

# Stroke Prevention in African American Women Ages 20-40 with oral contraceptives use

DR. ASHANTI L.N. COLEMAN, DNP, APRN, FNP-C MAY 2021

### Table of Contents

- Introduction
- υ Objectives
- υ Background
- υ Purpose and Significance
- Birth control
- υ AA women & Stroke
- υ Results
- υ Significance of Results to the profession
- Recommendations for Future Research
- υ Summary
- Case Study
- Q& A
- υ References

### OBJECTIVE

Upon completion of this presentation participants should be able to :

- υ Identify what stroke is?
- Describe risk factors associated with stroke.
- υ List preventative methods of stroke.
- Discuss use, benefits, risks and effects of oral contraceptive use.
- Understanding clinical manifestations and how women differ

### Introduction

There are many women using oral contraceptives for family planning and medical purposes such as acne and menstrual cycle regulation. Regardless of reasoning many women are still unaware of risk associated with the use of oral contraceptives

## Purpose and Significance

- Purpose: To enhance the knowledge of oral contraceptive use and risk factors as it pertains to stroke. It will also increase overall knowledge of risk factors of heart disease and stroke in women ages 20-40.
- How: Providing an evidenced-based education to bring awareness.
- Why: 80% of strokes are preventable (AHA, 2019).

### Oral Contraceptives

- υ Pills contain two types
- Combination pill- estrogen/progestin
- υ Mini pill- progesterone
- only (What is the difference)
- υ Take daily at the same time. Why?

(CDC, 2020)

### Oral Contraceptive use

- υ Family planning/prevent pregnancy
- υ Regulation of menstrual cycle
- υ Menstrual pain
- v Fibroids
- υ Endometriosis related pain
- Menstrual migraines
- (KFF, 2019)

### OC risk

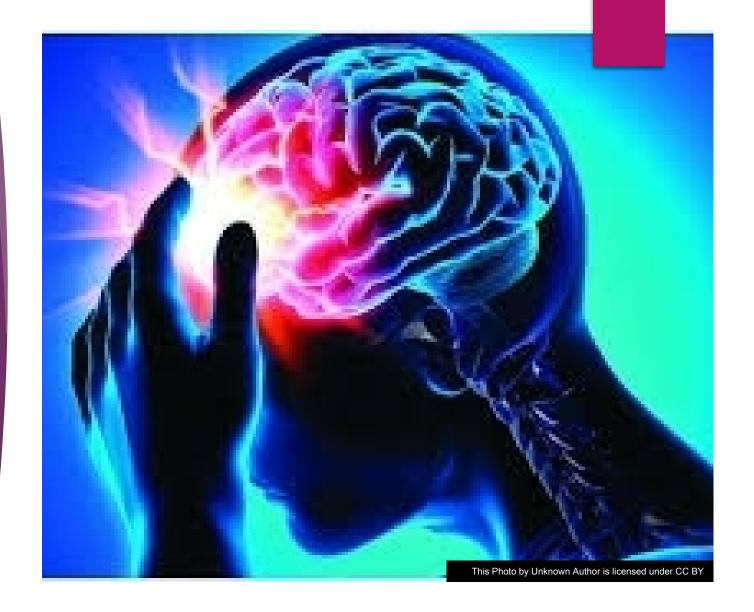
- Increased cholesterol levels
- Increased blood pressure
- Deep vein thrombosis
- Heart attack

### Background

- African American women have the highest prevalence of stroke (AHA, 2020)
- Higher- risk population are often the least informed. (Ennen & Beamon, 2012)
- 72.2 million women use oral contraceptive (Daniels & Abram, 2018).
- Combination hormonal therapy poses the highest risk for vascular incident (Schuiling & Likis, 2013).

