



HEARTS

IN THE AMERICAS



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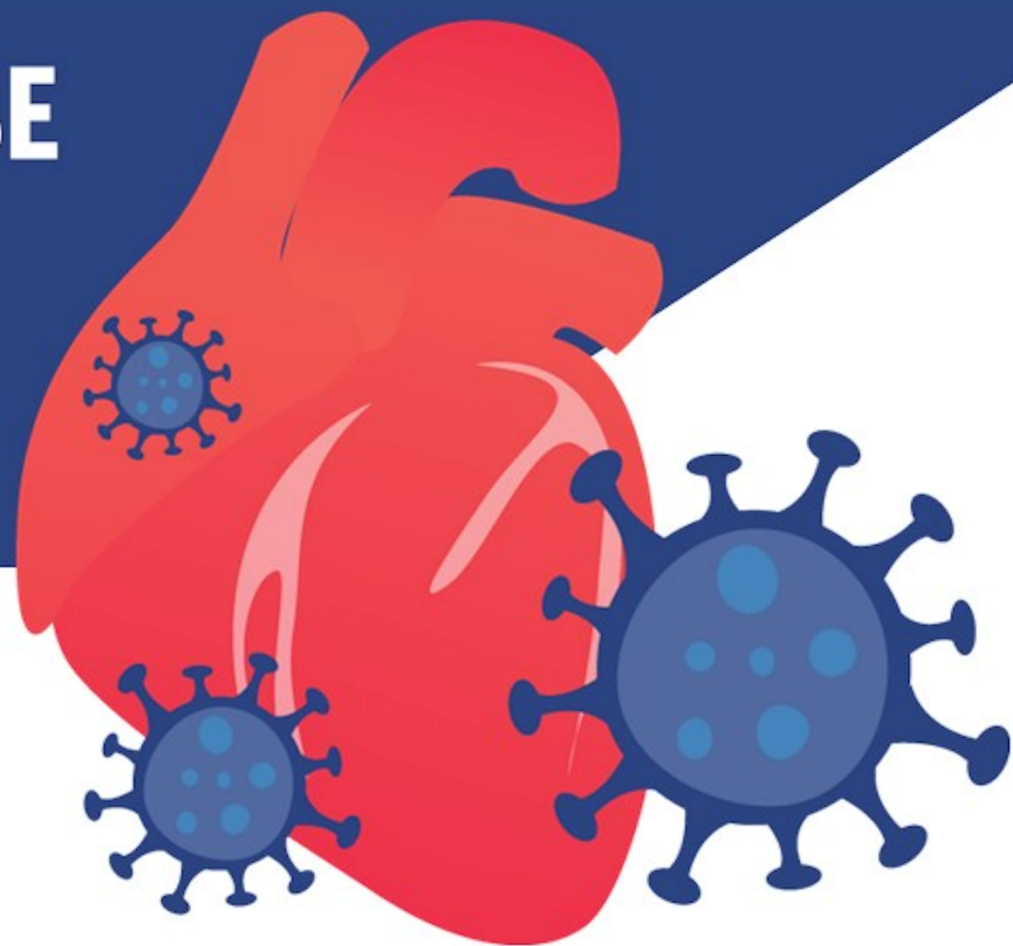
WEBINAR



HEARTS
IN THE AMERICAS

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

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Late Breaking Journal Club Headlines

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

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

This article was published in the following Dove Press journal:
Integrated Blood Pressure Control

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Abstract: The COVID-19 pandemic has changed most aspects of everyday life in both the non-medical and medical settings. In the medical world, the pandemic has altered how healthcare is delivered and has necessitated an aggressive and new coordinated public health approach to limit its spread and reduce its disease burden and socioeconomic impact. This pandemic has resulted in a staggering morbidity and mortality and massive economic and physical hardships. Meanwhile, non-communicable diseases such as hypertension, diabetes mellitus, and cardiovascular disease in general continue to cause significant disease burden globally in the background. Though presently receiving less attention in the public eye than the COVID-19 pandemic, the hypertension crisis cannot be separated from the minds of healthcare providers, policymakers and the general public, as it continues to wreak havoc, particularly in vulnerable populations in resource limited settings. On this background, many of the strategies being employed to combat the COVID-19 pandemic can be used to re-energize and galvanize the fight against hypertension and hopefully bring the public health crisis associated with uncontrolled hypertension to an end.

