



BLUE BAND INITIATIVE FOR MATERNAL HYPERTENSION

PATIENT EDUCATION AND EMPOWERMENT TO IMPROVE OUTCOMES

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MNPQC Hypertension Committee Faculty- Member-ECHO Participant
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St. Cloud Hospital

Regional Hospital Serving Central Minnesota

A part of CentraCare Health System



- Regional facility serving Central Minnesota
- 489 licensed bed regional medical center
- Five-time Magnet hospital (2023)
- **Family Birth Center :**
 - 6-bed private room OB triage unit
 - 11 labor/delivery/recovery beds
 - 6 antepartum (high risk) beds
 - 27 postpartum (mother/baby) beds
 - 2 operating rooms
 - Approximately 2,800 births per year
- 18 OB/Gyn's
- 5 delivering Family Practice Providers
- 3 Perinatologists
- 5 OB Laborists/Hospitalists
- 5 Midwives

MAGNET
RECOGNIZED



AMERICAN NURSES
CREDENTIALING CENTER

Learning Outcomes

- Learn how birthing people in Minnesota are being educated and empowered to self-advocate for their own heart health., while helping to alert other healthcare providers who may not be as familiar with pregnancy related hypertension by expediting care via medical alert bracelets.
- Understand the significance of hypertension and why it is important to recognize and treat gestational related hypertension quickly and appropriately
- Learn about a new novel method to engage patients, family, and community in the health and well-being of birthing people in Minnesota
- Learn how to implement the Blue Bands at your hospital, clinic, facility or organization

Bio

- Melissa has been working in obstetrical nursing for the past 25 years at a variety of facilities, from the small community hospital to a large urban obstetrical care unit, in the OR, and as a charge nurse. Her current work as a Nurse Clinician began in August of 2013 at CentraCare, St. Cloud Hospital. Melissa was a finalist in 2016 for the March of Dimes “Nurse of the Year” and awarded the “Nurse of the Year in Women’s Health” in October of 2020. Melissa also was the recipient of the Kunsche (coon-CHEE) Award from the Minnesota Perinatal Organization for outstanding work and dedication to advancing the field of perinatal health and furthering the MPO and Minnesota Perinatal Quality Collaborative (MNPQC) mission.
- Melissa serves on the MHA Perinatal Safety Committee, MNPQC and their Maternal Hypertension Subcommittee as faculty, and the Maternal Mortality Review Committee through the Minnesota Department of Health. Melissa obtained her Family Nurse Practitioner Certification in 2023 from ANCC and AANP and is a 2012 Graduate of Western Governors University with a Master’s in Nursing Education. She is a present member of AANP, ANA, AWHONN, MOLN, AORN, ASPAN and Sigma Theta Tau professional nursing organizations, and served as the AWHONN MN state chair in 2019-2020. She was featured in “The Call of Nursing” written by William Patrick.

Hypertensive Disorders, 1993–2014

Rate of hypertensive disorders per 10,000 delivery hospitalizations

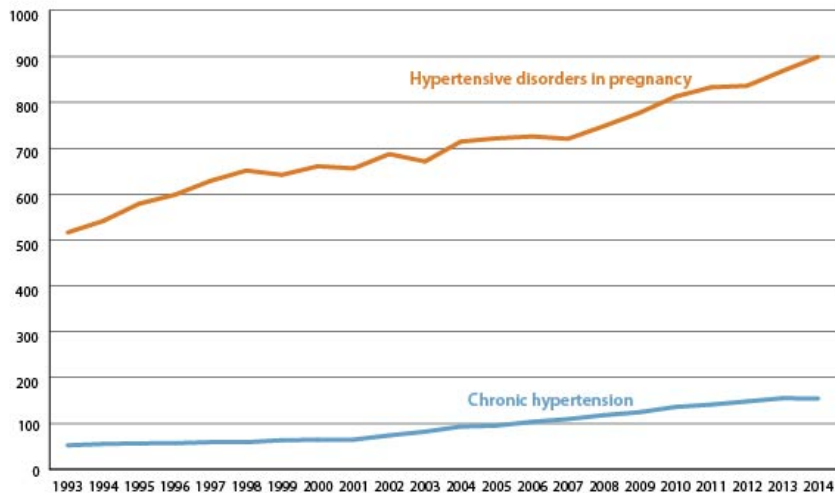
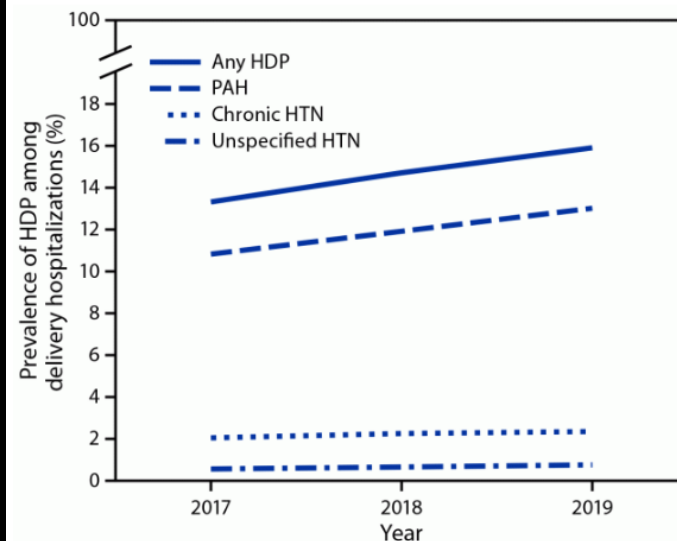
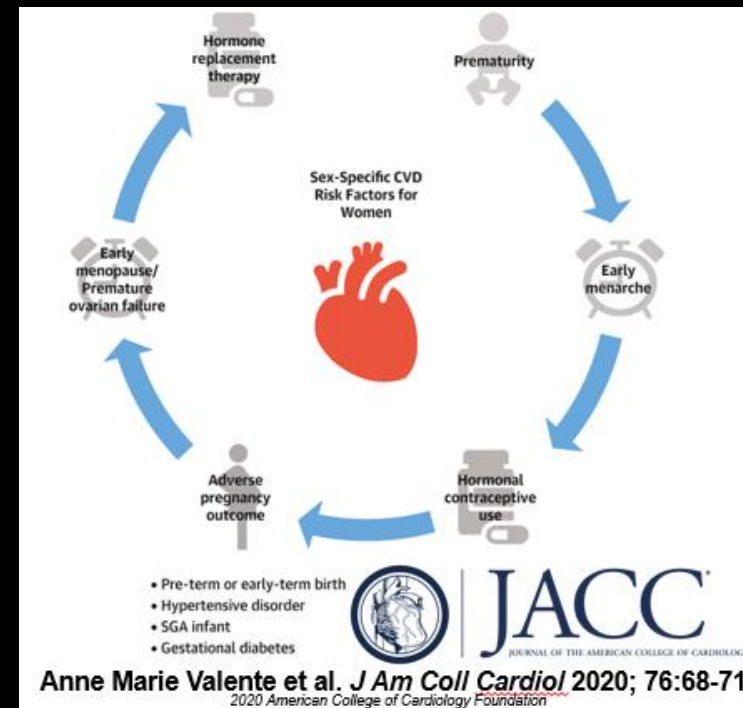


FIGURE 1. Prevalence of hypertensive disorders in pregnancy* among delivery hospitalizations, by year — National Inpatient Sample, United States, 2017–2019

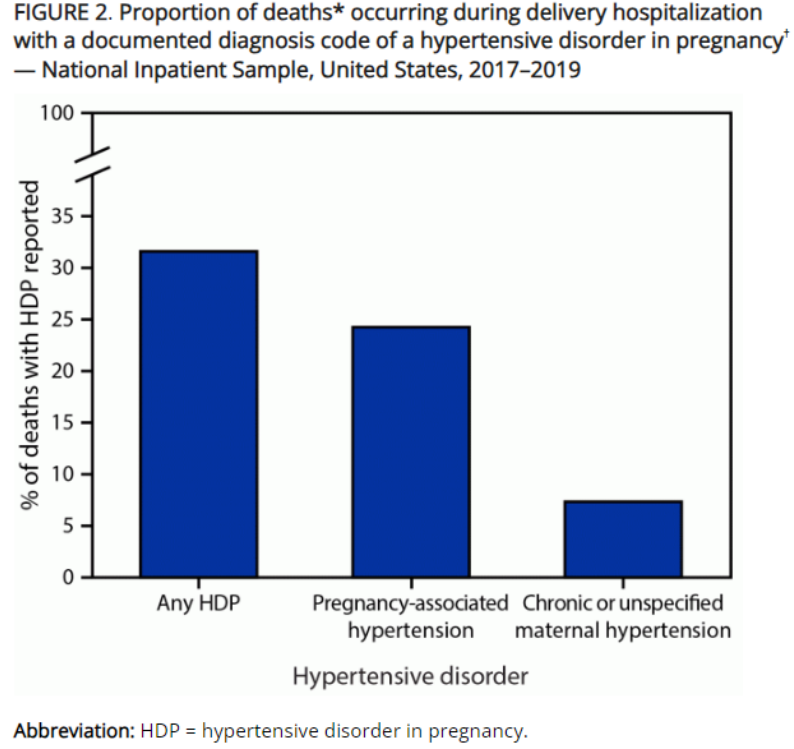
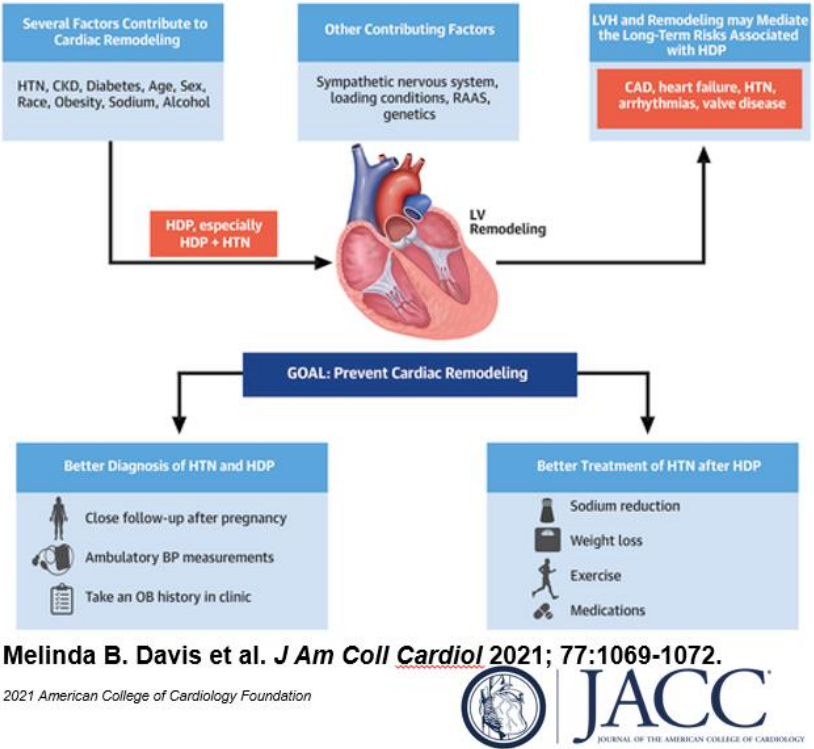


Abbreviations: HDP = hypertensive disorder in pregnancy; HTN = hypertension; PAH = pregnancy-associated hypertension.

* HDPs are defined as chronic hypertension, pregnancy-associated hypertension (i.e., gestational hypertension, preeclampsia, eclampsia, and chronic hypertension with superimposed preeclampsia), and unspecified maternal hypertension.

