## The Prevalence of Raised Blood

 Pressure and Self-Reported Hypertension in The Bahamas: Findings from the STEPS Survey, 2012Delon Brennen<br>Nanika Brathwaite<br>Camille Deleveaux<br>UWI Research Day, 19 September, 2014

## Introduction

- Hypertension has long been among the leading causes of illness and death in the Bahamas
- In 2011, it was the leading cause of death (3 $3^{\text {rd }}$ in males, $1^{\text {st }}$ in females)
- 200 deaths overall
- $10 \%$ of deaths
- 60 mortality rate per 100,000 population
- In 2001, it was the $3^{\text {rd }}$ leading cause (8\% deaths; 151 deaths)
- Comprised around $3 \%$ of hospital visits (~ 500 visits annually)
- Leading cause of public health general clinic visits
- $16 \%$ of visits
- ~ 38,000 visits per year


## Hypertension Mortality Rate per 100,000 Population Bahamas, 2001, 2003-2011



## Prevalence from Past Surveys (Self-Reported)



## Objective

- To determine the prevalence of raised blood pressure and hypertension in The Bahamas


## Design and Methods

- Data from the 2012 Bahamas STEPS Survey was used
- Population based stratified multi-stage cluster sample
- Adults 25 to 64 years
- Islands included
- New Providence
- Grand Bahama
- Cat Island
- Inagua


## Design and Methods

- Data collected using Personal Digital Assistants (PDAs)
- entered on-site
- Analyzed using Epi-Info 3.43
- Complex sample taken into account for weighting and variance estimation


## STEPS Approach

STEP 1: To measure self-reported hypertension, questionnaire used to measure 3 questions:

1. Have you ever had your blood pressure (BP) measured by a doctor or other health worker?
2. Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?
3. Have you been told in the past 12 months?

STEP 2: Physical measurements on a sub-sample by interviewer

- height, weight
- blood pressure


## Results - Self-Reported ( $n=1,632$ )

- $27 \%$ had been told they had raised blood pressure/hypertension
- 7\% not within past 12 months
$-20 \%$ diagnosed within past 12 months
$-62 \%$ measured but not diagnosed
$-11 \%$ were never measured
- $22 \%$ men, $31 \%$ women


## Results - Self-Reported ( $n=1,632$ )



## Self-Reported Prevalence by Age Group



## Among those Diagnosed Lifestyle Advice ( $n=136$ )

- Advised to reduce salt intake -76\%
- 77\% men
- $76 \%$ women
- Advised to lose weight - 59\%
- 62\% men
- $57 \%$ women
- Advised to stop smoking - 15\%
- 24\% men
- $8 \%$ women
- Advised to start/do more exercise - 70\%
- 76\% men
- $66 \%$ women


## Among those Diagnosed Medication ( $n=136$ )

- Currently taking blood pressure drugs - $58 \%$
- 54\% men
$-61 \%$ women
- Seen a traditional healer $-13 \%$
- 14\% men
- 13\% women
- Currently taking herbal/ traditional remedy $-11 \%$
- 10\% men
- 11\% women


## Results - Physical Measurements

- Mean systolic blood pressure, including those currently on medication - 127.4
- 129.3 men
- 125.6 women
- Mean diastolic, including those on medication 81.6
-82.7 men
- 80.5 women


## Results - Physical Measurements

- Percent with raised BP or currently on medication
- 34\%
- 36\% men
- $33 \%$ women
- Percent with raised BP NOT currently on medication - 24\%
- 28\% men
- 19\% women


## Comparisons with Previous Surveys



## Risk Factors from STEPS Survey

- Mean BMI 30.5 (no sex difference)
- $80 \%$ overweight (including obese)
- 49\% obese
- $90 \%$ ate less than 5 servings of fruits and/or vegetables on average daily
- $73 \%$ do not engage in vigorous physical activity


## Limitations

- Somewhat low response rate of $54 \%$


## Conclusions

- Around one out of three adults have raised blood pressure or hypertension
- A notable proportion may have hypertension but never been measured by health practitioner ~10\%
- Ongoing screening and interventions should continue, especially for at-risk groups as defined by findings from available research
- Further research is recommended


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## Thank you

