OLSON CENTER FOR WOMEN'S HEALTH

Women's Health overview

Black Maternal Health Awareness: Improving Outcomes

Tori Bowie, known as the "world's fastest woman," was found dead on May 2, 2023. A Black woman, she was 32 years old, eight months pregnant and a three-time Olympic medalist. Yet this world champion sprinter couldn't outrun the high maternal mortality rate and health gaps affecting Black women in this country.

In the middle of the night, Bowie went into labor and lost her life while trying to bring her baby girl into the world. Her death highlights ongoing concerns about how the health care system responds to the pain and needs of Black women, including those living with mental health disorders like Bowie.

Although she died alone from childbirth complications, including respiratory distress and eclampsia, she is not alone. In 2023, the Centers for Disease Control and Prevention reported that the maternal death rate for Black women was 50.3 deaths per 100,000 live births. That rate was much higher than for White (14.5), Hispanic (12.4) and Asian (10.7) women.

Black women are twice as likely to die in the hospital as White women and more than four times as likely to die from pregnancy-related complications. These differences are not explained by biology or individual choices. They are linked to social determinants of health, the structural conditions that shape where people live, work and access care.

Long-standing gaps in housing, education, nutrition and health care lead to higher rates of chronic health conditions among Black women long before pregnancy begins.

A key part of understanding this issue is the concept of allostatic load. This term describes the "wear and tear" on the body caused by long-term stress. For many Black women, stress can include racism, gender discrimination, financial strain and exposure to environments where safety and dignity are not guaranteed. Black women have the highest documented allostatic load of any demographic group, reflecting the immense mental cost of living with compounded stress across the life course.

Higher allostatic load is associated with high blood pressure, heart disease, obesity and and other conditions that significantly raise pregnancy risks.

see **Black Maternal Health Awareness** pg. 4

Upcoming Olson Center Educational Events:

We are offering opportunities to learn on a variety of health topics! Everyone is welcome to attend. Pre-registration is required by reaching the Olson Center at 402.559.6345 or **OlsonWHRC@unmc.edu**.

Olson Center Brown Bags
(online, 12 – 1 p.m. CST):

Everyone is welcome to attend the presentation, and talks will also be recorded. Nursing credit provided for the LIVE presentation only.

April 21: *Unhappy Feet*

May 19: TBD

Olson Center Wellness Through Doing Hobby Series
(online, 12 – 1 p.m. CST):

This series provides an opportunity for attendees to learn the very basics of a new hobby. The Wellness Through Doing series hopes to spark joy in attendees as they learn the basics of a new hobby and where to go in the community for additional training.

April 9: *Beginner 3D Printing*

Women's Health • overview
newsletter is published quarterly for health care professionals and the general public with special interest in women's health issues by the Olson Center for Women's Health.

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Women's Health Overview newsletter is available to everyone. If you would like to receive the newsletter free of charge, please contact the Olson Center at 402-559.6345 or e-mail your request to **ljmolczy@unmc.edu**. If you do not wish to receive the newsletter, please contact us.

An alternative electronic version of the newsletter is available. If you would like to receive this electronic version in addition to the print version, or instead of, please email your request to **ljmolczy@unmc.edu.**

From the Chair

As I reflect on my first six months as Chair of the Department of Obstetrics and Gynecology at UNMC, I am filled with gratitude and excitement for the momentum we are building together. Our mission to transform maternal health outcomes in Nebraska is taking meaningful shape, and I am proud to share some of the initiatives driving that vision forward.

The biomarker implementation program is running successfully. We are working towards in-house testing to reduce the turnaround time. This March, we will officially launch the STAMPP program at UNMC — a remote patient monitoring initiative designed to identify and manage hypertensive disorders in pregnancy. STAMPP represents a critical step in extending high-quality maternal care beyond our walls and into communities across the state, including partnerships with rural hospitals.

Education remains central to our strategy. We recently launched Empower Hour, a monthly lunch-and-learn series led by Marcela Pineda, MD and Olson Center clinic manager Briley Patterson. The program brings together our clinical staff and partner organizations, and our first two sessions were a wonderful success. Additionally, we are establishing faith-based preeclampsia education in North Omaha, connecting directly with communities most affected by maternal health disparities under the leadership of Karen Carlson, MD.

