



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

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

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# OBJECTIVE

Upon completion of this presentation participants should be able to :

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

# Introduction

- u 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

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

(CDC, 2020)

# Oral Contraceptive use

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

# OC risk

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



# Background

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

# What is Stroke?

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



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# STROKE SYMPTOMS: WOMEN VS. MEN

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

## WOMEN

- Face drooping
- Arm weakness
- Speech difficulty
- Vision problems
- Trouble walking or lack of coordination
- Severe headache without a known cause
- General weakness
- Disorientation & confusion or memory problems
- Fatigue



## MEN

- Face drooping
- Arm weakness
- Speech difficulty
- Vision problems
- Trouble walking or lack of coordination
- Severe headache without a known cause

# Clinical manifestations

# African American Women & Stroke

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



# How to prevent Stroke?

- u EDUCATION IS KEY
- u 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).
- u 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

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

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

KNOW AND  
UNDERSTAND RISK  
FACTORS

VIEW THE PATIENT  
HOLISTICALLY

EDUCATE, EDUCATE,  
EDUCATE!

# Summary



Questions?

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