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Improving Care for Moms in Illinois

Introduction

In contrast to global trends in high and middle-income countries, the number of women who die or experience life-threatening complications from causes related to pregnancy in the United States has increased in the last 25 years. Non-Hispanic black women are three to four times more likely to die within a year of giving birth compared with non-Hispanic white women. Dr. Geller and Research Specialists Abby Koch, MA and Katie Garland, MPH at the Center for Research on Women and Gender (CRWG) have been working with the Illinois Department of Public Health (IDPH) to understand why rates of maternal mortality (death) and severe morbidity (illness) are increasing and what can be done to reverse the trend.

Methodology/Findings/Results

Dr. Geller was a founding member of Illinois' Maternal Mortality Review Committee in 2000. The committee reviews the circumstances around deaths related to pregnancy to identify ways to prevent similar deaths in the future. After finding that delays in recognition and treatment for excessive bleeding were common factors in many new moms' deaths, Illinois created an educational program to make sure all health care providers that care for women during pregnancy and delivery and their hospitals know how to provide the best care for women who bleed too much when they give birth.

Upon discovering that homicide, suicide and drug overdose account for 25-30% of deaths of women who are pregnant or within a year of giving birth in Illinois, Dr. Geller and CRWG collaborated with IDPH to establish a second multidisciplinary review committee for violent deaths. The committee found that 93% of violent deaths in 2015 were potentially preventable. Mental health conditions and substance use contributed to 75% and 61% of deaths, respectively. There is a critical need for Illinois to expand mental health and substance use treatment for pregnant and postpartum women. CRWG, with affiliated faculty members Drs. Pauline Maki and Jenna Duffecy from the UIC Departments of Psychiatry and

Psychology, is conducting a pilot study with IDPH to increase screening, referral and treatment options in Illinois.

Studying women who experience life-threatening complications related to pregnancy and delivery in addition to mortality is extremely important because it occurs 50 to 100 times more often than death, so researchers can collect data and develop ways to improve care much faster than studying mortality alone. While the complications of pregnancy and delivery may not be preventable, women's progression to the most severe morbidity can often be prevented with timely diagnosis and treatment. Dr. Geller and CRWG are working with IDPH and the 10 Regionalized Perinatal Centers in Illinois to establish case review for women admitted to an intensive care unit or receive a transfusion of four or more units of packed red blood cells. From July 2017 to June 2018, 331 cases were reviewed. Illinois is the first state to follow national recommendations to systematically review cases of life-threatening complications (severe maternal morbidities) in all birthing hospitals across the state. As more data is collected, the results of the reviews will be used to design and implement interventions to address the major causes of preventable severe maternal morbidity.

Conclusions

Maternal mortality and morbidity continues to be a significant issue in the United States and Illinois. Understanding why these events are occurring and the factors that contribute to them allows us to plan and implement effective interventions to prevent further deaths and improve the health of all mothers in Illinois.

About Our Researcher

Dr. Stacie Geller is the G. William Arends Professor of Obstetrics & Gynecology and Professor of Internal General Medicine at UIC College of Medicine and the Director of the Center for Research on Women and Gender. She has been working to improve maternal health for 30 years. In addition to her work in Illinois, Dr. Geller has conducted maternal health research globally in settings including India, Ghana, and New Zealand. From 2008-2018, Dr. Geller was the Principal Investigator of the Building Interdisciplinary Research Careers in Women's Health grant, an NIH-funded training grant for junior faculty conducting women's health research.

The Office of Community Engagement and Neighborhood Health Partnerships Healthy City Collaborative, and the Office of Health Literacy Prevention, and Engagement sponsor sharing What We Have Learned. We are pleased to highlight research and community engagement activities of UIC researchers. Each month we feature a researcher and important findings from their work. This information is shared in a *ready to use format* suitable for widespread distribution to those who would most benefit from the research findings. If you would like more information about our efforts to share what we have learned, visit our website at <http://oceanhp.uic.edu> or email sabrina1@uic.edu.