Keywords: hypertension control, COVID-19 pandemic, resource-limited settings

Introduction

In 2020, through the Coronavirus (COVID-19) pandemic the world witnessed the devastating way disease can produce wide-scale death and suffering.¹ During the pandemic, almost every person globally was affected either by the virus itself or through the concurrent vast social and economic hardships produced in its wake.² In parallel, another global public health crisis has relentlessly continued in the background- the crisis of cardiovascular disease and its major risk factor, uncontrolled hypertension.³ Though more insidious in its onset when compared to COVID-19, the impact of cardiovascular disease is likewise, far reaching.

Though not a pandemic by strict definitions, cardiovascular disease is now reaching pandemic proportions and like the COVID-19 pandemic, calls for novel, aggressive and decisive public health action to “flatten” and “reverse” the curve of its current ascending trajectory.⁴⁻⁶ This is essential as, after decades of reductions in CVD premature mortality, a significant slowdown in this progress has been documented for the USA, and others high-income countries,⁷ a phenomena which is likely to be replicated in resource limited settings. To address this, every effort must be made to protect the gains already made and ultimately continue to reduce the cardiovascular disease burden.⁸

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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

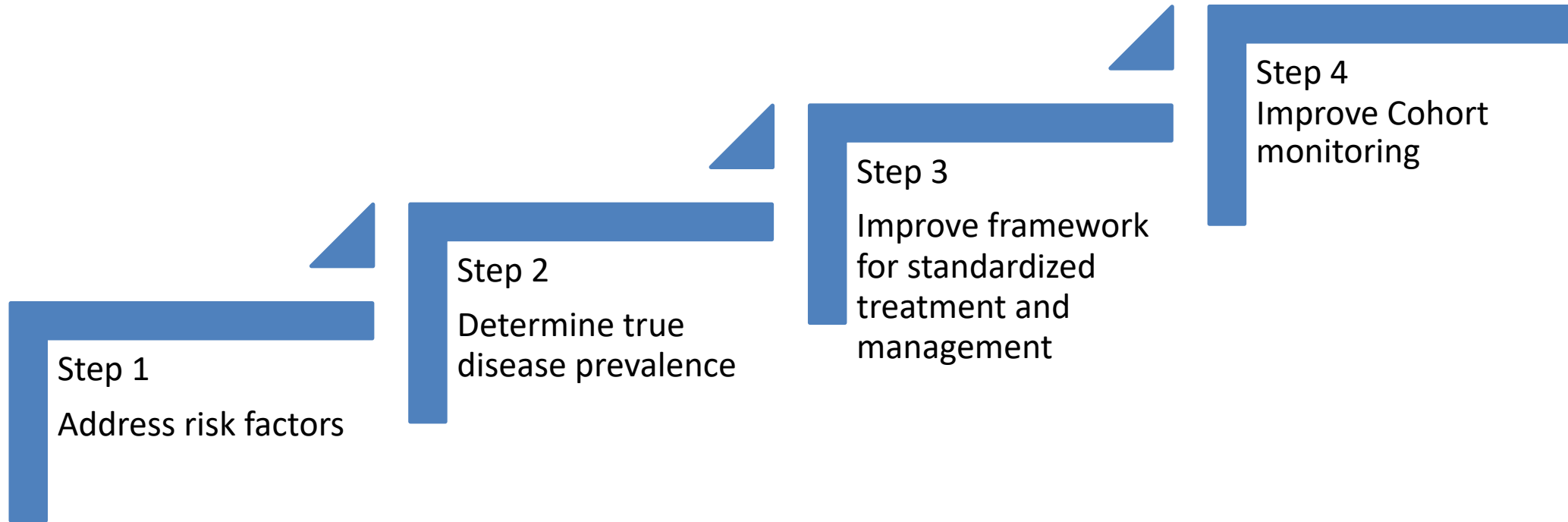
Failure to
diagnose
hypertension in
large segments of
the population