We welcome Katie Moore, MD, to the department as we continue to interview faculty and advanced practice partners (APP) for several open positions. The PULSE program, led by Neil Hamill, MD, is ready to start in May 2026. We have made great progress in establishing BRIDGE (Building Research, Innovation and Development including Graduate Education) with leadership from Rebecca Rimsza, MD, and Lindsey McAlarnen, MD. We have hired three clinical research coordinators (CRC) and have several open institutional review board (IRB) protocols and projects involving residents and students.

I look forward to sharing more progress in the months ahead. Thank you for your continued support and partnership.

Sarosh Rana, MD, MPH
Professor and Chair, Department of Obstetrics and Gynecology
College of Medicine
University of Nebraska Medical Center

research news

Advancing Maternal Health Research in Nebraska

The Department of Obstetrics and Gynecology at UNMC has taken a major step forward in research programs focused on pregnancy complications.

Dr. Sarosh Rana, chair of the Department of Obstetrics and Gynecology, is a nationally recognized expert in the care of women with high-risk pregnancies, including those affected by preeclampsia, hypertension, lupus and transplant-related complications.

Dr. Rana is an accomplished medical research scientist who has received funding for preeclampsia research from multiple agencies, including the National Institutes of Health (NIH). Preeclampsia is a life-threatening pregnancy disorder typically defined by high blood pressure after 20 weeks of pregnancy along with dysfunction of the kidneys and other organs. This disease affects 2% to 8% of pregnancies worldwide and is a major cause of maternal and fetal disease and death. There are no effective therapies available to treat preeclampsia other than early delivery.

Before coming to Nebraska, Dr. Rana focused her research on identifying biomarkers that could identify patients with preeclampsia from other patients with other hypertensive disorders. Her research, along with that of other researchers, identified two biomarkers – sFlt1 and PlGF – that affect blood vessel function and strongly predict adverse outcomes related to preeclampsia.

Based on this research, she participated as a key author in the study leading to the Food and Drug Administration (FDA) approval of these biomarkers for use in the United States in June 2023. This important step was followed by the acceptance of these biomarkers in the clinical guidelines by the American College of Obstetrics and Gynecology (ACOG, April 2024). Dr. Rana brought implementation of these biomarkers to Nebraska Medicine to better manage patients with preeclampsia.

Dr. Rana recently received a large grant from the Gates Foundation to evaluate a new treatment for preeclampsia. The funding will allow her research team to evaluate the safety and mechanism of action of a natural product called luteolin.

Dr. Rana's previous innovative preclinical research provided strong evidence that luteolin reduces inflammation and oxidative stress, conditions that accompany preeclampsia. Importantly, her research found that luteolin reduces blood pressure, a key cause of preeclampsia.

In addition to her research, Dr. Rana has developed the Systemic Treatment and Management of Postpartum Hypertension program (STAMPP-HTN). This pioneering clinical program is designed to help new mothers manage high blood pressure after pregnancy.

High blood pressure, including conditions like preeclampsia, can develop during pregnancy or in the weeks following childbirth. If not closely monitored, it can lead to serious health risks. Through STAMPP-HTN, mothers receive personalized education, remote blood pressure monitoring with easy-to-use devices and ongoing support from a dedicated care team.

Every mother at risk is enrolled before leaving the hospital and receives convenient follow-up care to keep blood pressure in a safe range and prevent future complications. This approach helps protect the long-term health of mothers, reduces disparities in care and empowers families with the knowledge and tools they need for a healthy recovery after childbirth.

This award-winning program is now being rolled out across Nebraska Medicine, with plans to expand to other hospitals throughout the state.

Contributed by **John S. Davis, PhD**
UNMC Department of OB-GYN

Black Maternal Health Awareness continued from pg. 1

Research shows that even before pregnancy, high allostatic load is linked to increased odds of preeclampsia, preterm birth and low birth weight.

The Black maternal health crisis is not only a national problem, it is also a Nebraska problem. Our state's large rural landscape poses significant barriers to care, including maternity care deserts in which more than half of Nebraska counties lack local obstetric services.