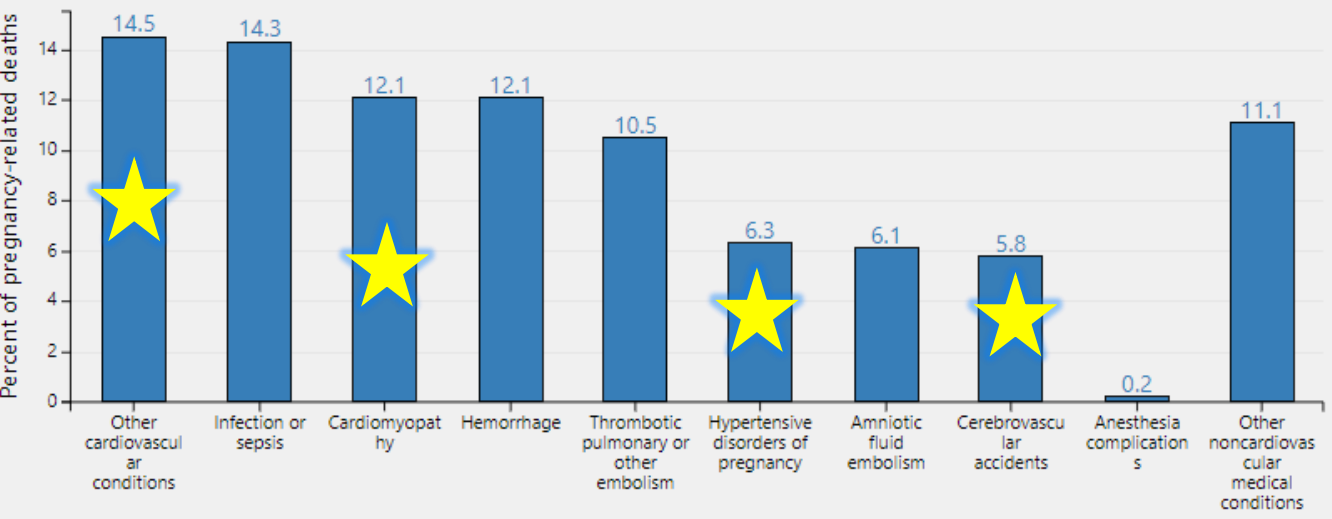


MATERNAL MORTALITY AND MORBIDITY IN THE US



MATERNAL MORTALITY AND MORBIDITY IN THE US

Causes of pregnancy-related death in the United States: 2017-2019



- ❖ 1 in 6.5 or 15.4% US women will have a SMM after delivery and being discharged from the hospital
- ❖ 75% will occur within the first 14 days after delivery/discharge



Most Common events after Delivery:



Blood transfusion



Pulmonary edema / Acute heart failure



Sepsis



Adult respiratory distress syndrome



Air and thrombotic embolism



Eclampsia



Puerperal cerebrovascular disorders



Acute Renal Failure

MATERNAL MORTALITY AND MORBIDITY IN THE US & MN

***SMM among US Black women overall are about 1.7 times more likely than in US White women overall

*** Minnesota Native American Women make up 2% of all births in MN, yet make up 12% of overall maternal deaths in MN



The Problems

- Delay in care
- Failure to recognize
- ***Our Why***



THE BLUE BAND INITIATIVE



THE BLUE BAND INITIATIVE

November 15, 2023



1. Level the field for all women. Not just improve outcomes for a specific demographic, but to decrease morbidity and mortality so that all ethnicities and demographics have a relatively similar rate of disease, severity of disease and outcomes.

GOALS:

2. Improve health care response to potential problems through awareness and understanding.

3. Improve each woman's own knowledge of her risk, signs and symptoms and provide knowledge to help her and her family/friends speak up when they are concerned.



Me calling my dad when my car starts making noise or when the engine light comes on



SELF-ADVOCACY

IS THE ABILITY TO ARTICULATE

ONE'S **NEEDS** & **MAKE**
INFORMED
DECISIONS

ABOUT THE  **SUPPORT**
NECESSARY TO MEET
THOSE NEEDS.

Patient Involvement and Self Advocacy:

- Teach the patient about how their BP should be taken
 - Position: Sitting, legs uncrossed, Semi-fowlers etc. Use a position where they spend 80% of their day.
 - Location: upper arm, lower arm etc.
 - Cuff Size: teach about the cuff that fits them best

St. Luke's Blue Band Initiative

November 16, 2023

THE PATIENT.
ABOVE ALL ELSE.®



St. Luke's background

- Identified need
 - Since 2020 significant increase in births complicated by HTN/GHTN/Preeclampsia
 - Racial disparities
- Utilize MNPQC implementation toolkit
 - Where to begin? All steps are outlined
 - Information for patient education
 - Instructions for patients
- Planning to Implementation: Less than 3 months
 - Thank you CentraCare!

- Identify Target Audiences
 - Internal
 - Community partners
 - External
 - Public
- Establish Timeline
 - Hospital and Clinic education
 - Webpage
 - Media release
 - Social media
 - Patient education handout
 - Memos internal and external

St. Luke's Launches Blue Band Project to Help Patients at Risk for Hypertension or Preeclampsia During & After Pregnancy

CATEGORY: News Releases

POSTED ON: Jun 26, 2023





Protecting Moms With Preeclampsia: Blue Band Project



Provide a blue band to every OB patient with any of the following:

- History of chronic hypertension with history of preeclampsia
- History of preeclampsia with severe features
- Gestational hypertension
- Risk for preeclampsia

Instruct patients to wear their band through 6 weeks postpartum or until a provider instructs them to take it off. The blue band will help identify patients as being at risk for eclampsia. St. Luke's has engaged in an awareness campaign with EMS and other medical providers, encouraging them to look for a blue band.

The Blue Band Project is a partnership with the Minnesota Perinatal Quality Collaborative (MNPQC).

Questions?

Contact Lori Swanson
218.249.5465
Lori.Swanson@slhduluth.com

THE PATIENT.
ABOVE ALL ELSE.®



- EMR build
 - Inpatient and ambulatory
 - Data tracking
 - Report builds
- Develop workflow process
 - Clinic: OBGYNs, CNMs, APCs
 - Inpatient: L&D nurses, ED staff

Preeclampsia

Preeclampsia is a serious disorder that can affect many organs in a mother's body, including the brain, kidneys and/or liver. Preeclampsia most often occurs after 20 weeks of pregnancy. It can also occur up to six weeks after a baby is born.

Preeclampsia can cause:

- High blood pressure
- Protein in the urine
- Organ damage
- Eclampsia, which can lead to seizure, stroke and/or death

Signs and symptoms of preeclampsia

- Swelling of face or hands
- A headache that is severe or will not go away
- Seeing spots or changes in vision
- Pain in the upper right area of belly
- Sudden or rapid weight gain
- Trouble breathing or feeling short of breath
- Heartburn that will not go away
- Decreased urination or no urination
- High blood pressure
- Chest pain

What are the risk factors for preeclampsia?

- History of high blood pressure
- First pregnancy
- Preeclampsia in a previous pregnancy
- Family history of preeclampsia
- History of kidney disease
- 35 years old or older
- Carrying more than one baby
- Certain medical conditions such as diabetes, bleeding disorders or certain auto-immune conditions
- Fertility treatments

Long-term risks of preeclampsia

Preeclampsia can cause serious health problems for the mother and have lifelong impacts. Women who have had preeclampsia have increased risk of heart disease, heart attack and stroke, and high blood pressure.

Blue Band Project

St. Luke's is part of the Blue Band Project, an initiative aimed at immediately making healthcare professionals aware of a patient's preeclampsia diagnosis. [Learn more on reverse.](#)

Blue Band Project

The Blue Band Project is an initiative in partnership with the Minnesota Perinatal Quality Collaborative (MNPOC). The goal is to immediately make healthcare professionals aware of a patient's preeclampsia diagnosis and/or eclampsia risk when that patient is seeking medical care for symptoms or concerns.

Patients who are at risk of or have been diagnosed with preeclampsia, or have high blood pressure, are offered a blue band to wear throughout pregnancy and up to 6 weeks after they deliver their baby. The blue bands alert healthcare professionals that the patient is at risk of eclampsia, which is a life-threatening condition.

Wearing a Blue Band

You have been given a blue band because you are at risk of developing eclampsia.

You should:

- Leave the blue band on until your healthcare provider advises you to take it off.
- Keep your follow-up appointments with your healthcare provider, even if you are feeling well.
- Continue prescribed medications as directed.

If you notice any of the symptoms of preeclampsia or eclampsia (see other side), seek medical attention immediately.

[Learn more about preeclampsia on reverse.](#)



The blue band empowers patients with a visual alert to others of their risk and/or diagnosis as they seek medical care for symptoms or concerns.



- **Lessons Learned**
 - Order 2-3 sizes of blue bands
 - Ensure that bands and education are distributed to community partners, access hospitals, and outlying clinics
 - Know your organization/geographic racial disparities
- **Feedback**
 - Self advocacy, awareness, safety
- **Follow-up**
 - Internal report for survey
 - Future quantitative data analysis
- **Consider collaborative programs**
 - Heart-to-Heart Program with SLC PHNs



Thank you

THE PATIENT.
ABOVE ALL ELSE.®



Implementation:

Patient is diagnosed with hypertension during pregnancy OR within 6 weeks postpartum at the Clinic or Hospital, this would include chronic hypertension

- The patient is provided verbal and written education
- The band is given to the patient
- Instructed to wear until 6 weeks postpartum or their provider advises they can stop wearing it

◦ A Blue banner appears in the EMR header when:

- Provider adds any type of hypertensive diagnosis to problem list
- Clinic staff document the blue band and patient education info given
- Hospital staff document the blue band and patient education info given



Eclampsia Risk: Blue Band Given to Patient

Supplies



The advertisement features a central image of a healthcare professional in a white coat holding a red stethoscope. Three blue wristbands are shown with custom logos: 'ECLAMPSIA RISK', 'centracare.com/blue', and 'CentraCare'. A red starburst graphic says 'FREE SET-UP!'. A red arrow points to a band with the text 'YOUR LOGO HERE!'. Below the image is a color calibration bar with the text 'PMS COLOR MATCHING INCLUDED!'. A blue box contains contact information: 'Questions or Orders? EMAIL OR CALL! andi@imagebuild.com Phone # 320-281-2325'. A small box at the bottom right contains the text: '*ART TIME AND/OR TAXES (WHERE APPLICABLE) MAY BE ADDED TO FINAL COST'. At the very bottom, a line of small text reads: 'Price Includes: Free Setup, PMS Color Matching, Digital Proof, Door to Door Factory Direct Shipping to one location in the Contiguous U.S Included!'.

Image Builders
PROMOTIONAL PRODUCTS & APPAREL **MADE EASY**

FREE SET-UP!

YOUR LOGO HERE!

PMS COLOR MATCHING INCLUDED!

**Questions or Orders?
EMAIL OR CALL!**
andi@imagebuild.com
Phone # 320-281-2325

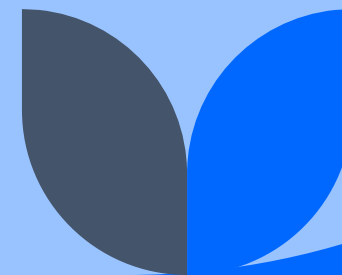
*ART TIME AND/OR TAXES (WHERE APPLICABLE)
MAY BE ADDED TO FINAL COST

Price Includes: Free Setup, PMS Color Matching, Digital Proof, Door to Door Factory Direct Shipping to one location in the Contiguous U.S Included!

- Find a company who can supply the product
- Get your
 - ☐ Custom logo on it
 - ☐ Custom Website on it
- Pricing is nominal
- Obtain grant money
 - Hospital auxiliary
 - Employee campaign
 - Specific donors
 - Be Creative

Or

- Work with MNPQC on using their Blue Bands



Patient Education



High Blood Pressure and Preeclampsia During and After Pregnancy

What is high blood pressure?

Blood pressure is the pressure of the blood against the blood vessel walls each time the heart contracts (squeezes) to pump the blood through your body. High blood pressure is also called **hypertension**.

What is preeclampsia?

Preeclampsia is a serious disorder that develops during pregnancy or up to 6 weeks after delivery. It can affect many organs (brain, kidneys, and/or liver) in your body. Preeclampsia usually happens in the last half of pregnancy.

Preeclampsia can cause:

- High blood pressure
- Protein in the urine
- Organ damage
- Seizure
- Stroke
- Death

What are the symptoms of preeclampsia?

Some women may have many symptoms of preeclampsia while others may only have one or two.

- | | |
|---|--|
| • Swelling of face or hands | • Trouble breathing or feeling short of breath |
| • A headache that is severe or will not go away | • Heartburn that will not go away |
| • Seeing spots or changes in vision | • Decreased urination or none |
| • Pain in the upper right area of your belly | • High blood pressure |
| • Nausea or throwing up | • Chest pain |
| • Sudden or rapid weight gain | • Confusion |

When does preeclampsia occur?

Preeclampsia can occur anytime during pregnancy, but most often after 20 weeks. It also can occur in the six weeks after your pregnancy.

What are the risk factors for preeclampsia?

- | | |
|---|--|
| • First pregnancy | • Certain medical conditions such as diabetes, bleeding disorders, or certain auto-immune conditions |
| • A history of preeclampsia in a previous pregnancy | • BMI over 35 |
| • Family history of preeclampsia | • Fertility treatment |
| • History of high blood pressure | |
| • History of kidney disease | |
| • Age 35 years or older | |
| • Carrying more than one baby | |



CentraCare.com

What are the risks for my baby if preeclampsia occurs?

- Premature delivery
- Stillbirth

What are the long-term risks for me if preeclampsia occurs?

- Preeclampsia can cause serious health problems for you and could have lifelong impacts.
- Women who have had preeclampsia have increased risk of:
 - Heart disease, heart attack, and stroke
 - High blood pressure

If you have had preeclampsia once, it increases your risk of preeclampsia with future pregnancies.

What should you do if you have been diagnosed with preeclampsia or postpartum preeclampsia?

- Keep your follow-up appointments with your health care provider, even if you are feeling well.
- Expect your first follow-up appointment after delivery to be within 2-5 days of discharge from the hospital.
- Continue your prescribed medications as directed.

Your provider will follow your health closely during your pregnancy and for 6 weeks after your baby is born.

If you notice any of the symptoms of preeclampsia listed above, seek medical attention. Get a ride to your closest emergency room or call 911 and report the symptoms you have been experiencing.