Low treatment
rates
Poor cohort
monitoring

Inadequate
treatment to goal

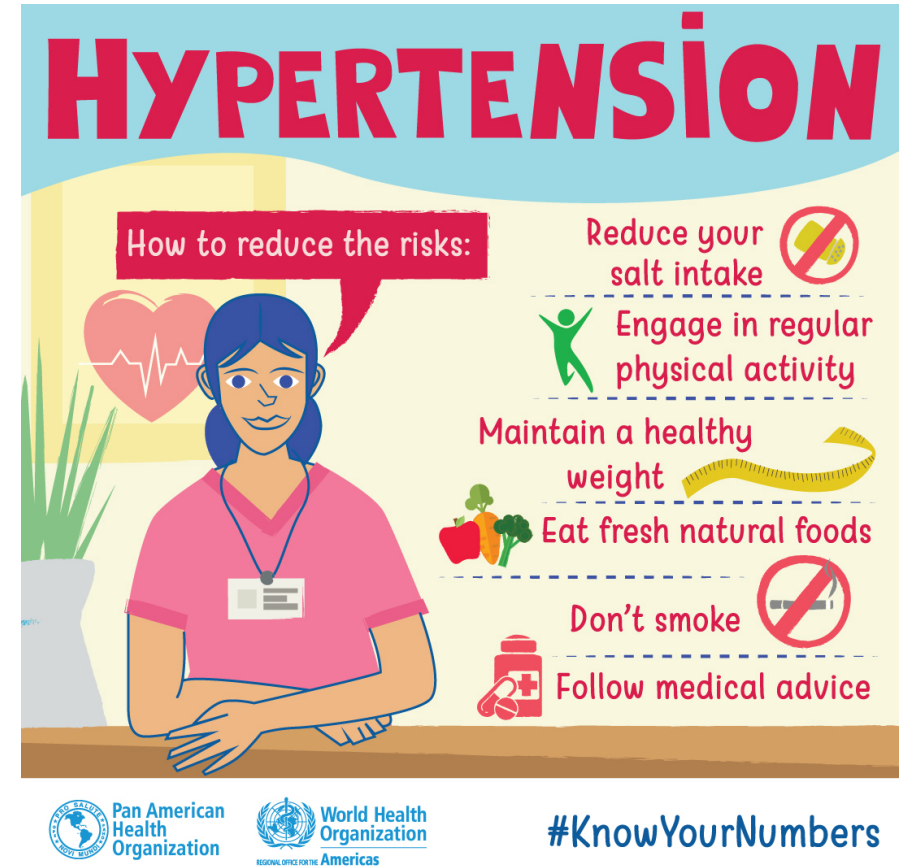
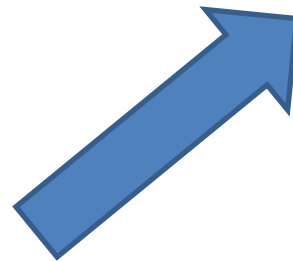
Low control rate
with high rates of
complications

Strategy to improved control



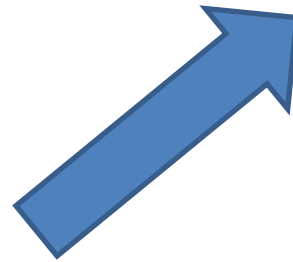
COVID-19 – Hypertension Interplay

- Step 1 – Address Risk Factors



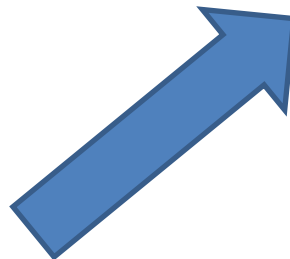
COVID-19 – Hypertension Interplay

- Step 2 – Determine true prevalence



COVID-19 – Hypertension Interplay

- Step 3 – Improve framework for standardized management



HEARTS
Technical package for cardiovascular disease management in primary health care

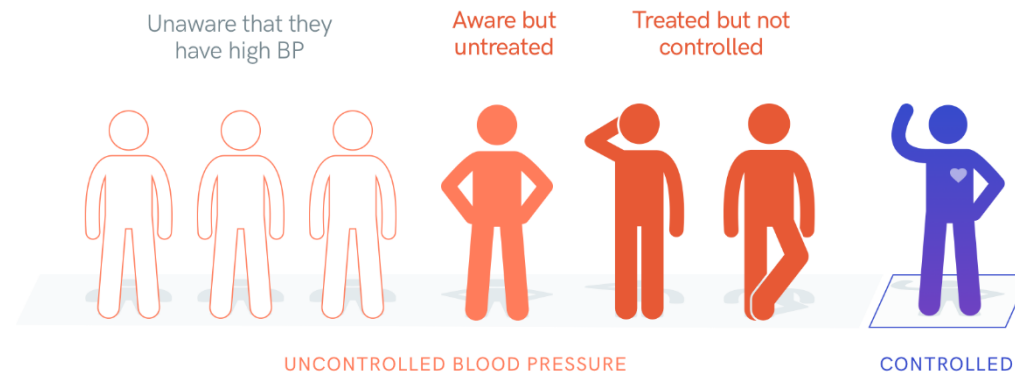
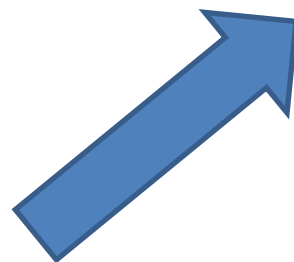
- Healthy-lifestyle counselling
- Evidence-based treatment protocols
- Access to essential medicines and technology
- Team-based care
- Systems for monitoring

