STUDENT ROUNDS

An Evidence-Based Approach

A FUTURE OB/GYN'S RESEARCH AIMS TO IMPROVE HEALTH OUTCOMES THROUGH BETTER CONTRACEPTION.

In the mid 1990s, Syracuse had the highest infant mortality in the country for a mid-sized city. Although the overall infant mortality rate has been cut in half, there is still plenty of room for improvement.

"We have higher than state averages of unplanned pregnancies, short-interval pregnancy rates, and poor birth outcomes," says Upstate MD/MPH student Jordana Gilman '19. "We could prevent a lot of negative outcomes."

One means is through better contraception. Gilman, who plans a career as an OB/GYN, is a proponent of a form of family planning called immediate postpartum Long Acting Reversible Contraception (LARC), which involves placement of an IUD within 10 minutes of the delivery of the placenta.

"We need evidence it works," says Gilman, who is collecting and analyzing data on hundreds of pregnancies in Syracuse from 2014 to 2016. "We're going to see how many unplanned pregnancies, poor birth outcomes, and terminated pregnancies there were. We need recent, local data."

The American Congress of Obstetricians and Gynecologists recommends immediate postpartum LARC placement as the most effective option for postpartum contraception. And the U.S. Centers for Disease Control and Prevention cite immediate postpartum LARC as the primary cause of the decline in the repeat teen birth rate since 2004.

Immediate postpartum LARC is an alternative to other postpartum contraception methods, including abstinence and Depo Provera injections (which last 12 weeks). But often, contraception isn't offered until the mother's follow-up visit when the baby is six weeks old. Gilman cites a study showing 24 percent of local patients miss that appointment, mirroring national rates. Along with that no-show rate, many women resume sexual activity before the six-week postpartum visit.

Placement of a LARC in the delivery room is desirable because the woman has just delivered a baby and likely does not want to become pregnant again soon, she says. "There is ample evidence showing immediate postpartum LARC is safe and effective at lengthening the interval between pregnancies, decreasing elective termination rates and improving the health of mothers and babies," says Gilman, who earned an undergraduate degree in human biology, health, and society from Cornell University in 2014.

"Everybody deserves appropriate family planning," Gilman says, noting that LARC placement can be effective for up to 12 years. "This isn't just for Medicaid patients or the underserved."

Gilman is supervised on the project by principal investigator

Renee Mestad, MD, division chief of general obstetrics and gynecology at Upstate. She also recruited another fourth-year medical student interested in OB/GYN, Lisa Ditchek '19, to assist her with chart review. Gilman hopes to review as many as 800 patient records and plans to present preliminary findings to the OB/GYN department as part of her Family Planning Acting Internship. Ultimately, she plans to work with MPH faculty to develop her current family planning research project into a publishable paper.

"I'm playing the long game with this," says Gilman. "I want the information to be indisputable, and eventually be a call to action."

Gilman came to Upstate with a plan to puruse OB/GYN. "I gave my first medical presentation in the cafeteria in 7th grade when I explained menstruation to my lunch table," she says. "As a child of the women's liberation movement, my whole career just had to be about women's health and LGBTQ reproductive health."

Her interest in public health was sparked as a third-year medical student in Upstate's RMED program, where she spent five-months working in Cortland, New York, with family practitioner Cherilyn White, MD '94.

"Dr. White saw so many different kinds of patients in her practice, ranging from babies, to pregnant women, to older adults with heart



Jordana Gilman '19 was inspired to pursue an MPH after her clinical rotation in Upstate's RMED program.

disease," says Gilman. "In each case, the interplay between the patient's environment and their health determined the way that she managed their conditions and gave recommendations. Many of these individuals had housing issues or financial issues, causing typical recommendations for nutrition and wellness to be meaningless. Dr. White took all of that into account when treating her patients. She didn't just give them cookiecutter advice or demand that they change parts of their lives that could not be easily changed, and I loved that because it actually gave the patients something useful they could work with."

Gilman began focusing on the many areas impacting patient health that can't be treated with "pills or surgery," such as neighborhood, air quality, family structure, and racism. "My experiences in third year inspired me to try to get a broader view of health and the health system," she says. "I loved being with patients one-on-one and meeting with their families, but there was something frustrating about repeating the same advice over and over again. There must be a more efficient way. I felt like public health is the answer."

Gilman decided to take a year off from medical studies to complete coursework for Upstate's MPH program. In the process, she served as a graduate fellow with the Lerner Center for Health Promotion at SU's Maxwell School (co-sponsor of the MPH program), and was part of a group conducting an audit of a city block on Syracuse's Near West Side as part of a "Crime Prevention Through Environmental Design" project.

City officials, urban planners, community organizers and students studied possible changes to the built space on a street to cut down on drug use and traffic.

Teams examined the features of the block and made recommendations for modifying doorways, tree growth, lines of sight, signage, and other features.

"You can nudge behaviors by changing the built environment," says Gilman. "It's cool to use research to prevent crime."

Gilman is now finishing up MPH electives along with completing her fourth year of medical school. She believes her joint degree will help her to practice preventive medicine and advocate for her OB/GYN patients on a policy and legislative level. "There's tremendous opportunity to marry OB/GYN with public health," she says. "Hopefully, I will be able to contribute to the field from both directions—in the clinical setting with individual patients and in the community with whole populations."