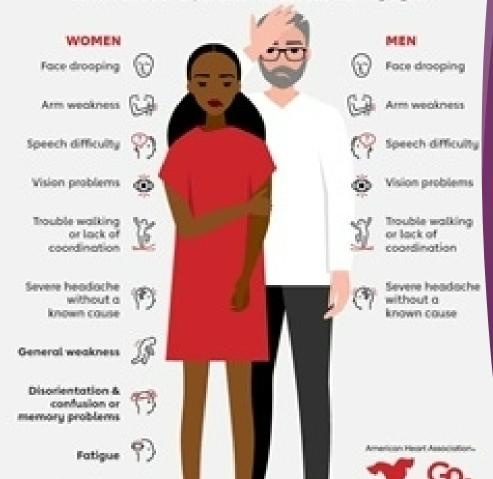
## What is Stroke?

blockage of oxygenated blood to the brain from a clot which can cause temporary or permanent damage and may lead to death (AHA, 2020)



### STROKE SYMPTOMS: WOMEN VS. MEN

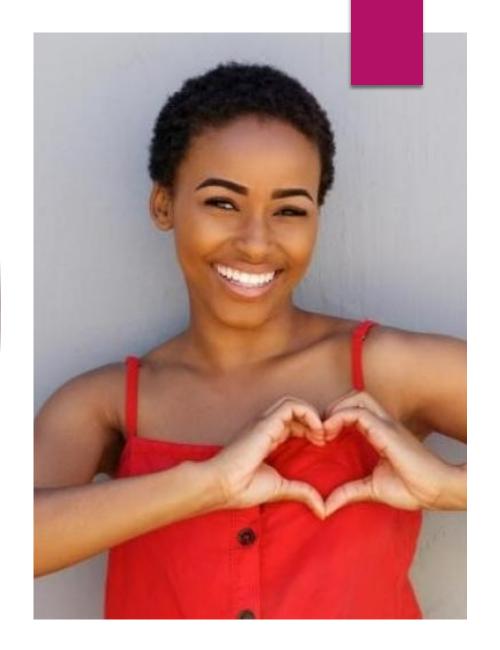
Men and women share a common set of strake symptoms. But women also can experience more subtle warning signs.



## Clinical manifestations

## African American Women & Stroke

- Obesity
- High blood pressure
- Diabetes
- Sickle cell anemia



### How to prevent Stroke?

#### EDUCATION IS KEY

- Innovative text messaging questionnaire research results found the most improvement with patient's knowledge in the following topics: mechanism of action, benefits, and effectiveness (Hall, Westhoff & Castano, 2013).
- Preventive strategies should be routine for women especially OC users (Fall, et al. 2014).

### Research Findings

2020 Quantitative non-experimental stroke prevention research

69 participants

Mean age 32

406.% holding graduate degrees

44.9% used OC combination while 30.4 % unknown

Average had 1-2 kids

Average length on OC 6 yrs

Significant increase in knowledge with use and risk

### Case Study

- AA 38 year old female has a BMI of 25.7, exercises 4-5 days/week, on non smoker, no alcohol use,
- υ Hx: 1 miscarriage
- υ Surgical hx; c-section x2 endometrial ablation,
- Medications : OC- Microgestin Fe (combo hormone)

