

BROADCAST-Using simulations to tackle potentially fatal pregnancy-related hypertension and hemorrhage

As newly-released research from the Center for Disease Control and Prevention (CDC) recently confirmed earlier studies that 80% of pregnancy-related deaths in the US are preventable, Peoria-based OSF HealthCare was already working on a full-scale effort to tackle the issue. The agency's data also confirmed Black women are three times more likely than white women to die due to pregnancy related causes.

Nikki Delinski, DNP, RN, director of Education Operations, [Jump Trading Simulation & Education Center](#), was enlisted by leaders to develop training that could reinforce standardized best practices across the Ministry. The two-part series included online education and on-site training so Mission Partners (employees) did not have to travel to the Jump Trading Simulation & Education Center in Peoria during the height of the pandemic, when medical providers were most needed at patients' bedsides.

The training focused on two well-known complications that offer the best chance of survival if treated properly: pregnancy-related hemorrhage and pregnancy-induced high blood pressure called preeclampsia.

Many of the frontline caregivers provided valuable feedback, saying they felt far more confident to act after more than 500 in-person simulations.

Delinski shared, "Our Mission Partners said that they needed to familiarize themselves with the guidelines and the supplies. It was more than communication, more than timeliness. It was better understanding the supplies – where they are, as well as understanding what those guidelines are and who can act on those guidelines." (:22)

Delinski and her team organized simulations throughout the 16 hospitals and medical centers within OSF Healthcare. The on-site training for maternal hemorrhage used manikins that simulated bleeding. But Delinski points out that operations specialists redesigned the manikins to produce more common, realistic symptoms, such as sweating, stress and real-life blood loss scenarios.

"So it wasn't just a gush of blood. It was over time, and those nurses and physicians were able to then actually implement their interventions in the appropriate timeframe. They were able to use the supplies, rather than just saying, 'Here I would do this,' or 'I would think about this.'" (:22)

All too often, symptoms that follow the days, weeks and even months after delivery can be dismissed as simply a side effect of giving birth. But CDC research indicates slightly more than half of all pregnancy-related deaths happen seven days to one year after pregnancy.

Delinski and her team developed hypertension training that, used 40 specially-trained standardized participants (SPs) – clinical actors who have studied and practiced the symptoms and also know the guidelines. Those SPs also participate in debriefings and often point out how certain actions or behaviors made them feel.

Next steps will include recruiting SPs who more specifically reflect the diversity of the individual communities.

"If we're going up to Chicago to do some of these 'in situ,' these in-the-moment, in-the-environment simulations, what better way to portray realism than to have actual community

members acting as those patients?" (:19)

Delinski believes educating the multidisciplinary teams that care for pregnant women can also help raise community awareness about the need to listen to the concerns of women who are pregnant or who have been pregnant during the last year and help them get the right care at the right time.

By our Mission Partners becoming more educated, it will help to educate our patients and the community. So when we're gaining new information and new experiences, we will then naturally share those experiences and education with our patients [so they know what] signs and symptoms to look for and when to reach out for help." (:17)

OSF HealthCare has been collecting data to measure the impact of the training on outcomes. So far, leaders report cumulative measurements for blood loss have improved the past few measurement cycles, remaining at or above target levels.