** It is important to let health care providers know if you are pregnant or have recently been pregnant.*

If you have been given a blue wrist band to wear, the band is to alert health care workers and others of your condition. Wear this band during your pregnancy and continue to wear it after you deliver. Leave the blue wristband on until your health care provider takes it off or tells you to take it off.

Many complications of preeclampsia can be prevented. CentraCare is working to raise awareness of preeclampsia in our communities by using the blue medical alert bands and education.



CentraCare.com

Share with local providers, EMS, Media, Patient Stories (Social, News, Radio)



1406 Sixth Avenue North
St. Cloud, MN 56303

Media Release

July 21, 2020

Karna Fronden
Public Relations Manager
CentraCare
320-251-2700, ext. 71381
karna.fronden@centracare.com

CentraCare Launches Blue Band Initiative to Combat Pre-Eclampsia

St. Cloud, Minn. - This month CentraCare is launching the Blue Band Initiative, a new effort in Minnesota to improve awareness and recognition of pre-eclampsia within our communities. Preeclampsia is a serious disorder that develops during pregnancy or up to 6 weeks after delivery. As part of this project, patients at risk for pre-eclampsia will receive a blue wrist band.

If someone you know or see is experiencing a medical problem and has a blue wrist band, please speak up and notify medical personnel. This knowledge can affect treatment options and health outcomes. Symptoms of pre-eclampsia can mimic other conditions, making it hard for medical staff to recognize, especially if patients are not obviously pregnant or unable to verbalize their medical histories. Some symptoms of pre-eclampsia include swelling, headaches, vision changes, nausea, weight gain, trouble breathing, chest pain and confusion.

"My hope is that through this initiative health care workers will gain a better understanding of the subtle signs and symptoms of pre-eclampsia and women off all backgrounds will get similar treatment and care," said Melissa Erickson, MSN Ed., CentraCare - St. Cloud Hospital Birth Center. "I would love to see this program spread across the Midwest."

Without proper treatment, pre-eclampsia can lead to stroke, seizure, organ damage or death.

Blue Bands Can Save Lives of Pregnant Women and New Moms

Birthing Services

"I had friends and family in New York who died of preeclampsia. I thought 'this can't be happening to us, please God, please God, don't make this happen.' I knew every moment could be life or death."



Eunice Adjei-Gyimah and her fiancé, Ryan Daniel, looked forward to celebrating Independence Day with their new son Nathaniel, who had been born on June 23. All seemed to be going well for mom and baby, with Eunice getting into the daily rhythm of caring for a



CentraCare St. Cloud
Hospital Birth Center



Month DD, YYYY

Name
Business
123 Any Street
City, State 12345

Dear Name:

CentraCare recently launched the Blue Band Initiative, an effort to improve awareness and recognition of pre-eclampsia within our communities. As part of this project, patients at risk for eclampsia (hypertension - chronic or new onset) will receive education and a blue wrist band to wear during pregnancy up until about six weeks after delivery, dependent on their providers' orders.



Symptoms of pre-eclampsia can mimic other conditions, making it hard for healthcare professionals to recognize, especially if patients are not obviously pregnant or unable to verbalize their medical histories. Estimates show that up to 60% of adverse outcomes from pre-eclampsia could be prevented with early recognition and proper treatment. Please be aware of patients wearing a blue band.

To learn more about this initiative, please visit:

- https://minnesotaperinatal.org/hypertension_in_pregnancy
- https://journals.lww.com/greenjournal/Fulltext/2019/01000/ACOG_Practice_Bulletin_No_202_Gestational_49.aspx
- <https://safehealthcareforeverywoman.org/patient-safety-bundles/severe-hypertension-in-pregnancy/>
- <https://www.centracare.com/services/birthing-services/resources-education/high-blood-pressure-and-preeclampsia/>

Sincerely,

Melissa Bray-Iverslie, MSN Ed., BSN, RNC-MNN, PHN
CentraCare - St. Cloud Hospital Birth Center, AWHONN MN Section Chair
Minnesota Perinatal Quality Collaborative Member and Hypertension Subcommittee

CentraCare.com

November 15, 2023

Coming full Circle



Coming full Circle



Empowered
Personal Autonomy
Influence

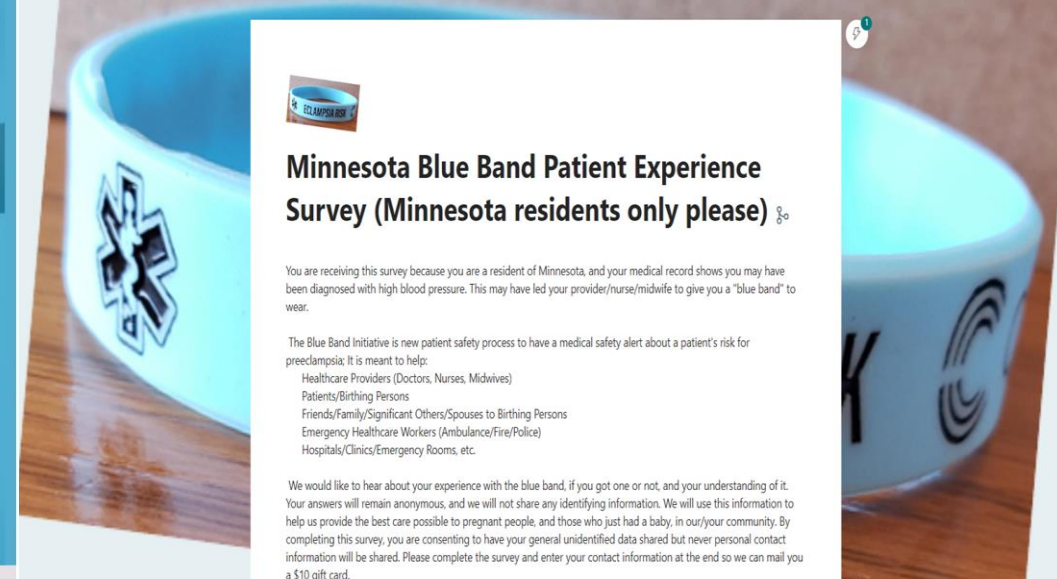
Self Advocacy
Health
Aptitude
Audacity
Skill
Courage
Brave
Personal Safety

Perseverance
Strength
Competence
Confidence
Capable
Knowledge
Tenacity

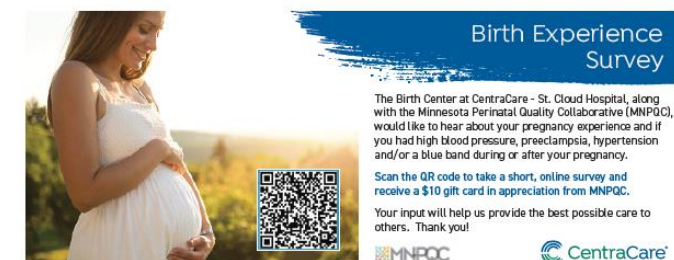
What that
meant for this
woman.....



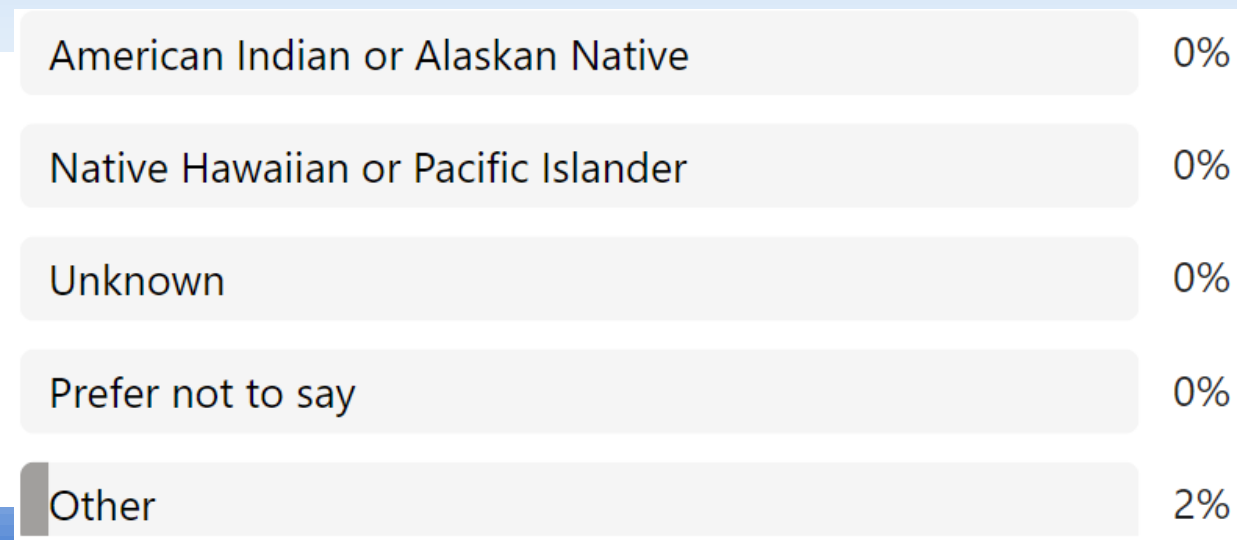
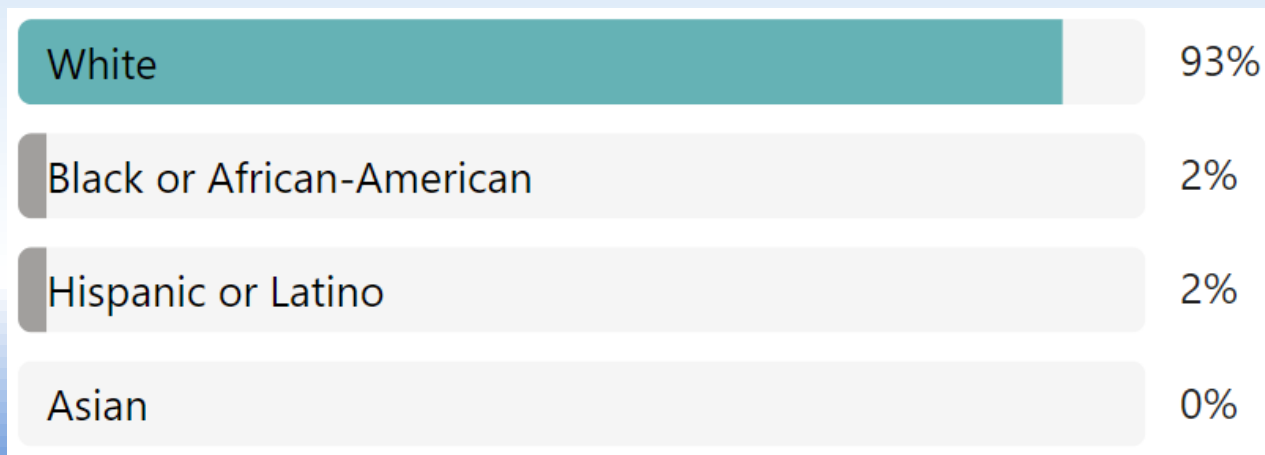
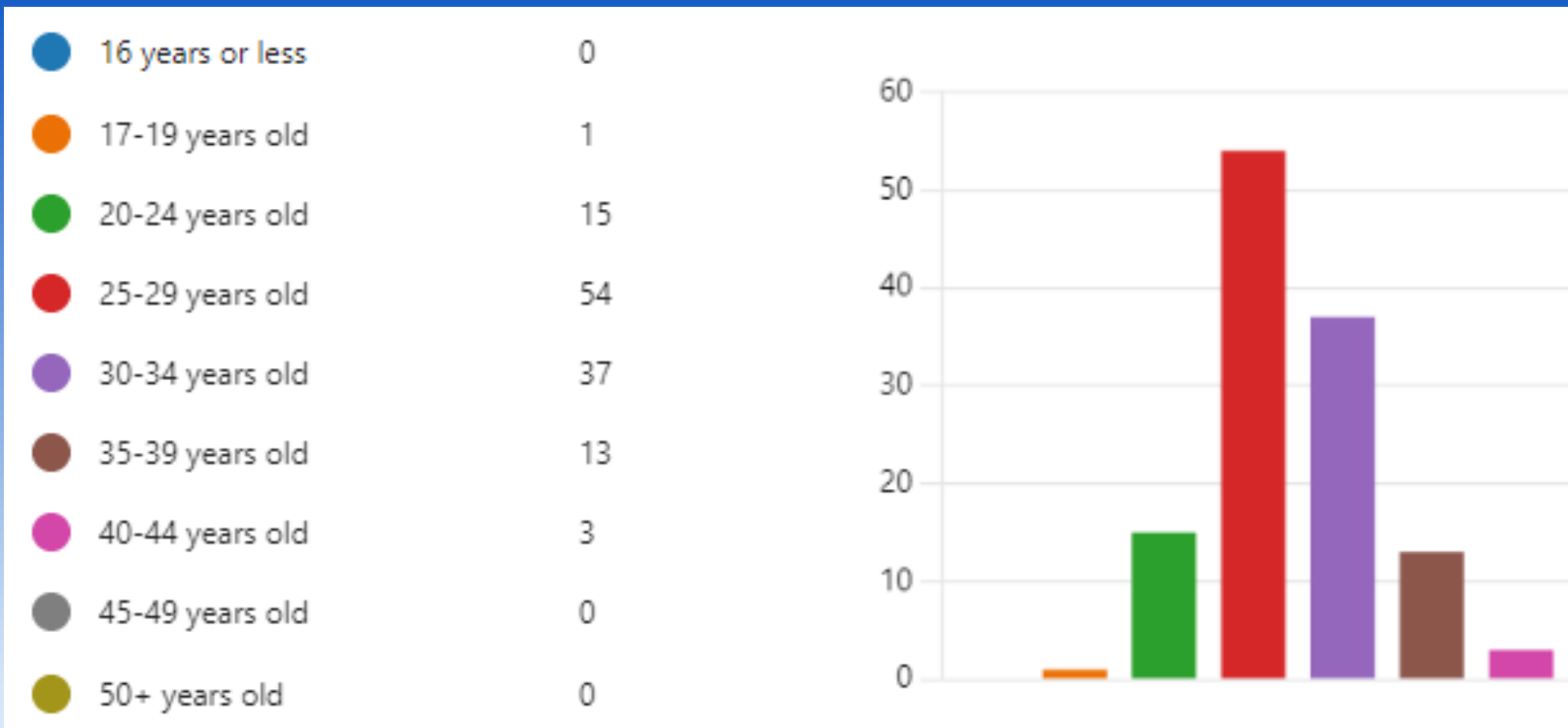
The Survey