However, Nebraska is leading the nation in solving this health crisis by tackling the inequities right here at home. Through partnerships and community-led innovation, and collaborative efforts at UNMC and Nebraska Medicine, Black mothers in this state can avoid some of the most preventable pregnancy and childbirth complications.

The Omaha Community Pathways HUB is one example. This evidence based, nationally recognized program addresses the social needs that affect adverse health outcomes. The HUB works closely with health care providers and community organizations to meet patients where they are, connecting pregnant and postpartum individuals to the resources they need.

This approach acknowledges that medical care alone is not enough. Families may also need access to stable housing, insurance coverage, food, transportation, supplies, employment assistance and emotional support. The HUB provides exactly that kind of whole person, wraparound care.

Since March 2024, the Omaha Community Pathways HUB has served 209 pregnant individuals and their families. It has resolved more than 1,400 documented needs, ranging from health care coverage, housing and basic supplies. Sixty-six percent of participants identify as Black or African American, and 85 percent are insured through Medicaid, the exact populations most affected by maternal health gaps.

Participants report an average of seven unmet needs when they enroll, underscoring the level of difficulty that often goes unseen in traditional care models. Yet even with these challenges, outcomes are promising. Nearly 88 percent of Black participants delivered babies at a healthy birth weight, and nearly 88 percent delivered full term. Both rates are above the Douglas County average. These numbers reflect the powerful impact of addressing social needs alongside medical care.

UNMC and Nebraska Medicine have also partnered with community groups such as I Be Black Girl, whose birth equity work centers around Black women and their lived experiences. Their Birth Support Program increases access to culturally aligned doula care, an intervention shown to reduce cesarean deliveries, improve birth satisfaction and lower the risk of preterm birth. Doulas provide emotional, physical and advocacy support for Black women who often report feeling unheard or dismissed in health care settings. This support can be transformative.

Together, these initiatives represent the kind of collaborative, community-rooted work needed to move the needle. They are concrete examples of what it means to shift from talking about disparities to actively addressing the conditions that create them. They show that when we invest in families, listen to communities and build partnerships across systems, we can and will change outcomes for the better.

Contributed by **Candace Giles, DO**
UNMC Department of OB-GYN

Join the Olson Center for the first-ever Nebraska Promise Walk for Preeclampsia on May 9, 2026.

The Olson Center for Women's Health is partnering with the Preeclampsia Foundation for the first-ever Nebraska Promise Walk for Preeclampsia. This family friendly-event inlcudes a one mile heart-healthy walk, survivor stories, local vendors, raffles and music. We invite you to join us! If you have any questions, reach out to the Olson Center at 402.559.4500.

Location: Lewis and Clark Landing at the RiverFront
345 Riverfront Drive, Omaha, NE 68102

Time: 9 a.m. to 12 p.m.

Cost: Registration is free!

Scan this code to sign up!

OLSON CENTER FOR WOMEN'S HEALTH

Mission Statement
The mission of the Olson Center for Women's Health is to provide a national comprehensive health science center at the University of Nebraska Medical Center (UNMC). Based in the Department of Obstetrics and Gynecology, the center enables UNMC to make distinctive strides in education, research and service through innovative approaches to women's health issues.

Want More Information?
Visit our website: **OlsonCenter.com**

Learn more about our health care providers, services and programs available at the Olson Center for Women's Health. Our website also offers women's health information. Here are a few topics:
- Breastfeeding
- Breast health and disease
- Cardiovascular health
- Gastrointestinal health
- Gynecologic health
- Incontinence
- Reproductive endocrinology/infertility
- Pregnancy
- Wellness

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Improving **Postpartum Hypertension Care** Through Remote Patient Monitoring

Uncontrolled postpartum high blood pressure and new-onset postpartum preeclampsia are some of the most common and serious health problems people can face after having a baby. In Nebraska, heart disease and pregnancy-related high blood pressure are leading causes of complications and maternal deaths.

Even though the risk is highest in the days and weeks after delivery, postpartum care has traditionally relied on a single blood pressure check three to seven days after birth. For many new parents, coming back for an in-person visit so soon after delivery — while recovering, caring for a newborn and managing daily life — can be very difficult.