World Health Organization
www.who.int/cardiovascular_diseases/hearts/en

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

Conclusion

The ongoing COVID-19 pandemic and the multiple lessons learned through this crisis, brings to the fore, many strategies that can be applied to the management of hypertension in low to middle-income countries. It also reminds us, of the need for a unified, multisector strategic approach, to not only identify the areas of deficiency to the existing management structure but more importantly, to develop meaningful solutions to likewise address this public health crisis. As such the formulation of programs that utilize a standardized and simplified approach to cardiovascular diseases management and cardiovascular risk factors, particularly the detection, treatment, and control of hypertension is likely to be essential going forward to address the increasing burden of hypertension, especially in resource-limited settings such as in LMICs.

- The hypertension crisis is real, and highly destructive
- Like the COVID-19 pandemic, it needs decisive action
- Lessons learnt should be applied promptly

Standardized treatment to improve hypertension control in primary health care: The HEARTS in the Americas Initiative

Donald J. DiPette MD¹  | Kenneth Goughnour MPH, MCH² | Eric Zuniga MD³ |
Jamario Skeete MD⁴ | Emily Ridley PharmD⁵  | Sonia Angell MD, MD, MPH⁶ |
Jeffrey Brettler MD⁷ | Norm R. C. Campbell MD⁸  | Antonio Coca MD, PhD⁹ |
Kenneth Connell MBBS, PhD¹⁰ | Rohit Doon MBBS, DPH, DIH¹¹ | Marc Jaffe MD¹² |
Patricio Lopez-Jaramillo MD¹³ | Andrew Moran MD, MPH^{14,15} | Marcelo Orias MD, PhD¹⁶ |
Daniel J. Pineiro MD¹⁷ | Andres Rosende MD¹⁸ | Yamilé Valdés González MD, MSc^{19,20} |
Pedro Ordunez MD, PhD²¹ 

Paper aims

- To describe the adoption of the Evidence Based protocols (Module E) of the HEARTS of the Americas Protocol

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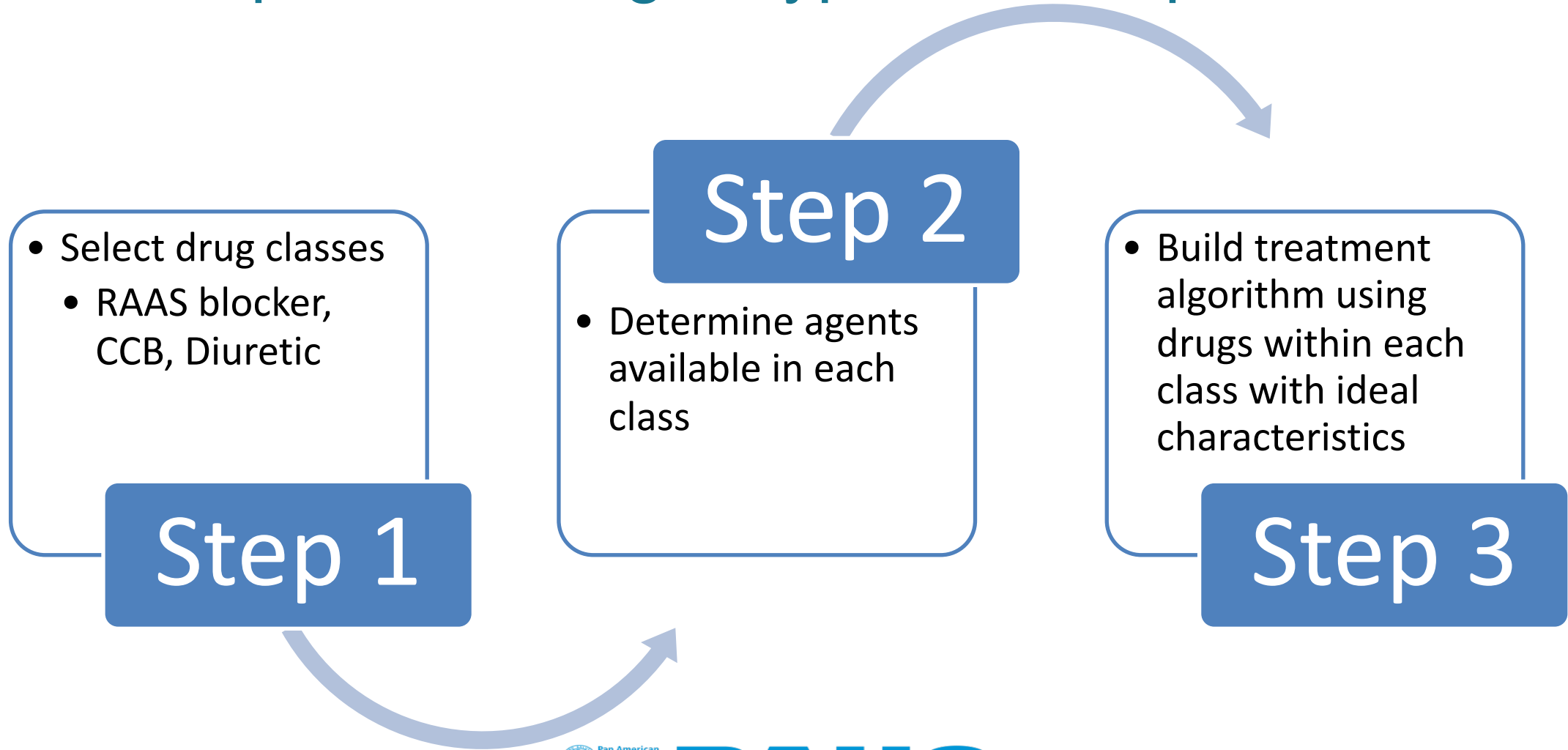
Abstract