- A report was run for all patients who delivered at St. Cloud Hospital with a diagnosis of Hypertension of any type during their pregnancy episode
- 580 Surveys were mailed out
 - Survey offered a \$10 gift card from MNPQC for completing
 - A \$50 gift card for participation in a focus group – **Next Step**
- 16 were return to sender
- 123 respondents to date with a 22% return rate
- General demographics were collected, along with some racial ethnic questions/data



November 15, 2023



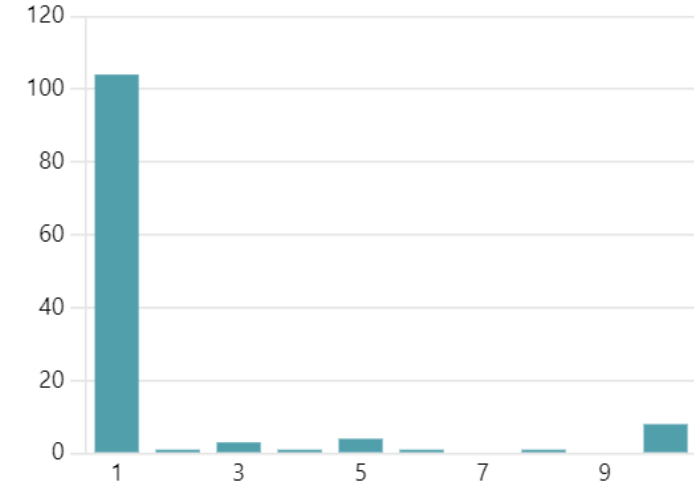
My **care** given to me during my pregnancy was affected by my race/ethnicity



1.88

Average Rating

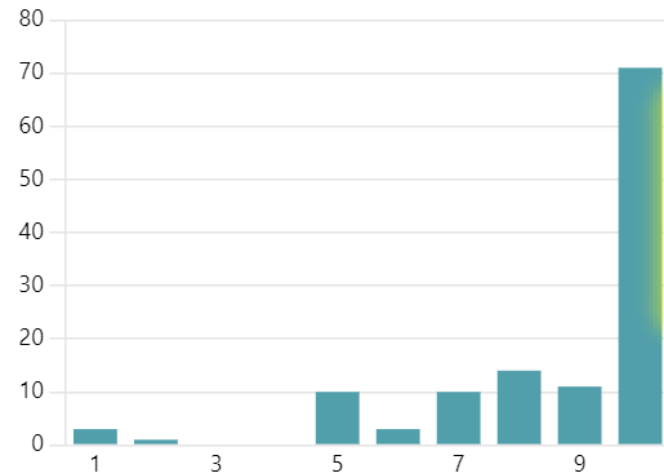
My **education** given to me during my pregnancy was affected by my race/ethnicity



1.89

Average Rating

Healthcare professionals were patient when explaining things to me until I understood



8.65

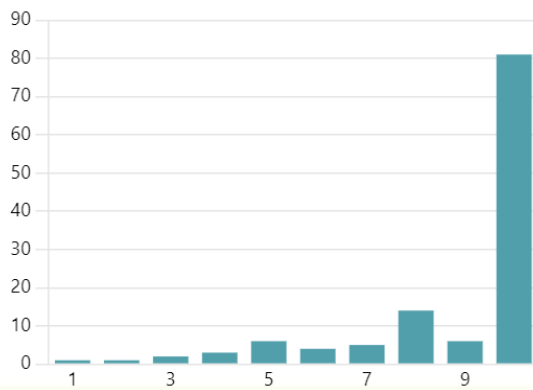
Average Rating



Healthcare professionals were courteous when explaining and teaching me

8.83

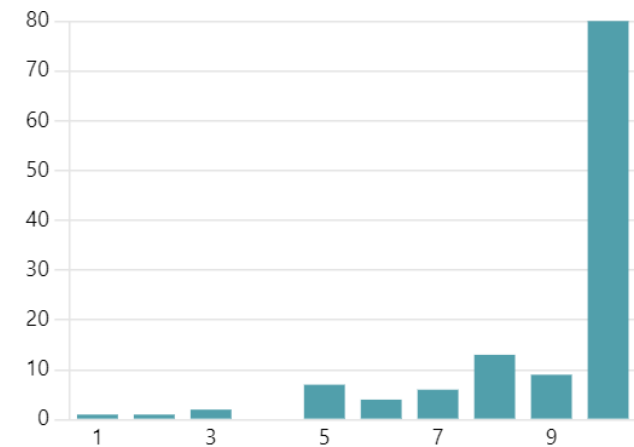
Average Rating



Healthcare professionals were respectful when explaining and teaching me

8.90

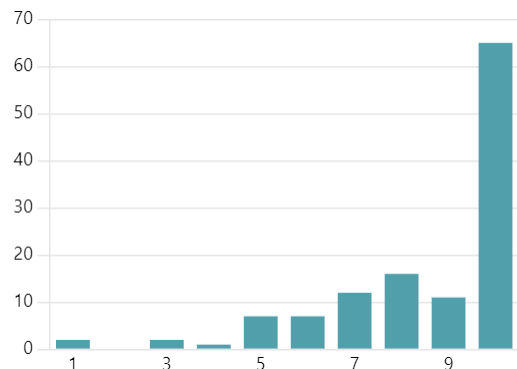
Average Rating



I leave my prenatal appointments feeling supported and well informed

8.54

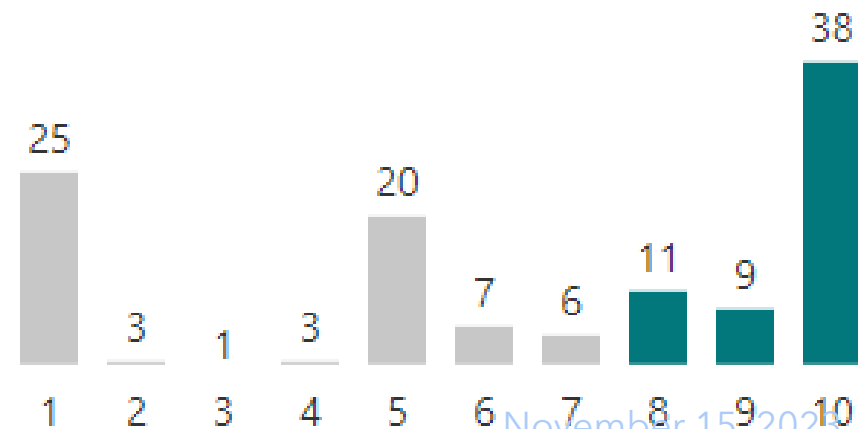
Average Rating



I felt comfortable asking additional questions about my care because the staff look like me

6.33

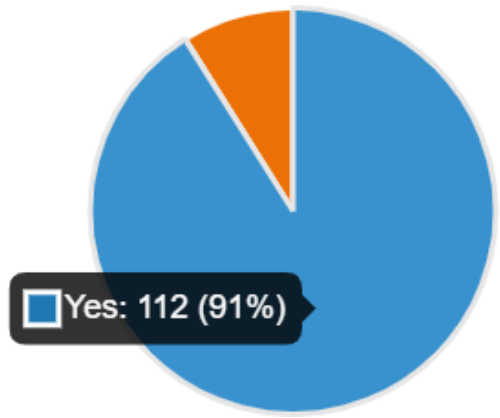
Average Rating



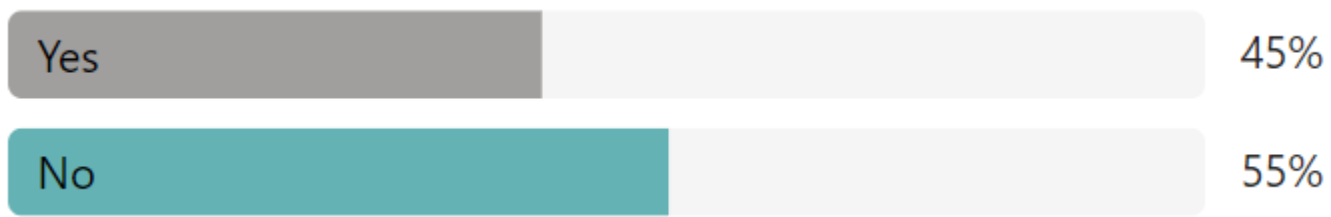
November 15, 2023

Were you told that you had any of the following problems during your pregnancy and or up to 8 weeks postpartum?

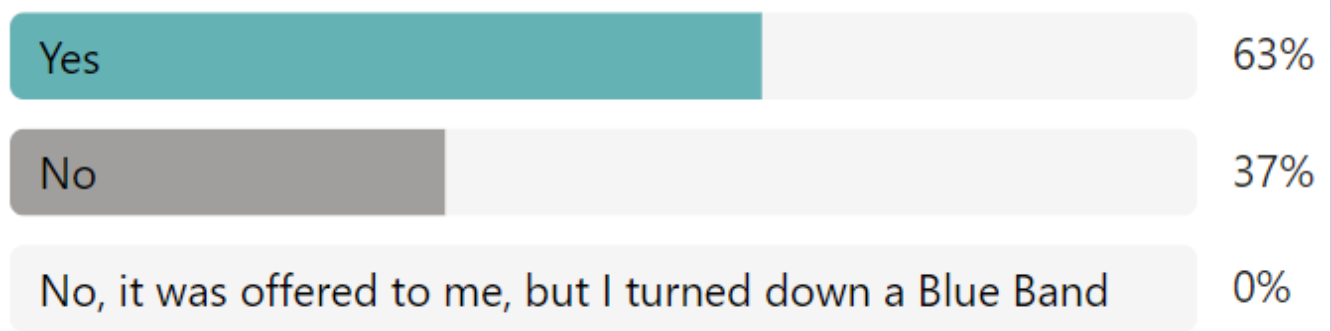
High blood pressure
Hypertension
Preeclampsia
Eclampsia
HELLP Syndrome



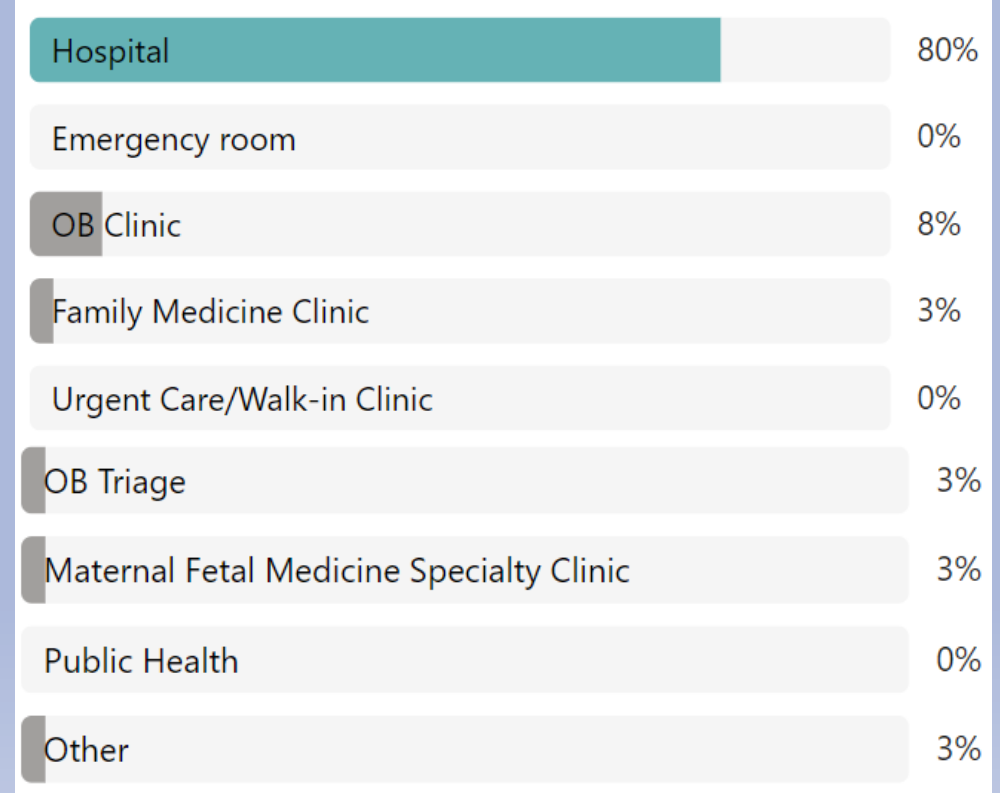
Did you get a blood pressure cuff from a healthcare professional, clinic, or hospital during or after your pregnancy?