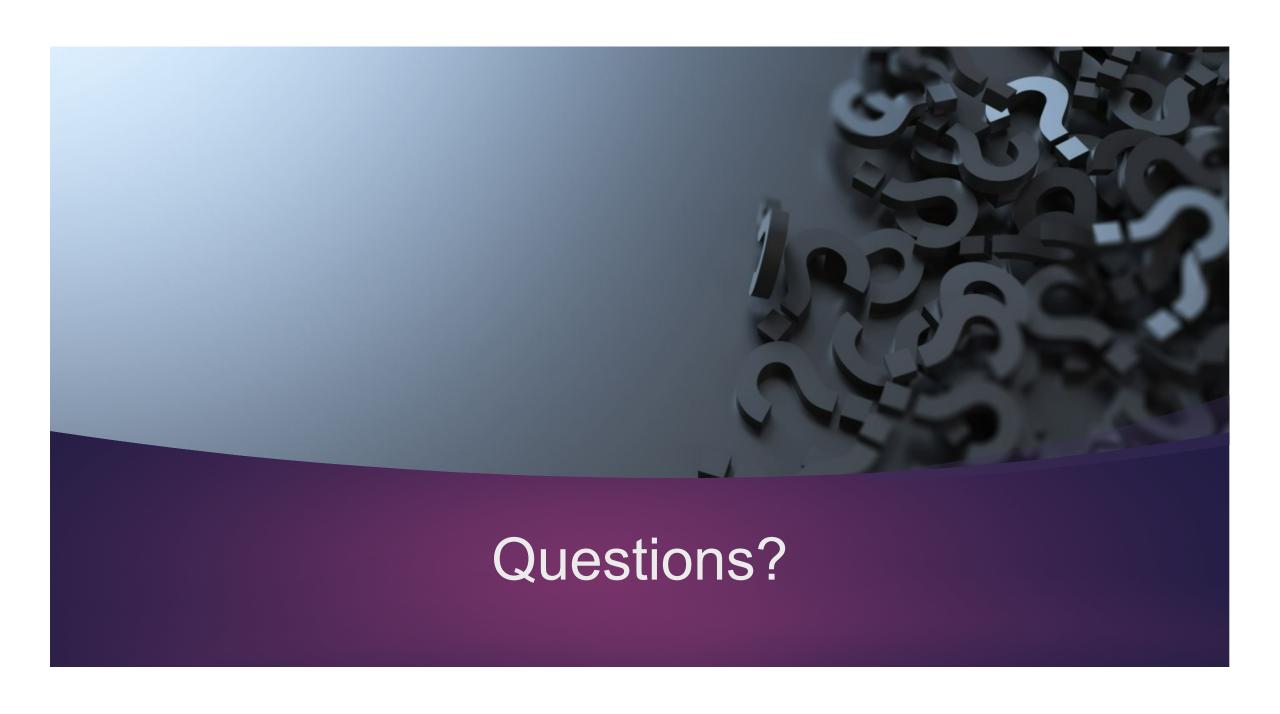
- AA 34 year old female has a BMI of 36, sedentary, medical history of two miscarriages, c-section. Socially drinks, non-smoker,
- υ Hx: sleep apnea, two miscarriages
- Surgical hx: cholecystectomy, adenoidectomy, D & C, c-section x1
- Medications : OC- NuvaRing (combo hormone)

KNOW AND UNDERSTAND RISK FACTORS

VIEW THE PATIENT HOLISTICALLY

EDUCATE, EDUCATE, EDUCATE!

## Summary



### References

- American Heat Association. Know your risk. (2021, May 20). Retrieved from \*\*\*\*\*\*\*\*\*.goredforwomen.org/en/know-your-risk.
- Centers for Disease Control and Prevention. (2020). Women and stroke.
  \*\*\*\*\*\*\*\*\*.cdc.gov/stroke/women.htm
- Denjamin EJ, Muntner P, Alonso A, et al. Heart Disease and stroke statistics-2019 update: a report from the American Heart Association. Circulation. E259. Http://\*\*\*.ahajournals.org/doi/pdf/10.1161/CIR.00000000000000659 Published January 31,2019.
- Daniels, K., & Abma, J. C. (2018). Current contraceptive status among women aged 15–49: United States, 2015–2017 [NCHS data brief, no 327]. Centers for Disease Control and Prevention. \*\*\*\*\*\*\*\*\*\*\*\*.cdc.gov/nchs/products/databriefs/db327.htm

### Reference

- Ennen, K. A., & Beamon, E. R. (2012). Women and Stroke Knowledge: Influence of Age, Race, Residence Location, and Marital Status. Health Care for Women International, 33(10), 922-942. \*\*\*\*\*\*doi.org/10.1080/07399332.2012.673662 \*\*\*\*\*\*\*doi.org/10.4137/CMBD.S13401
- Fall, A. O., Proulle, V., Sall, A., Mbaye, A., Samba Ba, P., Diao, M., ... Dreyfus, M.
   (2014). Risk Factors for Thrombosis in an African Population. Clinical Medicine Insights: Blood Disorders, 7, 1-6.
- Hall, K. S., Westhoff, C. L., & Castano, P. M. (2013). The impact of an educational text message intervention on young urban women's knowledge of oral contraception. Contraception, 87, 449-454.
  - \*\*\*\*\*\*doi.org/https://doi.org/10.1016/j.contraception.2012.09.004

### Reference

Schuiling, K. P., & Likis, F. E. (2013). Women's Gynecologic Health (2nd ed.). Burlington, MA: Jones & Bartlett Learning.