



2020 LEAD Capstone Poster Session

ECHO: Essential Care of Hypertension in Obstetrics

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Abstract

- Cardiovascular disease accounts for significant maternal morbidity and is the leading cause of indirect maternal deaths in pregnancy, contributing to 20% of total deaths
- Specifically, long-standing chronic hypertension is of increasing concern and one of my particular interests
- The fourth trimester has been cited as an important time to identify, treat, and therefore intervene in high risk women with hypertension
- The ECHO program seeks to empower women with chronic hypertension who come into our prenatal clinic to achieve optimal perinatal outcomes, to ensure proper postpartum follow up, and transition to a primary care provider.



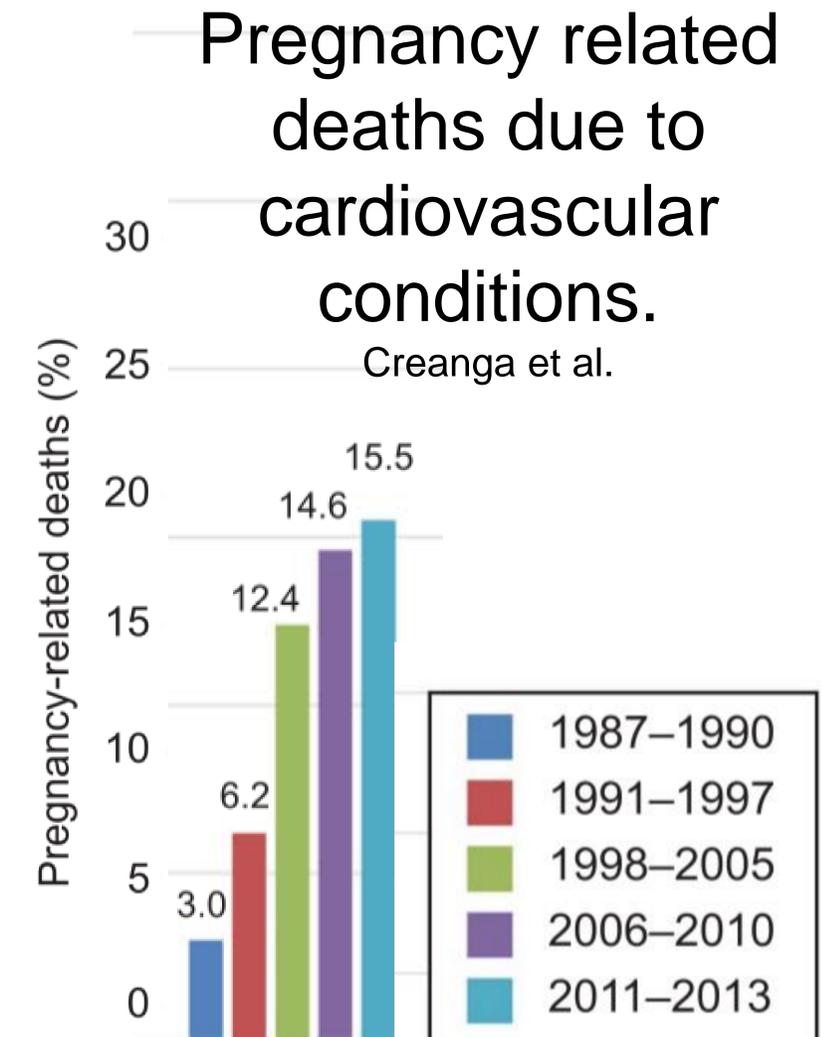
Objectives

- To identify women with chronic hypertension during the antepartum period who are at risk of poor perinatal outcomes and increased maternal morbidity-particularly in the fourth trimester
- To empower women in their own healthcare by providing detailed teaching and providing blood pressure cuffs for their own health monitoring
- To align our care routinely with recommendations from ACOG by offering virtual visits to eliminate frustration with transportation issues and newborn care within 3-10 days after delivery
- To transition patients smoothly from obstetrical care to long term care



Background Information

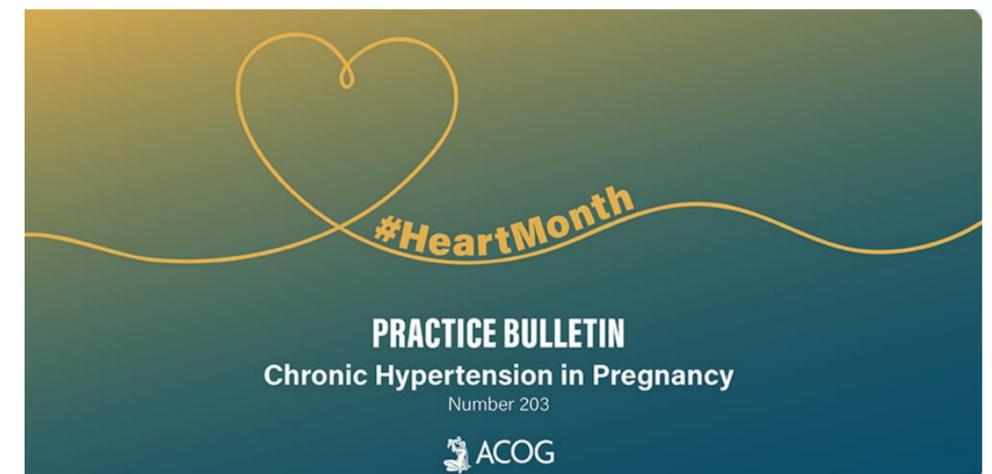
- Cardiovascular disease accounts for significant maternal morbidity and is the leading cause of obstetric ICU admissions in the US with heart disease as the leading cause of indirect maternal deaths
- Access to care, poor health literacy, and health disparities have been attributed to the disproportionate poor perinatal outcomes of women of color
- The fourth trimester has been cited as an important time to identify, treat, and therefore intervene in high risk women with hypertension
- The American College of Obstetricians and Gynecologists has recommended that women with high risk medical conditions have close postpartum follow up within 7-10 days, including a blood pressure check at 3-10 days.
- This close follow up can be difficult for women of limited resources with a newborn.