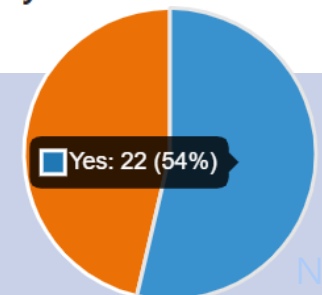
Were you ever offered or given a blue band?



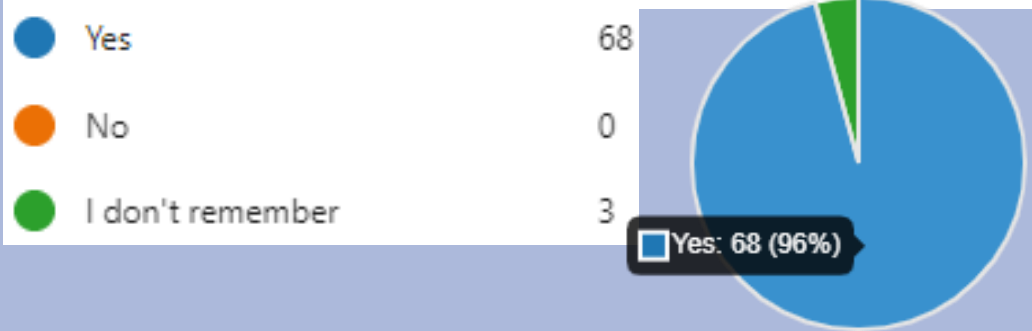
Where were you when you were offered or given a blue band?



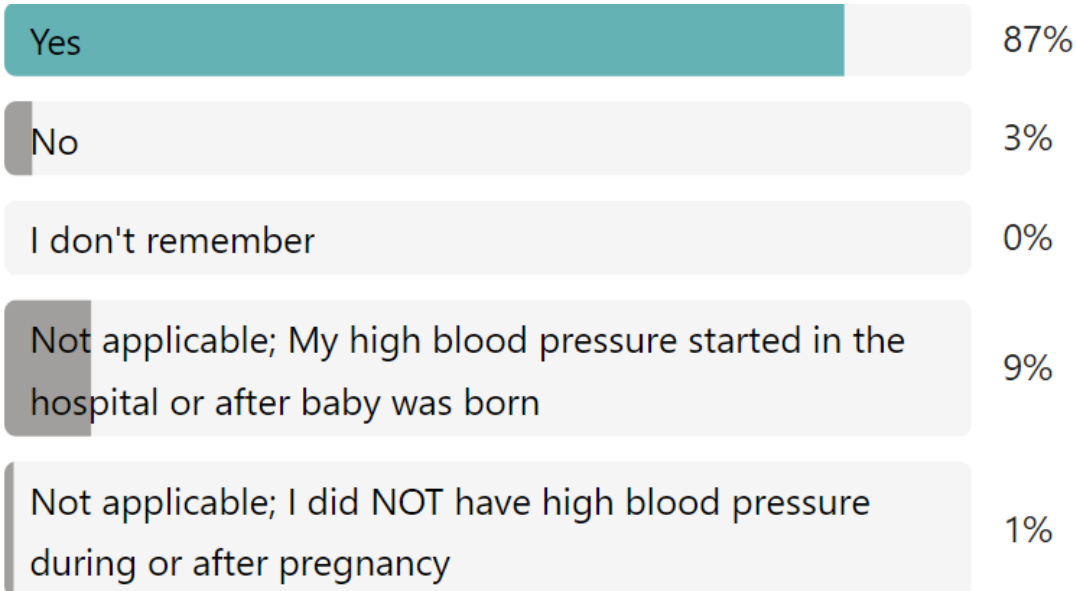
Based on the introduction of this survey and the "Blue Band Initiative" do you think you may have benefited from or would have wanted a "Blue Band"?



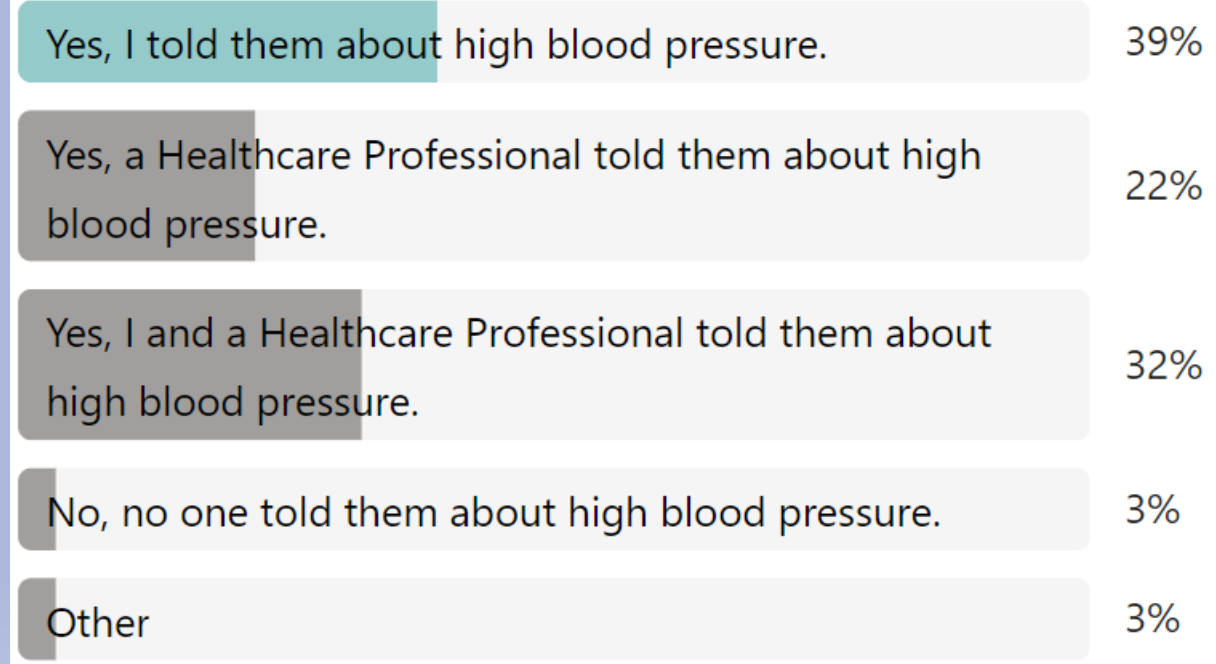
Did a healthcare professional talk to you about high blood pressure when you were offered or given a blue band?



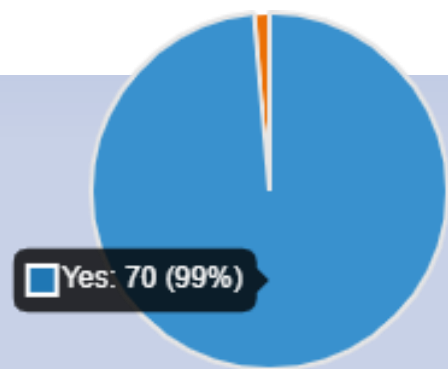
Did you talk about your blood pressure at one or more clinic appointment?



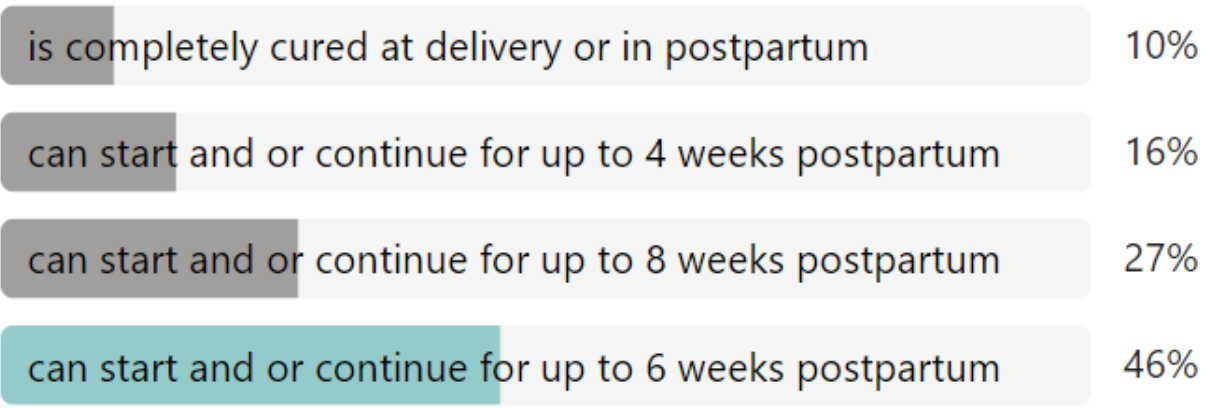
Did anyone (*you or a healthcare professional*) teach or tell your spouse, partner, family or friends about the blue band and high blood pressure?



Do you feel you understood the reason you were offered or given a blue band?



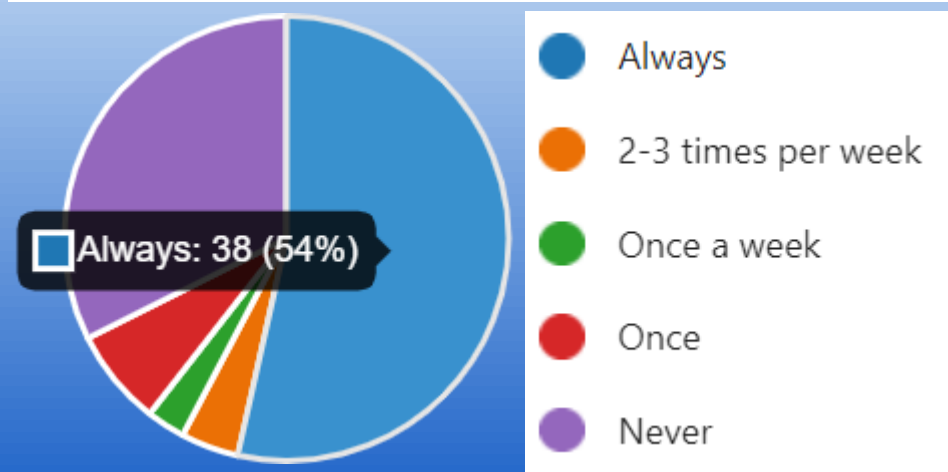
Did you receive information or education that high blood pressure in pregnancy....



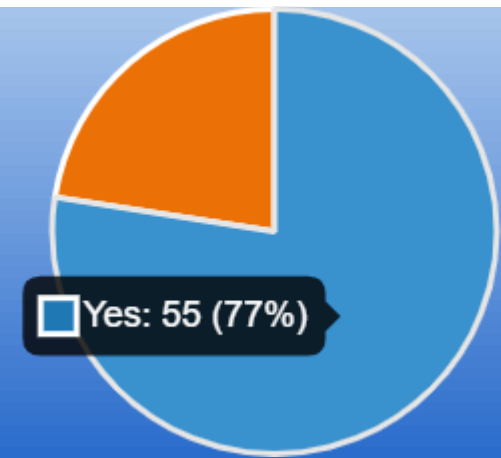
Do you feel like you were given or taught enough information about high blood pressure?



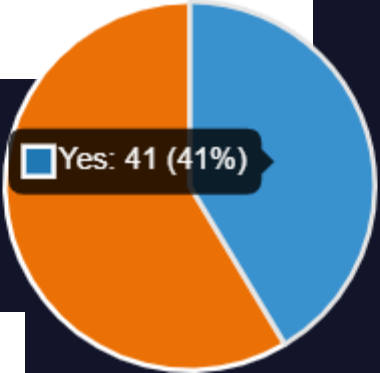
How often do you wear your blue band?



