ESTELLE SLOOTMAKER | FRIDAY, MARCH 22, 2019

Here's how we can address rural Michigan's alarmingly high infant mortality and poor maternal health

This article is part of State of Health, a series examining health disparities, how they affect Michigan's children and seniors, and the innovative solutions being developed to address them. It is made possible with funding from the Michigan Health Endowment Fund.

Michigan's beautiful rural areas have an ugly secret: high infant mortality and poor maternal health, fueled in part by substance abuse, lack of access to healthy food, and dwindling birthing hospitals and OB-GYNs. The root causes may be different from those in Michigan's urban communities, but the results are the same: Michigan's African-American and American Indian babies are three times likelier than white babies to die in their first year of life.

Lynette Biery, director of the Michigan Department of Health and Human Services' Bureau of Family Health Services, notes that clusters of higher infant mortality are found in the Upper Peninsula, the northern Lower Peninsula, and southwest Michigan, near the Indiana border. While hard to document, anecdotal evidence also points to increasing Hispanic infant deaths among rural migrant communities due to fear when family members are undocumented.

Lynette Biery.

"For American Indians, Latinos, and a handful of African-Americans in the rural communities, social injustice inequities certainly top the list (of mortality causes)," Biery says. "Transportation and access to care is huge. When you live in a county that has no provider, it's an hour and a half to the hospital, and you don't have a car, that sets you up for significant challenges and adverse outcomes."

Biery is among a contingency of Michigan experts and practitioners devoted to reducing mother and infant deaths. Their newly launched initiative, Mother Infant Health and Equity Improvement Plan (MIHEIP), has as its vision "Zero preventable deaths. Zero disparities."

"For infants, the Improvement Plan is largely about preventing preterm birth and low birth weight," she says. "We are being very focused, creating evidence-based initiatives to reduce the number of moms smoking, and we're seeing payoff."

Changing habits, overcoming addictions

Addiction is one of the biggest challenges for Michigan's rural mothers and infants. In Michigan's rural areas, more pregnant women smoke cigarettes and abuse opioids than pregnant women in urban areas.

"Cigarettes are the most commonly used substance during pregnancy and are at least as powerful a contributor to infant mortality as any of the other substances," says Dr. Steven Ondersma, a professor in Wayne State University's departments of psychiatry and behavioral neurosciences and obstetrics and gynecology. "If I could wave a magic wand and remove one thing from pregnancies everywhere, it would be cigarettes."

Steven Ondersma.

Dr. Tami Michele saw the devastating results of substance abuse during the nine years she served as medical director of the obstetrics department at Spectrum Health Gerber Memorial Hospital in Fremont, 25 miles northeast of Muskegon in Newaygo County. In addition to high rates of smoking among pregnant mothers, she says heroin-, opioid-, and meth-addicted babies were "common."

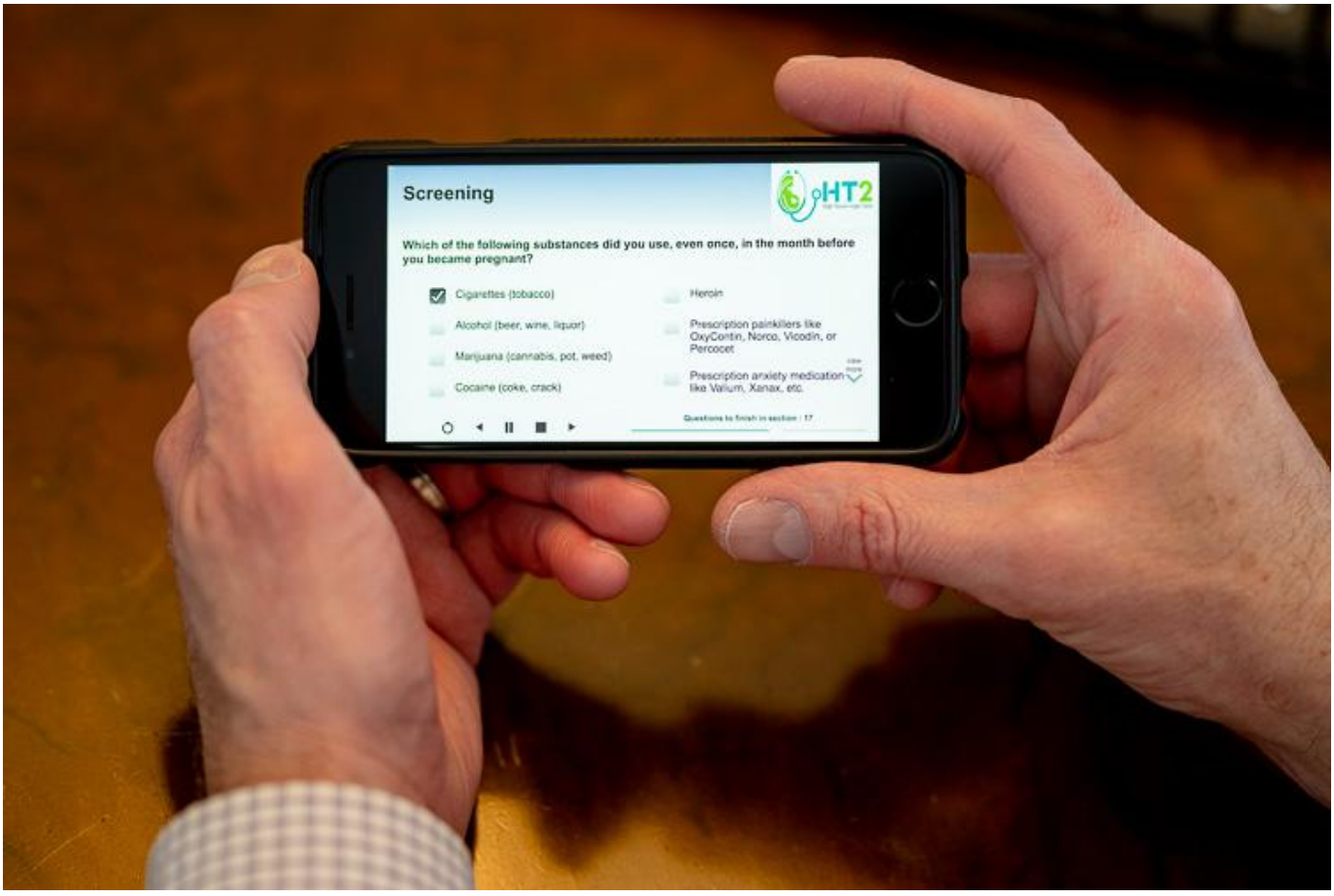
"The attitude was 'My friends smoked or did drugs and their babies are fine,'" Michele says. "One of the hardest realities about drug use is that even if we screened every woman, there were no local resources for interventions."