Specific Aims

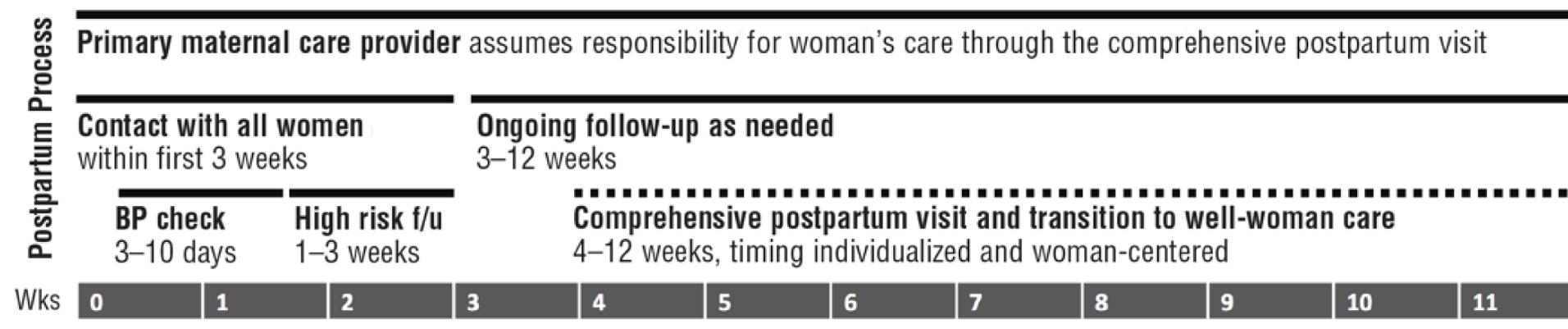
- To identify women at high risk for postpartum morbidity and mortality due to hypertension
- To comply with current guidance regarding timing of follow up for hypertensive disorders
- To transition women successfully from obstetric care to long term primary or specialist care





Project Plan

- **First, blood pressure cuffs that have been calibrated by clinic staff are distributed in early pregnancy for the patient to record her blood pressures and to provide additional data points for titration of medication.**
- **Secondly, a virtual visit 3-10 days postpartum to follow up on a women's blood pressure log, ensure that she has enough medication, remind her of the importance of the postpartum visit for contraception, and to ensure she has plans for long term follow-up with a primary care provider**
- **Thirdly, a specialized referral system for a transitional clinic in conjunction with medicine to ensure that these women have a timely follow up 4-6 weeks postpartum. This clinic would be in collaboration with maternal-fetal medicine to take into account any postpartum questions.**





Application of What I Learned in the LEAD Program

- Effective leadership is the ability to use influence to make changes which includes use of communication, having difficult conversations, self-discovery, inspiring trust, and embracing diversity.
- This capstone project incorporates the following:
 - Recognition of a difficult issue: disparities in healthcare are a difficult subject to discuss and tackling reasons for these disparities is critical in implementing change
 - Self-discovery: recognizing that I can be more effective as a leader when working on issues that I'm truly passionate about. These include chronic hypertension, postpartum care, and health disparities.
 - Embracing diversity: different women have complex issues that may be preventing them from seeking care and complying with their medications. It may be health literacy, transportation, work/family commitments, or distrust of the system
 - Inspiring trust: As tackling the transition of postpartum care has not yet been addressed at length, I acknowledge this is a difficult project. However, I believe that my new role as Medical Director of the Women's Health Clinics can be used to work towards a solution by providing a space for the collaborative postpartum visit.



Proposed Budget

- Approximately 12,000 deliveries per year
- Of these, 1% will have CHTN
- Approximately 120 patients per year
- Omron blood pressure cuffs \$30 x 120 patients=\$3,600
- This will be an additional 10 virtual postpartum patient visits per month and an additional 10 in person coordination of care visits performed in conjunction with medicine colleagues



Innovation and Significance

- The fourth trimester is becoming a newly recognized term describing the important postpartum period where numerous maternal and neonatal issues should be addressed.
- Unfortunately, many new mothers defer their time to their infants and their own health suffers
- Recognizing that hypertension is the leading cause of maternal morbidity and mortality, by targeting the enriched cohort of women with chronic hypertension
- By understanding health disparities and barriers to care, we can effect change through a multidisciplinary program
- The ECHO program can serve as a framework for other high risk women



References

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