Recognizing this gap, we saw an opportunity to better support postpartum patients at UNMC and the Olson Center by making blood pressure monitoring easier and more accessible from home. Our goal was to remove barriers to care while keeping patients safely connected to their care team during this critical time.

This led to the creation of STAMPP-HTN (Systematic Treatment and Management of Postpartum Hypertension), a program designed to help patients manage high blood pressure after delivery. STAMPP-HTN provides patients with Bluetooth-enabled blood pressure cuffs, daily remote monitoring, updated education for patients and families, and access to a fully virtual postpartum blood pressure clinic.

Patients at higher risk for high blood pressure — such as those diagnosed with preeclampsia — are enrolled in the program before leaving the hospital. While still admitted, they receive clear education on warning signs and hands-on training on how to check their blood pressure using a hospital-provided cuff.

After going home, patients check their blood pressure at least twice a day and answer brief questions about symptoms like headaches or vision changes. The care team reviews these readings in real time. If a blood pressure reading is too high or symptoms are concerning, a provider contacts the patient right away and helps decide next steps, including returning to the hospital if needed.

Patients are also scheduled for follow-up visits through our virtual postpartum blood pressure clinic. Providers adjust medications and care plans using established guidelines to keep blood pressure in a safe range.

STAMPP-HTN helps patients feel informed, supported and empowered during a time that can feel overwhelming. Instead of worrying about whether symptoms are serious, or struggling to schedule extra appointments, patients know that their care team is actively monitoring their blood pressure and watching for problems. This reassurance allows patients to focus on healing, bonding with their baby and adjusting to life at home.

The program also reflects a more modern and compassionate approach to postpartum care. By using remote monitoring and telehealth, STAMPP-HTN meets patients where they are — at home with their families — while still providing high-quality, timely medical care. Patients have clear guidance on what symptoms to watch for and have direct access to providers who know their history and can respond quickly when concerns arise. This reduces delays in care and helps prevent complications before they become emergencies.

Importantly, STAMPP-HTN was designed with equity in mind. It improves access for patients who live far from the hospital, have limited transportation or face other barriers to in-person visits. No matter where patients live, they receive the same close monitoring, education and support.

By combining innovation, technology and a strong commitment to patient-centered care, STAMPP-HTN represents a new standard for postpartum support — one that prioritizes safety, connection and peace of mind for patients and their families.

Contributed by **Rebecca Rimsza, MD**
UNMC Department of OB-GYN

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ADDRESS SERVICE REQUESTED

olsoncenter.com

Welcome **Diane Johnson, APRN-CNM** to the Olson Center for Women's Health

Diane Johnson, APRN-CNM graduated from Nebraska Methodist College in 2010 with a Bachelor of Science in Nursing and went on to spend 11 years working as a registered nurse in Labor and Delivery — seven years at Bellevue Medical Center and three years at Nebraska Medicine. She is also a Nebraska American College of Nurse-Midwives (ACNM) board member and part of the Maternal Advisory Group for Nebraska.

Diane earned a Master of Science in Midwifery from Frontier Nursing University in June 2022 and completed her Doctor of Nursing Practice at the University of Nebraska Medical Center in May 2025.

She is passionate about empowering patients through evidence-based care, education, informed consent and shared decision making. As a midwife, she supports low risk, low intervention physiologic birth and has completed both Spinning Babies courses and Body Ready Method training to deepen her understanding of the biodynamics and biomechanics of labor and birth. She is currently on track to be certified as a Body Ready Method Pro.

Diane cares for a diverse patient population and frequently supports individuals navigating both low-risk pregnancies and more complex medical situations that require collaborative care. She is a strong advocate for interdisciplinary teamwork and evidence-based guidelines in obstetrics and gynecology.

Diane has been married to her husband, James, for 15 years. They have three children — Emma, Elliott, and Easton — and a 3-year-old mini goldendoodle named Louie. In her free time, she enjoys fitness, including cycling and strength training, crocheting and cross stitch, and spends many hours at the baseball and softball fields cheering loudly!

We are thrilled to have Diane join our midwife group at the Olson Center for Women's Health!

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