Hypertension is the leading risk factor for cardiovascular disease (CVD) worldwide. Despite the availability of effective antihypertensive medications, the control of hypertension at a global level is dismal, and consequently, the CVD burden continues to increase. In response, countries in Latin America and the Caribbean are implementing

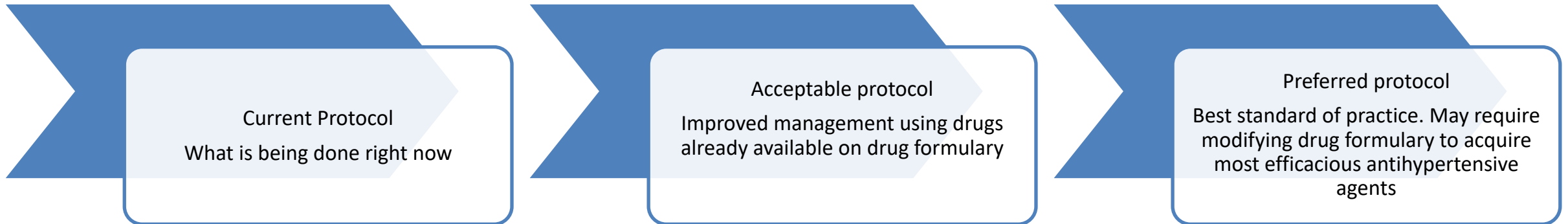
Ideal Characteristics of antihypertensive medications

- 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



Shifting to a preferred protocol



Example of shift from current to preferred protocol

Step 1 (once the diagnosis of hypertension has been made)

Losartan 50 mg and amlodipine 5 mg

Step 2 (titration, if warranted)

Losartan 100 mg and amlodipine 10 mg

Step 3 (titration, if warranted)

Losartan 100 mg and amlodipine 10 mg and hydrochlorothiazide 25 mg

Step 4 (titration, if warranted)

Losartan 100 mg and amlodipine 10 mg and hydrochlorothiazide 50 mg

Step 5 (if blood pressure not at control level)

Start a fourth medication or refer to specialist



Step 1 (once the diagnosis of hypertension has been made)

Telmisartan 40 mg and amlodipine 5 mg (*in a FDC preparation and once daily*)

Step 2 (titration, if warranted)

Telmisartan 80 mg and amlodipine 10 mg

Step 3 (titration, if warranted)

Telmisartan 80 mg and amlodipine 10 mg and chlorthalidone 12.5 mg

Step 4 (titration, if warranted)

Telmisartan 80 mg and amlodipine 10 mg and chlorthalidone 25 mg

Step 5 (if blood pressure not at control level)

Start a fourth medication or refer to specialist

Main take home points

8 | CONCLUSIONS

In conclusion, there are significant opportunities for improving hypertension control globally, including the diligent implementation of a standardized and comprehensive approach to hypertension treatment and control, such as Global HEARTS. A central and critical approach is designing and implementing a standardized treatment protocol pillar and securing the availability and affordability of high-quality antihypertensive medications, thus leaving no one behind. The HEARTS in the Americas Initiative is an example of a standardized and innovative approach to hypertension control that is being replicated in other world regions. Training and program development practices and lessons learned by HEARTS in the Americas will continue to serve as a model for other regions worldwide to catalyze the actions needed to improve hypertension control and ultimately reduce the disease burden of CVD.

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

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Questions?



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