe and Supported Pregnancy

A Call to Action for Surgery Chairs and Program Directors

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Surgical residency programs have traditionally lacked structured support for trainees who become pregnant. While there have been some important areas of progress in the last two years, including an ACGME requirement to provide residents with lactation facilities[1] and a commitment to at least 6 weeks of maternity leave by all specialty boards,[2] these fail to address health related issues that occur during pregnancy. In the United States, surgeons are in training for much of their twenties and thirties, which for many women represents the optimal time for pregnancy and family growth, in part influenced by the well-documented decline in fertility above age 35 and increased likelihood of pregnancy-related complications.[3] Residency programs should provide structured support to those who choose to have children during this time.

Pregnant residents face increased risks of peripartum complications, including pre-eclampsia,[4] intrauterine growth restriction,[4] preterm labor and delivery,[4] and postpartum depression.[5] Extrapolation from non-medical shift workers offers additional insight on the effect of work schedules on pregnancy outcomes. Rotating shifts (combination of day and night work) are associated with 75% increased odds of developing pre-eclampsia, while fixed night shifts and long work hours (more than 40 hours per week) are both associated with more than 20% increased odds of preterm labor and birth, respectively.[6] Surgical residents who are pregnant may be experiencing significant stress and increased risk of health issues during pregnancy.

For more than half of women in the United States who have had children during surgery training, the current system has bred professional dissatisfaction and led to altered fellowship plans.[7] It has caused many women to consider leaving training, and it has deterred about one third of surgeon mothers from recommending that medical students pursue a career in surgery.[8] The common suggestion that pregnancy should be relegated to research time or deferred until training has been completed is an outdated strategy that forces prioritization of career over family planning, and it fails to acknowledge that pregnancies do not always happen in a predictable, well-timed fashion. For some trainees, this leads to undesired delays in starting a family, fertility challenges, and difficult family planning choices. Furthermore, the current system fails to accommodate the needs of the majority of surgery resident mothers who have had at least one child during clinical training.[7]

Most surgical training programs verbalize support of women residents, but there is a lack of specific policies that empower and enable pregnant trainees to best care for their health. This critical gap is negatively impacting resident health, safety, and well-being. We must openly acknowledge that physiologic changes associated with pregnancy may require modifications to surgical training. We have therefore developed and adopted *Guidelines for the Well-being of Surgical Resident Parents* addressing five domains (Full text available in Appendix 1, http://links.lww.com/SLA/D403):

1. Prenatal Health Maintenance: Pregnant residents must be able to freely attend prenatal visits, without stigma or pushback. It is expressly not the responsibility of the pregnant resident to ask favors or arrange trades to attend medical appointments, but rather coverage is built into the schedule in the same manner as case and clinic assignments.
2. Maintaining Health and Well-being while Operating: Pregnant residents are supported in leaving the operating room during non-critical portions of the case to eat, drink, attend bodily needs, or rest, all of which are important in maintaining maternal and fetal health.
3. Special Considerations for Work Hours and Rotation Schedules: To minimize disruptions to sleep and circadian rhythm for residents in their third trimester, work shifts are limited to 12 hours and restricted to daytime work only. For rotations with overnight home call, alternative schedules are available. Some rotations may not be conducive to these restrictions and may necessitate schedule changes for pregnant residents and their peers.
4. Support for Non-Birthing Parents: Schedule accommodations are also available to non-birthing parents, including protected time to attend milestone prenatal and pediatric appointments, as well as a 2-week transition period after returning to work from parental leave of absence, during which the resident can choose schedule alterations that best fit their family's needs.
5. Culture of Support and Equity: Departmental leadership establishes a culture where pregnancy during clinical and research periods of training is fully supported. Discriminatory behavior about family planning or parental status is not tolerated.

While written guidelines are an important first step in establishing a safe and equitable workplace, they are not sufficient for establishing durable cultural change. Surgical culture is ripe with complex power dynamics and stereotypical expectations of ''toughness.'' For example, junior residents lack meaningful influence over their own daily schedules and often feel discouraged from asking for schedule changes. With less accrued social capital, their reputations are more vulnerable to judgmental comments from peers or chief residents.

By contrast, senior residents may feel eager to demonstrate their ability to lead a team and to perform advanced operations, making it more difficult to step away during the day to attend prenatal appointments, or to eat and drink at regular intervals. Fellowship applications or job searches likely add performance pressure that

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could negatively impact a resident's willingness to advocate for her own health.

Support for pregnant residents needs to start at the top with departmental and residency program leadership, who should voice clear expectations for all levels of the community, including attending surgeons, advanced practice providers, and residents. Program Directors must normalize schedule changes and actively assist in these adjustments to make it clear that maternal and fetal health is a priority. In order for a pregnant trainee to care for their health, attending surgeons must be willing to adjust to support these modifications; this may include completing tasks traditionally performed by the resident, like signing out a postoperative patient to the inpatient floor team, or staffing a consult with a junior resident. Advanced practice providers can assist in clinical coverage to ensure that pregnant trainees can attend their own prenatal appointments. Men and women trainees who do not become parents must be supportive of their fellow residents and accept schedule changes related to a colleague's pregnancy or parental leave. In a group that is already working near 100% capacity, unequal distribution of work, whether real or perceived, may breed animosity. This underscores the importance of addressing resident well-being holistically, so that all residents feel capable of flexibility. Formal guidelines improve transparency and predictability so that alternative call schedules and coverage plans can be thoughtfully arranged ahead of time, allowing for more even, equitable division of responsibilities.

The logistics of resident coverage will vary across institutions, likely impacted by the size of the program. Regardless of specific schedule accommodations that a program can offer, transparency and community engagement are important steps in cultivating a culture of support for these initiatives. We accomplished this by including a range of community members: a) residents who are parents *and* those who are not, b) program leadership, c) faculty members with varying levels of seniority, and d) administrative leads with expertise in Graduate Medical Education requirements. The guidelines were then presented in a program-wide meeting, revised based on discussion, and adopted as a departmental policy following a vote.

When implemented appropriately, progressive policies such as these can be used as a competitive advantage in recruiting residency applicants, enabling medical students to choose programs whose values are in line with their own. All medical students, regardless of sex, cited family planning and lifestyle during training as barriers to pursuing a career in surgery.[9] Surgery as a field will continue to miss out on the most talented individuals if we fail to adopt an inclusive and supportive culture—one that facilitates family growth during training.

Instead of viewing pregnancy during training as a handicap or a hassle, we must view it as promising evidence that the face of surgery is changing. That's a good thing—currently, 40% of all surgery residents in the US are women, and nearly 40% of all resident physicians will become parents during training.[10] But trainee diversity is meaningless if the culture does not change to support the experience of diverse individuals, including those who become parents during residency. Training programs must act now to promote safe and equitable environments for their residents. While immediate progress is feasible and necessary in individual programs, wide-spread change is unlikely to occur in the absence of national guidance. For this reason, the ACGME must require programs to directly address the health and safety of pregnant trainees, just as it has mandated programs to address resident well-being. Additionally, the American Board of Surgery should comprehensively update their requirements to allow for further flexibility during training for pregnancy and peripartum periods. While flexibility once seemed anathema to surgical training, it is now a fundamental necessity for cultural progress. It is time for the traditional surgery training model to change to assure all trainees can flourish.

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