

In the time between accepting my position as a Margolis Intern and beginning my internship work this summer, one of my closest friends (I'll call her Betty), went in for what was supposed to be a routine prenatal visit. She was diagnosed with preeclampsia and immediately hospitalized. Once hospitalized, she was transferred to a larger facility that was equipped to handle complicated pregnancies and preterm infants. After a week in the hospital where doctors failed to lower her blood pressure, she had an emergency cesarean section. Her daughter (I'll call her Erin), was born at 28 weeks gestation. She was in the NICU for two months before going home a healthy infant. Prior to Betty's diagnosis, I already knew that I would be working on a project assessing maternal morbidities and had completed previous work specifically on preeclampsia. But researching preeclampsia and watching a friend go through it (while at least six-feet physically distanced) are very different. Fortunately, Betty and Erin are both healthy, settling into life at home and were recently celebrated at a belated baby shower in a couple of weeks.

This summer, I'm working with a team to develop a model of pregnancy that can be used to assess the costs and benefits of strategies to treat and prevent hypertensive disorders of pregnancy, like preeclampsia. Specifically, we are assessing the potential impact of these strategies on prevalence and outcomes of, as well as racial disparities in, hypertensive disorders of pregnancy among women in North Carolina. While both preeclampsia, as well as its adverse effects occur in white birthing people, like Betty, women of minority populations are much more likely to develop preeclampsia and to suffer from a severe maternal morbidity or pregnancy-related death as a result than white birthing persons.

While it obviously would have been preferred for Betty to have never developed preeclampsia in the first place, it is fortunate that she received the best care at every point in her pregnancy. She was diagnosed early, treated quickly and when other treatments failed, she was able to deliver in a facility with a NICU that was equipped to handle preterm infants like Erin. Betty is white, cisgender, heterosexual and from a well-educated and middle-class family. It's not that she hasn't experienced difficulties in her life, it's that her race, nor her sexual orientation, nor her gender identity contributed to these difficulties, and her family's social standing has given her a privilege and access to resources not afforded to many people. This privilege and access mean that she received the care for her preeclampsia that every birthing person deserves, but many do not get.

A major reason for pursuing an internship at the Margolis Center was a desire to view my research from a policy lens. Although I've discussed policy implications of my work with previous research teams, I've wanted conversations around policy to be much larger and more well integrated discussions in my work. I'm interested in identifying ways to improve birth experiences and outcomes for birthing people in the United States. Much of my previous research has focused on individual level interventions to achieve this goal. For example, educating birthing people on the importance of prenatal care. However, these interventions can only be so successful as individual health behaviors occur within and according to their specific contexts. Educating birthing people on the importance of seeking prenatal care early can only be

so effective without health insurance and access to quality care. In my opinion, consideration of context has been missing from much of my previous research.

My internship at the Margolis Center has helped to fill in this gap. While my team this summer has still been discussing the importance of early prenatal care within the context of preventing and treating preeclampsia, instead of focusing on how to educate individuals, our conversations have focused on policy and healthcare interventions like Medicaid Expansion and improving equity in prescription practices of providers. Medicaid Expansion would give more people access to health insurance, removing one of the barriers to attending prenatal care. Prescribing low dose aspirin to birthing people at risk of developing preeclampsia is one preventive measure. However, there could be inequities in how providers determine to whom to give prescriptions.

While my mentorship team contains a trio of researchers with expertise in Markov models, cost-effectiveness analysis and maternal mortality and morbidity, I've primarily worked with Dr. Osondu Ogbuoji and Ashwini Deshpande, a Research Associate. Ashwini, Osondu and I have had a weekly check-in, and I've had a separate check-in with my mentorship team. My role has been to develop the model of pregnancy to test the impact of interventions. We're focusing on interventions that could increase access to low dose aspirin early in pregnancy, which is a method to prevent development of preeclampsia. I've conducted a literature search to identify specific interventions to increase early initiation of prenatal care (women are only eligible for low dose aspirin before 4 months gestation), increase prescription of low dose aspirin to at risk women and to increase adherence to low dose aspirin. Using National Vital Statistics Data, as well as that identified in a literature search, I'm applying costs and utilities to our decision model to determine what the impact of these three interventions is on preventing preeclampsia from developing for women in North Carolina. I've enjoyed the opportunity to work in a team. Much of my doctoral work has been very independent, particularly during the pandemic. My internship at the Margolis Center has been a very collaborative process between all team members.

I've already achieved my goal of incorporating a policy lens into how I think about my research. It's been very rewarding that I've been able to do that while considering interventions that help pregnant people in my home state. Wanting to conduct research that improves conditions for the community in North Carolina was a major driver in choosing where I completed my doctoral work and my internship at the Margolis Center has continued helping me fulfill this goal. While it's been challenging to learn a new methodology in a short time period, I've enjoyed expanding my repertoire of skills. I am confident that my experience interning at the Margolis Center will benefit me as I finish my doctoral work and move onto a post-doc.