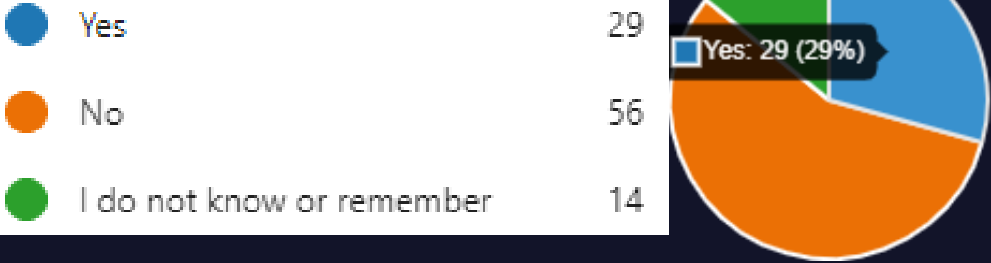
Did you wear the Blue Band until 6 weeks postpartum?



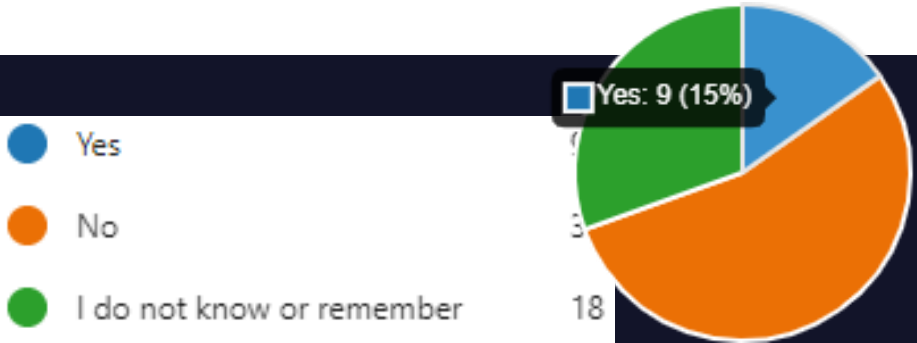
Did you go to the Emergency Room, Urgent Care, Telehealth or a different clinic during or after your pregnancy?



Did you need to tell the Healthcare professionals at the Emergency Room, Urgent Care, Telehealth or Clinic Provider about having high blood pressure?



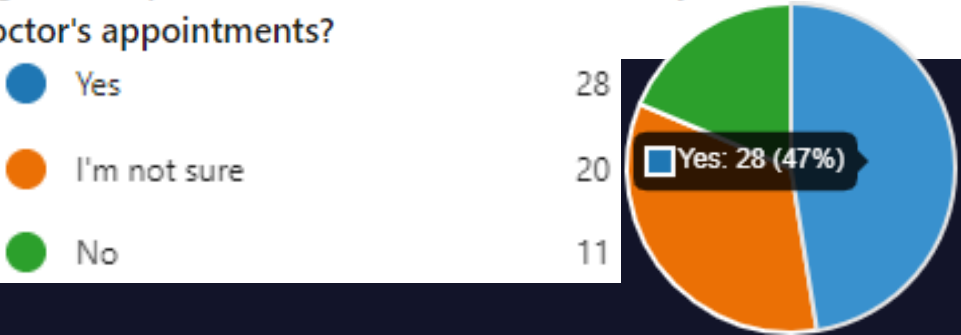
Do you think you got care faster because you had the blue band on?



Did the healthcare professionals in the Emergency Room, Urgent Care, Telehealth or Clinic see that you had a blue band on or know you had high blood pressure?



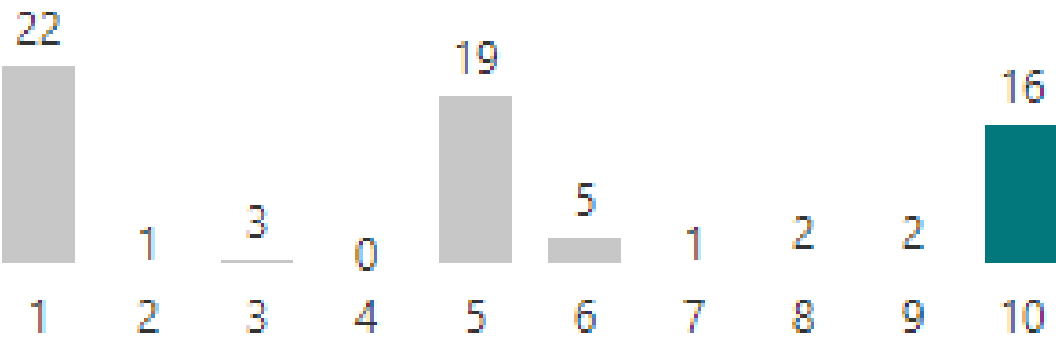
Do you think wearing the blue band helped you talk about your high blood pressure and be more involved in your care or doctor's appointments?



Do you think health care professionals took better care of you because you were wearing the blue band?



Did having the blue band on with the information you learned with it, help you decide to go to the Emergency Room, Urgent Care, Telehealth or a different clinic?



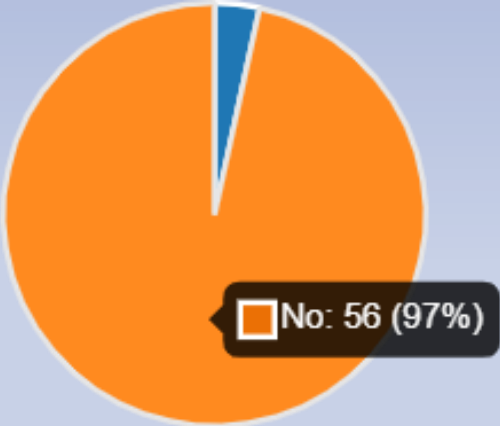
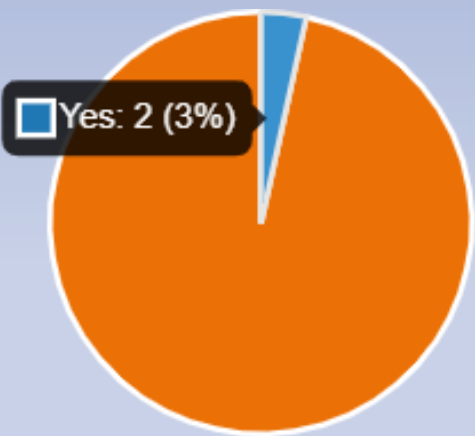
28% rated between "8 - 10" for this question

63% SAY THE BAND INFLUENCED THEIR DECISION TO SEEK EMERGENCY CARE

Had not been diagnosed with preeclampsia yet. I had a hard time breathing walking to my car, but I had a doctors appointment the next day, was sent to hospital from appointment and into emergency C-section same day because of high blood pressure.

I had just over boarderline high blood pressure with my baby. I was induced with both of my previous babies in 2018 & 2021. I knew that I had high blood pressure but when I contacted my doctor via MyChart message, nurses responded saying it was not urgent. I did not feel understood even though I knew at that point how my body works.

Do you think you should have gone, but did NOT go, to the Emergency Room, Urgent Care, Telehealth, or a different clinic because of your high blood pressure?



Why did/do you choose not to wear the blue band? *

- 34 Total Comments
- 15 – Wore until instructed to stop
- 5- “Forgot”

10 others said:

1=20-24yrs
5=25-29yrs
3=30-35yrs
1=35-39yrs

100% of the 10
comments with concerns
were by white/Caucasian
patients

Quality:

“It Broke”

Aesthetics: “

It was weird and made me feel uncomfortable”

“It’s like telling everyone I have a problem without actually telling them”

“Not comfortable, too tight”

“Not Cute”

“Did not like anything on wrist”

Purpose Not Clear:

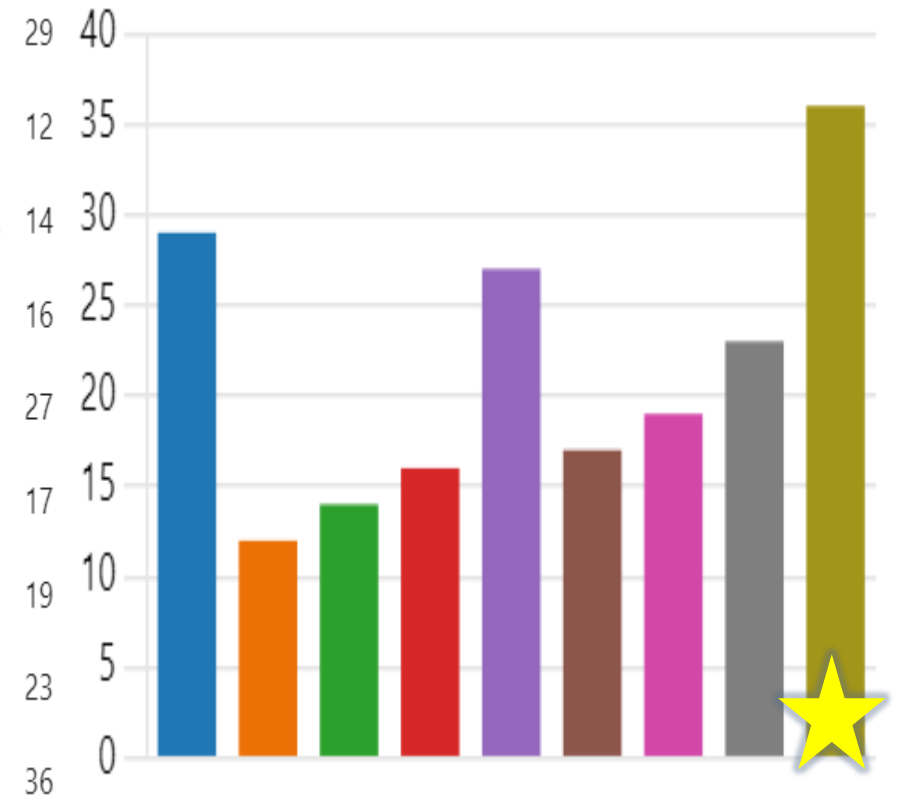
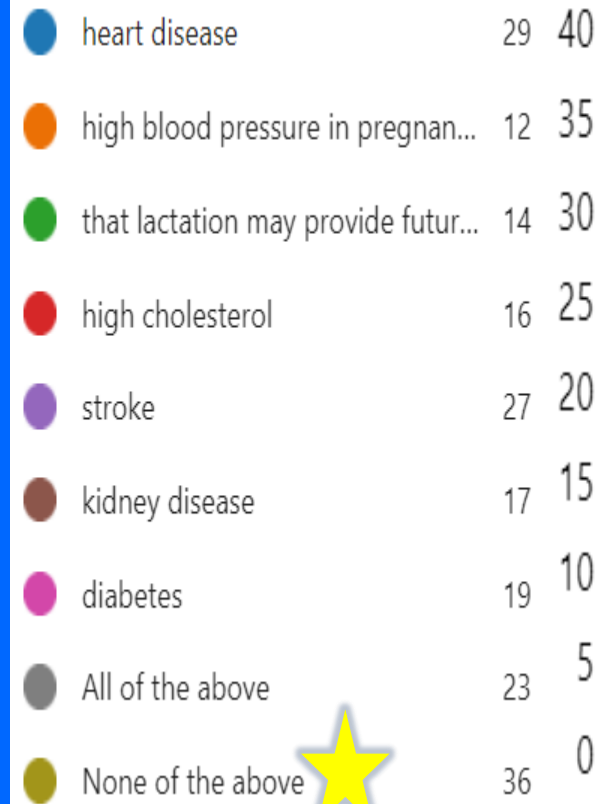
“Only wore while in the hospital”

“Chronic Hypertension, not Preeclampsia”