Newaygo County women seeking treatment had to travel to facilities in Muskegon or Grand Rapids. Considering that methadone treatment requires daily visits, the distance and transportation challenges were insurmountable for many. Another roadblock is that very few rural doctors are certified to prescribe alternative medications for opioid-addicted expectant mothers.

Mandatory drug screenings or court involvement are often proposed as solutions to the issue, but Ondersma believes those approaches do more harm than good.

"Conflating healthcare with a forensic approach causes women to avoid healthcare, to not tell the truth, to see healthcare as the enemy rather than where they can get help and support," he says. "We will do more good if women feel free to talk about what they're doing so they can get help in healthcare settings."

Ondersma is developing a unique app to educate women about the risks of substance abuse and the interventions available to them, designed for use during a woman's first obstetrician appointment. A friendly animated character asks the user basic screening questions and provides a motivational intervention if she screens positive.



Steven Ondersma demonstrates his app.

The first part of the screening asks about use of legal substances, like cigarettes. These answers will be shared with the patient's healthcare team. In the second section, the patient can choose to remain anonymous as she answers questions about illegal drug use and partner violence.

"Women are traumatized when exposed to violence," Ondersma says. "(In addition to physical harm) you have the resulting stress, substance use, sleep issues, poor eating habits, and less prenatal care — all the things you want don't want if you are going to have a healthy baby."

Healthy eating for two

Lack of access to healthy foods is another social determinant impacting rural mothers and babies. Michele saw a lot of obese expectant mothers drinking one to two liters of soda pop every day — understandable when the most accessible grocery retailer is the nearby Wesco gas station. Many of Michele's patients developed gestational diabetes.

"They'd run in and get candy bars, chips, and fast food. The result was hypertension, preeclampsia, large babies, pre-term babies," she says. "High sugar makes everything more high-risk. It increases inductions and C-sections."

Michele engaged a registered nurse with experience as a childbirth educator to lead successful classes for her patients beginning with their second prenatal visit. In addition to stressing the importance of good nutrition, including getting 80 to 100 grams of protein a day, the classes covered prenatal exercises, what to avoid, and what to expect during pregnancy and birth.

"Poor nutrition is the basis of a lot of health issues in rural communities," Michele says. "Nutrition education needs to start at a young age and include the whole family so they provide healthy choices for their children."

Increasing access to care

Another factor affecting rural mothers and infants is a startling lack of adequate medical care. Because rural hospitals cannot keep up with costs, especially when many of their obstetrical populations have Medicaid, an increasing number of them have closed their labor and delivery departments.

"We've seen a steady decline in the number of birthing hospitals," says Amy Zaagman, executive director of the Michigan Council for Maternal and Child Health (MCMCH). "We have areas where women have to travel two and three hours to get to a hospital that does labor and delivery."

Amy Zaagman.

What's more, fewer OB-GYN physicians are opening practices in rural communities. While the Michigan State Loan Repayment Program has brought more than 30 new physicians into northern Michigan obstetrics practices, more incentives are needed.

"(When) one OB-GYN is on call to manage laboring patients, unplanned cesareans, obstetrical and gynecological emergencies, it's a big responsibility," Michele says. "Many physicians would rather work in larger groups in a city, which leads to a lack of doctors in rural areas."

Michele would like to see more hospitals embrace a midwifery model of birth. Countries like the Netherlands that employ such models have much better outcomes than the United States. She notes that approximately 100 women give birth at home in Newaygo County each year.

"Having a good process for hospital systems to accept homebirth transfers, prenatal consultations, access to labs, ultrasounds, and collaborative health care is essential," she says. "Increasing the availability of certified nurse midwives in rural hospitals would benefit families and is a solution to cost-effective maternity care in low-resource areas."

No matter what color a baby's skin, being born in the United States is riskier than in 55 other countries, including Cuba, Taiwan, and Bosnia and Herzegovina. But being born African-American or American Indian is downright dangerous. Whether embracing a midwifery model or advancing policies that dismantle systemic racism, changes are needed to ensure that every baby born in Michigan – and the U.S. – enjoys their right to pursue life, as well as liberty and happiness.

A freelance writer and editor, Estelle Slootmaker is happiest writing about social justice, wellness, and the arts. She is development news editor for Rapid Growth Media, communications manager for Our Kitchen Table, and chairs The Tree Amigos, City of Wyoming Tree Commission. Her finest accomplishment is her five amazing adult children. You can contact Estelle at Estelle.Slootmaker@gmail.com or www.constellations.biz.

Steven Ondersma photos by Nick Hagen. Lynette Biery photo courtesy of Lynette Biery. Amy Zaagman photo courtesy of Amy Zaagman.