HEARTS IN THE AMERICAS
WEBINAR

CARDIOVASCULAR DISEASE AND COVID-19
Inter-relationship and opportunities for change of two global crises

Monday
16 November 2020
10:30 am - 12:30 pm (EST)

www.paho.org/en/hearts-americas
Late Breaking Journal Club Headlines

Jamario Skeete, MD
Division of Cardiology
Rush University Medical Center
Chicago, IL
Integrated Blood Pressure Control

Approaches to the Management of Hypertension in Resource-Limited Settings: Strategies to Overcome the Hypertension Crisis in the Post-COVID Era
Paper aims

- Explore the overlap between the COVID-19 pandemic and the hypertension crisis
- Describe a framework for management of hypertension based on lessons learned from the response to the COVID-19 pandemic
Hypertension Paradigm

- Unaddressed Risk Factors for hypertension
- Failure to diagnose hypertension in large segments of the population
- Low treatment rates
  Poor cohort monitoring
- Inadequate treatment to goal
- Low control rate with high rates of complications
Strategy to improved control

Step 1
Address risk factors

Step 2
Determine true disease prevalence

Step 3
Improve framework for standardized treatment and management

Step 4
Improve Cohort monitoring
COVID-19 – Hypertension Interplay

• Step 1 – Address Risk Factors
COVID-19 – Hypertension Interplay

• Step 2 – Determine true prevalence
COVID-19 – Hypertension Interplay

• Step 3 – Improve framework for standardized management
COVID-19 – Hypertension Interplay

- Step 4 – Improve cohort monitoring

Globally, only 1 of every 7 people has their hypertension under control.
Main take-home points

- The hypertension crisis is real, and highly destructive
- Like the COVID-19 pandemic, it needs decisive action
- Lessons leant should be applied promptly
Standardized treatment to improve hypertension control in primary health care: The HEARTS in the Americas Initiative

Donald J. DiPette MD | Kenneth Goughnour MPH, MCH | Eric Zuniga MD
Jamario Skeete MD | Emily Ridley PharmD | Sonia Angell MD, MD, MPH
Jeffrey Brettler MD | Norm R. C. Campbell MD | Antionio Coca MD, PhD
Kenneth Connell MBBS, PhD | Rohit Doon MBBS, DPH, DIH | Marc Jaffe MD
Patricio Lopez-Jaramillo MD | Andrew Moran MD, MPH | Marcelo Orias MD, PhD
Daniel J. Pineiro MD | Andres Rosende MD | Yamilé Valdés González MD, MSc
Pedro Ordunez MD, PhD
Paper aims

• To describe the adoption of the Evidence Based protocols (Module E) of the HEARTS of the Americas Protocol
Ideal Characteristics of antihypertensive medications

- High efficacy
- Additive / synergistic BP reduction when used in combination
- Supported by clinical trials
- Limited side effects
- Affordable
- Available
- Easily titrated
Steps to building a hypertension protocol

Step 1
- Select drug classes
  - RAAS blocker, CCB, Diuretic

Step 2
- Determine agents available in each class

Step 3
- Build treatment algorithm using drugs within each class with ideal characteristics
Shifting to a preferred protocol

Current Protocol
What is being done right now

Acceptable protocol
Improved management using drugs already available on drug formulary

Preferred protocol
Best standard of practice. May require modifying drug formulary to acquire most efficacious antihypertensive agents
**Example of shift from current to preferred protocol**

<table>
<thead>
<tr>
<th>Current Protocol</th>
<th>Preferred Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong> (once the diagnosis of hypertension has been made)</td>
<td><strong>Step 1</strong> (once the diagnosis of hypertension has been made)</td>
</tr>
<tr>
<td>Losartan 50 mg and amlodipine 5 mg</td>
<td>Telmisartan 40 mg and amlodipine 5 mg (in a FDC preparation and once daily)</td>
</tr>
<tr>
<td><strong>Step 2</strong> (titration, if warranted)</td>
<td><strong>Step 2</strong> (titration, if warranted)</td>
</tr>
<tr>
<td>Losartan 100 mg and amlodipine 10 mg</td>
<td>Telmisartan 80 mg and amlodipine 10 mg</td>
</tr>
<tr>
<td><strong>Step 3</strong> (titration, if warranted)</td>
<td><strong>Step 3</strong> (titration, if warranted)</td>
</tr>
<tr>
<td>Losartan 100 mg and amlodipine 10 mg and hydrochlorothiazide 25 mg</td>
<td>Telmisartan 80 mg and amlodipine 10 mg and chlorthalidone 12.5 mg</td>
</tr>
<tr>
<td><strong>Step 4</strong> (titration, if warranted)</td>
<td><strong>Step 4</strong> (titration, if warranted)</td>
</tr>
<tr>
<td>Losartan 100 mg and amlodipine 10 mg and hydrochlorothiazide 50 mg</td>
<td>Telmisartan 80 mg and amlodipine 10 mg and chlorthalidone 25 mg</td>
</tr>
<tr>
<td><strong>Step 5</strong> (if blood pressure not at control level)</td>
<td><strong>Step 5</strong> (if blood pressure not at control level)</td>
</tr>
<tr>
<td>Start a fourth medication or refer to specialist</td>
<td>Start a fourth medication or refer to specialist</td>
</tr>
</tbody>
</table>
Main take home points

• Using a step-wise approach a hypertension protocol could be implemented building on existing medications available and transitioning to ideal medications with time.
Questions?