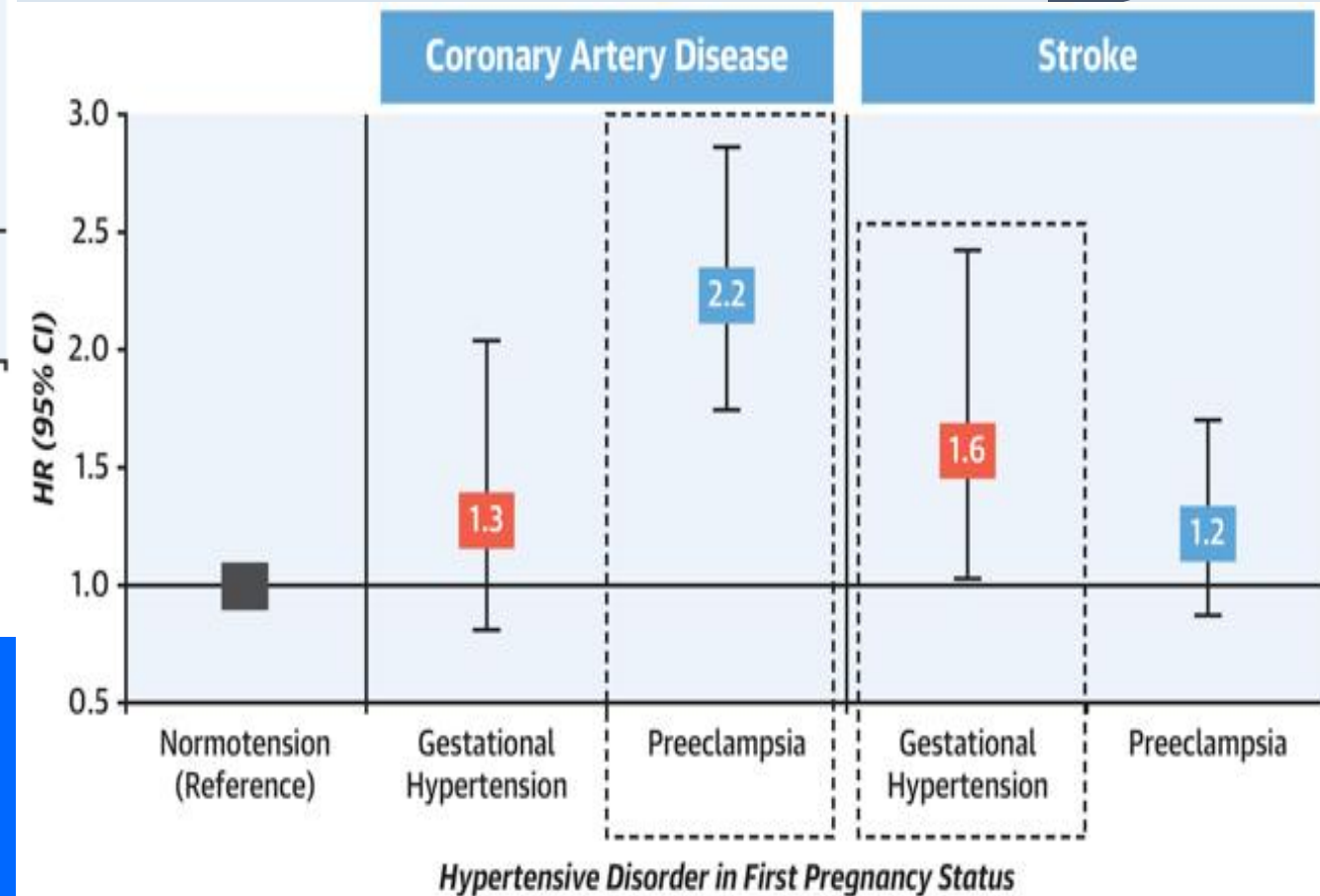
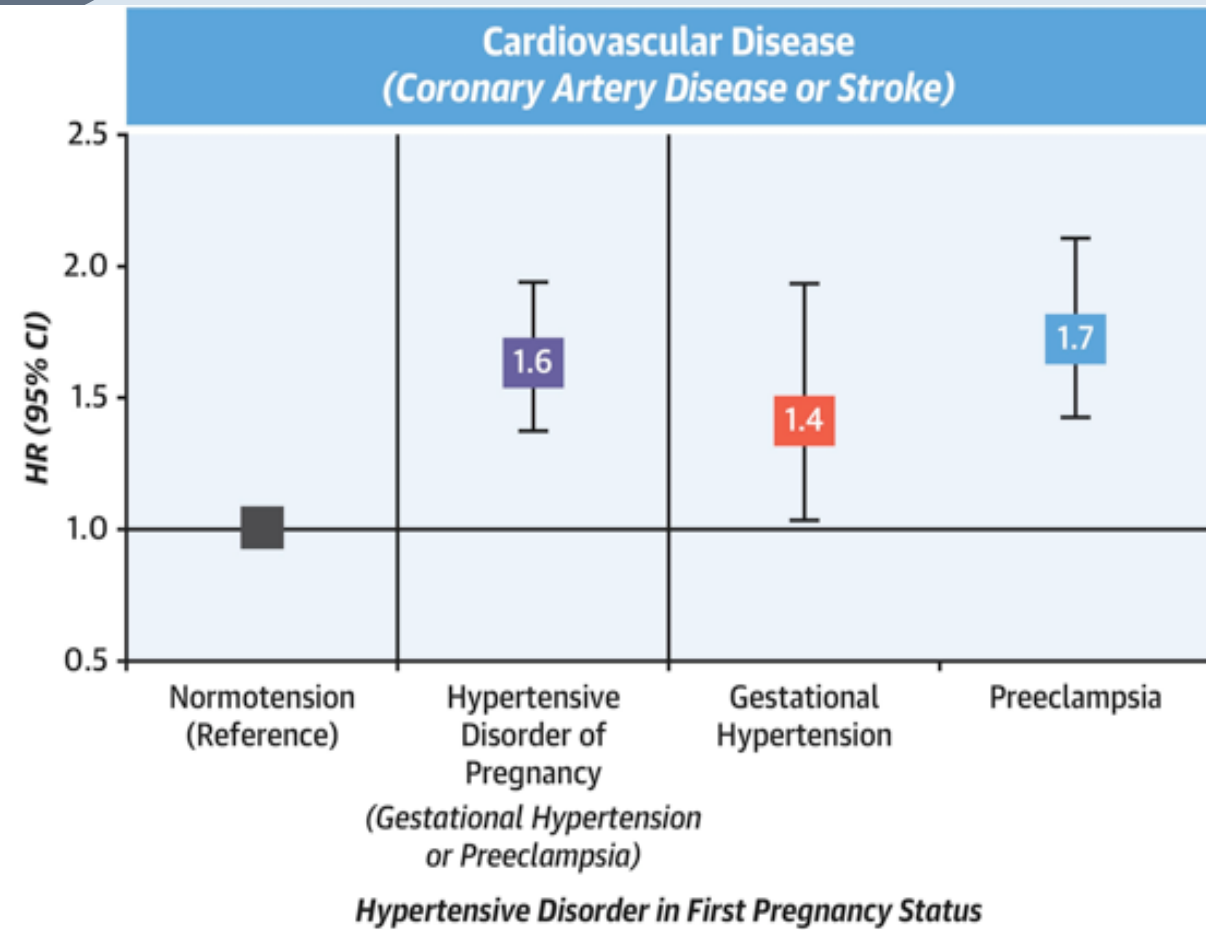
“Only wore while in public”

“Only wore while at home”

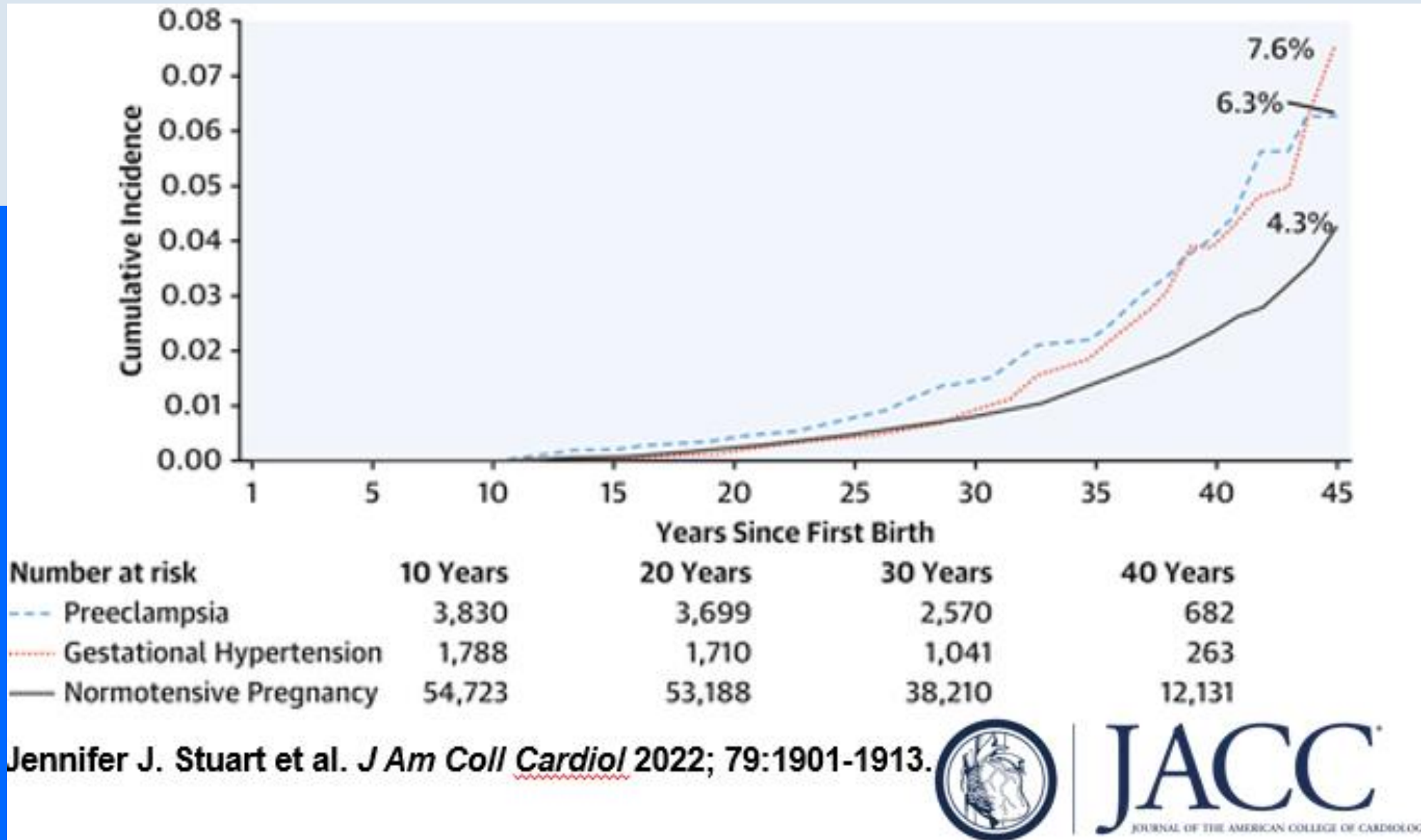
Did you receive information/education that high blood pressure in pregnancy may be linked health problems later in life, such as:



Hypertensive Disorders of Pregnancy & CVD Subtypes



Multivariable-Adjusted Cumulative Incidence of CVD



What we know from studies:

Hypertension in pregnancy is associated with a later in life, increased risk for:

- Stroke - Risk doubled for later in life
- Heart Disease - Risk doubled for later in life
- Diabetes - Risk doubled for later in life
- High Blood pressure - Risk More than doubled for later in life
- Kidney Disease - Risk doubled for later in life

You can decrease and or prevent some of your risk by:

- Breastfeeding/lactation, specifically when extended to be at least 12 months
- Losing weight by having a body mass index (BMI) in the normal range
- Not Smoking or using tobacco products
- Healthy diet
- Regular exercise

Before now, I have been taught and or knew about: *

all of the above

34%

half of the above

28%

only a little of the above

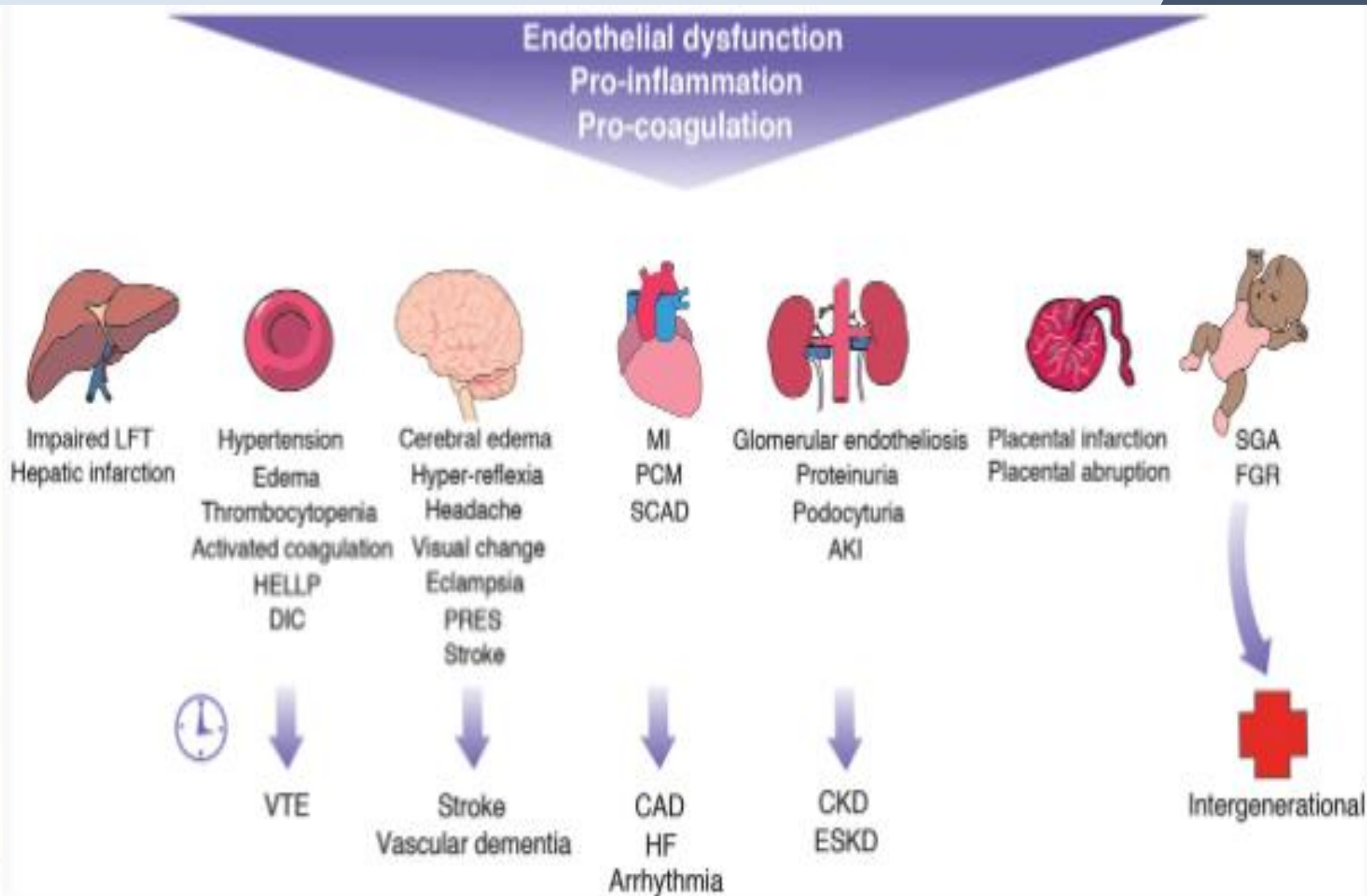
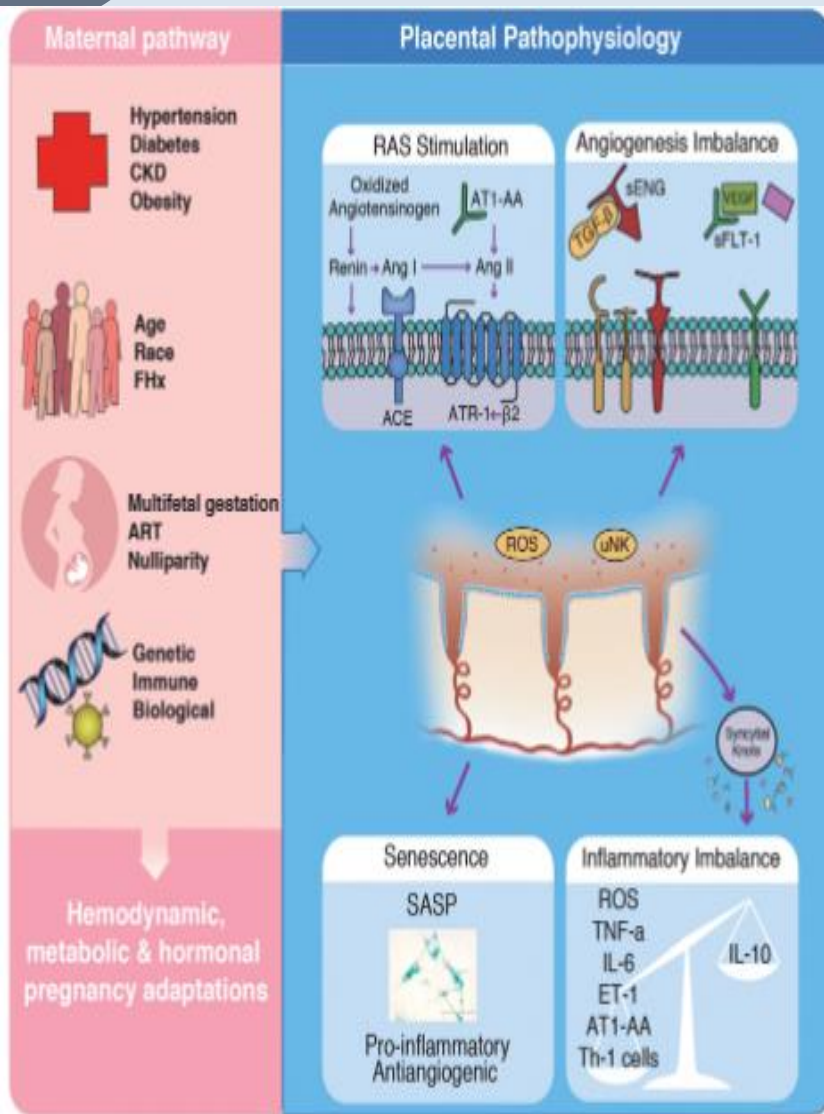
25%

none of the above

12%

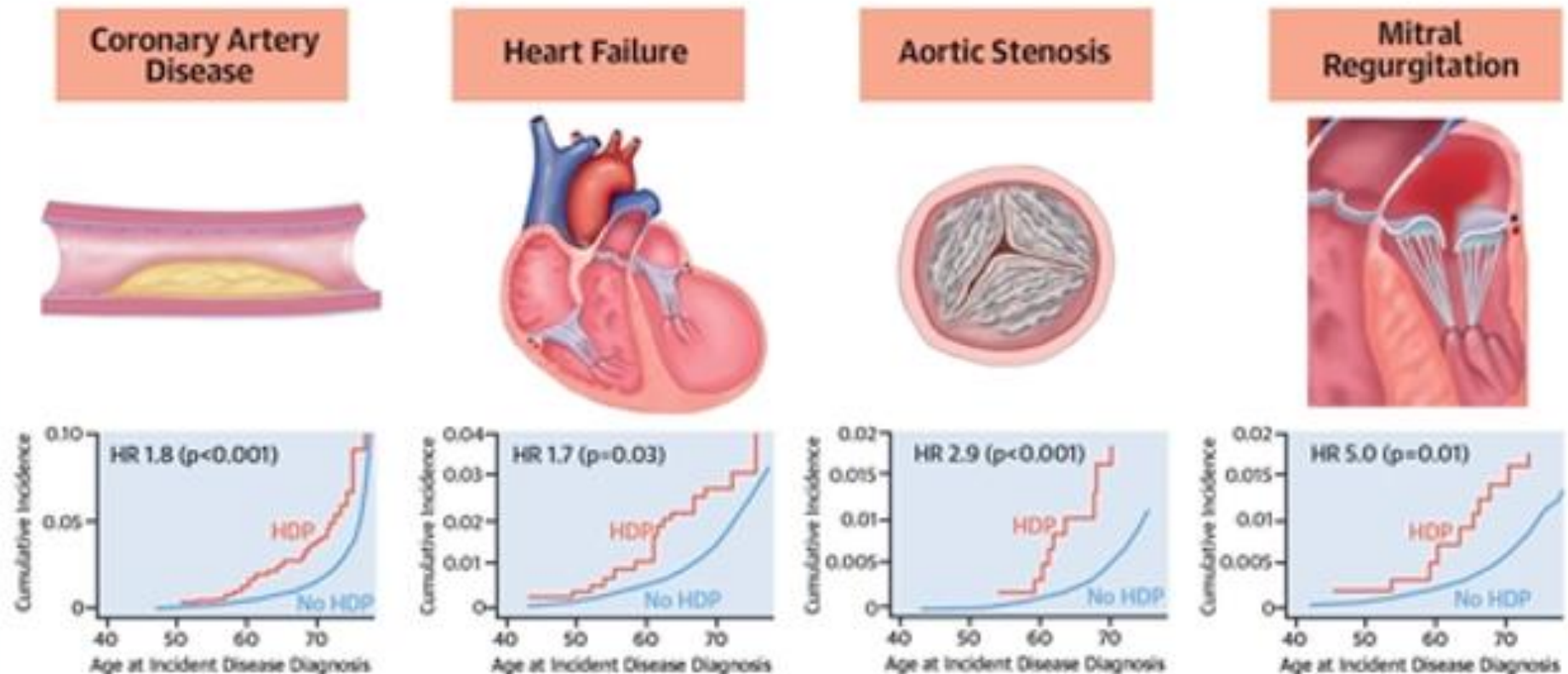


Pathogenesis of Hypertensive Disorders of Pregnancy – Long Term



Multivariable-Adjusted Cumulative Incidence of CVD

CENTRAL ILLUSTRATION: Hypertensive Disorders of Pregnancy Are Associated With Long-Term Risk of Diverse Cardiovascular Diseases



Honigberg, M.C. et al. *J Am Coll Cardiol*. 2019;74(22):2743-54.

Michael C. Honigberg et al. *J Am Coll Cardiol* 2019; 74:2743-2754.



Do you have any additional comments or ideas for making this initiative, education, or healthcare better?

Compliments/Kudos

- Felt like **it was perfect** the way it went
- Maybe giving other patients a doctors note for their employer about their condition so that they understand what the patient is going through.
- **Thank you!**
- No, everyone was very **upfront about everything and told me about all the risks.**
 - They were very good at making sure I got my BP checked VERY frequently before and after pregnancy!
- Dr. was very concerned for my well being and educated my husband and I about my blood pressure level. She made it clear what we needed to have an induction and **explained what the consequences** were if we didn't. She was **very sincere, informative, and kind in her explanation.**
- **Offer it!!**
- The staff was incredible. I had a traumatic shock response immediately after giving birth so I was not aware of the blue band until I was coherent again but all of the nurses and doctors were beyond comforting, informative and caring to me in my fragile state and I think that helped leave an imprint in not only my mind but my heart.
- No, I feel it is a **great initiative how it is**
- **I think the blue band thing is cool and I wish I knew more about it in my pregnancy**
- **More information** about signs and symptoms of preeclampsia and other hypertension symptoms during pregnancy
- I'm sure they taught me more because there was a lot of information as I was there.
 - This was my first pregnancy and they helped me tremendously I stayed there for 7days I believe to 3 of them to make sure I was okay after pregnancy and making sure I was comfortable with my baby girl, the other portion to make sure I was okay due to preeclampsia.

Do you have any additional comments or ideas for making this initiative, education, or healthcare better?

Opportunities

- **Take postpartum just as seriously as antepartum.**
- It would have helped **having a handout provided to me** with the first sign of concern for high blood pressure.
- Need **more information** about how **serious preeclampsia** is when diagnosed with it.
- **Treat the patient, not the symptoms.**
 - I have chronic hypertension and was monitored closely this pregnancy.
 - Only when I was in the hospital and saw **different providers did they make me feel “labeled” with the blue bands**
- Maybe giving other patients a **doctors note for their employer** about their condition so that they understand what the patient is going through.
- Encourage more pay or incentives for more doctors and nurses so that everyone doesn't feel rushed or high strung in the hospital
- No idea what a blue band even was until now
- I think if you have issues in one pregnancy you should be given/told to wear the band at the beginning of future pregnancies.
- **Talk** more about how important it is.
- Actually **educate people.**
 - **Make an effort** instead of giving people 47 paper flyers
- **This sounds great!**
 - It would be helpful to not have to explain my history to every single person you come in contact with.
 - And would have **maybe been helpful for staff to better believe the symptoms I had been feeling.**
- They wrote a prescription for a blood pressure cuff and I couldn't get it filled because I wasn't pregnant (they had wrote on it that I was pregnant upon discharge after having the baby).
 - I went in for a 3 day and 10 day check and at both appointments the nurse said the **cuffs** they were giving **were not accurate** because it was reading as high the whole time I was at home

Do you have any additional comments or ideas for making this initiative, education, or healthcare better?

Opportunities

- "Make sure **blood pressure cuffs** that are **given are accurate**.
 - I was given one at a pregnancy appt when my blood pressure was borderline and when using it at home, it was very high.
 - When we went to the ER, they said they were continually seeing **issues with those cuffs** and my blood pressure was normal.
 - Or perhaps more communication between hospital and clinic. I then couldn't trust my cuff provided and had to secure my own.
- Maybe **more info during pregnancy** appts that **eclampsia can spike AFTER delivery**.
 - I was largely **fine until 2. days after delivery** and then had high blood pressure.
 - The care I received after was great but I had no idea this could happen afterward vs. just during pregnancy. “
- I had **no idea about this** actually!
 - Maybe having posters up in check up rooms during prenatal appts or included in the packet that I was given by the nurse at my first appointment after I found out I was pregnant as that had a lot of information in it!
- Make sure to **provide the blue band and education to all eligible patients**.
 - Blood pressure was taken at all appointments. I noticed that I was off so I **took my blood pressure at home** and then went into the triage.
 - I was told about the symptoms and high blood pressure risk during pregnancy.
 - I **don't recall being informed** that **high blood pressure during pregnancy can increase the risk** for developing the following **later in life**.
- This was my first pregnancy and i was terrified- **especially when I had to remind my care team what was going on**. I had no idea what high blood pressure during pregnancy meant, i had to **do my own research**.
 - I think that people working in OB and even labor and delivery NEED to realize, this isn't just “another day at work” this is somebody's whole life. I've been waiting my whole life to be pregnant and have a baby, and i was treated like i was just another patient to get in and out of the clinic. That is not how worried, terrified, and emotional pregnant women should be treated, especially with high blood pressure.
- I **had high blood pressure** readings **a couple of years before getting pregnant** but **during my pregnancy I did not have any high blood pressure readings**. I was treated as if I had high blood pressure during all of my prenatal appointments and was made to feel uncomfortable and pressured into additional appointments because of the so called high blood pressure.

Discussion/Questions?



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Special
Thanks
to Dad!

