



# WHL • NEWSLETTER

News from the World Hypertension League (WHL).  
In Official Relations with the International Society of Hypertension and the  
World Health Organization

No. 170, December 2020

## Note from the Editor



In the midst of the Pandemic, positive enthusiasm is found in the many celebrations of World Hypertension Day 2020 from nations around the globe, described in this issue of the *Newsletter*.

Dr. Dan Lackland Multiple impressive initiatives from the WHL partners and member societies provide great hope for 2021. And the submissions for the WHL Art Contest provide a wonderful vision for the future.

Solidifying the collaborations from our partners Resolve to Save Lives, International Society of Hypertension, World Health Organization and Pan American Health Organization, as well as all our partners and regional offices, the WHL Newsletter would like to function as an information resource for global hypertension control.

And most important – as we close this very challenging year – the *Newsletter* promotes the season for peace, love, and hope for all.

Dan Lackland



## President's Column



Dr. Zhang Xin-Hua

The World Hypertension Day 2020 (WHD2020) events held by international and national organizations demonstrated that prevention and control of hypertension has continued even during the pandemic of COVID-19. It is the first time that WHO, PAHO and WHL have organized WHD events with our partners to emphasize the theme: “*Measure your blood pressure accurately, Control it, Live longer*”.

Thanks to the hard work of our partner organizations and colleagues, facing overloaded clinical tasks and restricted travel, the hypertension control projects supported by WHO, PAHO, WHL, RTSL and other partners are progressing. WHO HEARTS projects have covered more than 3 million hypertensive patients; PAHO supported 13 countries in implementing the HEARTS package; and the HEARTS China Hypertension Control Project is running in 72 counties, with a standard automatic measurement and recording system, and standard treatment protocol.

The launch of the training course for blood pressure measurement will certainly help to improve measurement accuracy, with the correct choice of validated devices and correct procedures. Salt reduction is also addressed in WHD events for better prevention and control of

hypertension in populations. WHD contributed to improving awareness and control of hypertension globally. Many countries and organizations even practice “WHDday”, “WHWeek”, and “WHMonth” activities every year.

As the hardest and longest year of 2020 comes to an end, we wish everyone a healthy and prosperous new year!

Xin-Hua Zhang

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## CHILDREN’S ART CONTEST WINNERS



**We had over 50 artwork submissions from 9 different countries or areas this year!**

- Argentina • Brazil • Bulgaria • China
- Costa Rica • Hong Kong • India • Nigeria
- Portugal

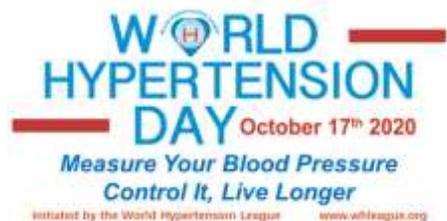
See the winning posters on the [WHL website](#).

**Thank you and congratulations to all of our participants for their talented and inspired artwork! And a big *Thank You* to our WHL members and parent sponsors who helped get the word out.**

## WORLD HYPERTENSION DAY REPORTS

**Measure Your Blood Pressure,  
Control It, Live Longer!**

**Thanks to our members and colleagues who promoted World Hypertension Day through social media and educational programs! We’re excited to present several reports from around the world below.**



### World Hypertension Day Global Event

The World Hypertension Day global event was organized by WHO, PAHO and their partners on 16 Oct 2020. The events addressed the theme of WHD2020, “Measure your blood pressure accurately, Control it, Live longer”, with the success story of the implementation of the HEARTS technical package on hypertension control globally, and the launch of the certificate course for blood pressure measurement with automatic devices. Dr. Tedros, Dr. Frieden, Dr. Varghese and Dr. Ordunez shared the progress of hypertension control projects globally. Dr. Campbell and Dr. Khalsa introduced the [certificate course for blood pressure measurement](#), developed by the Pan American Health Organization with the World Hypertension League, Lancet Commission on Hypertension Group and Hypertension Canada. More than 1200 participants joined the ZOOM event, including colleagues from WHL and ISH.

On 17 Oct 2020, the WHL global office organized the mixed virtual and in-person meetings for WHD2020. All WHL executive board members and directors of WHL regional offices from Asia, America, Europe and Africa, and global partners from RTSL, WHO, PAHO, and India, as well as representatives of Chinese national medical organizations and government

officers, participated in the event. To address the WHD2020 theme, the event featured 3 major topics: controlling hypertension efficiently and universally, enhancing salt reduction, and launching the training course for proper blood pressure measurement. The regional offices shared their local WHD activities with colleagues.



The speakers in session 1 (Evening in America)



The speakers in session 2 (Morning in Europe/Mideast)



24 Chinese national medical organizations call for action to enhance salt reduction with FOP labelling, joined by WHO headquarters and country office, nutritional societies and government officers (Mid-day in Asia).



Launch of the training course for blood pressure measurement (Afternoon in Asia)

## Costa Rica

Report by Adriana Blanco-Metzler, MSc, INCIENSA

World Hypertension Day was celebrated on October 17<sup>th</sup> with special activities planned by WHL and Costa Rica, focusing on the webinar “HTA y COVID-19” held on Friday October 16<sup>th</sup> in Costa Rica.

With the support of our LINKS-Resolve to Save Lives project, results on health impact and economics generated during the IDRC 108167 project will be widely shared. The activity is organized by the Association of Professionals in Nutrition, INCIENSA, the Social Security System of Costa Rica: Caja Costarricense del Seguro Social, and our new funded NGO: Costa Rica Saludable (Healthy Costa Rica). More details at this [link](#):



## Honduras

### International Federation of Medical Students' Associations (IFMSA)

Submitted by Mauricio J. Murillo, VP Public Relations & Communications, IFMSA Honduras, Tegucigalpa, Honduras



Our National Member Organization with the support of our Standing Committee on Public Health (SCOPH) organized a campaign to celebrate World Hypertension Day. It consisted of a series of infographics shared on our social

media accounts, reaching up to 4,500 people on Facebook with our posts. The information shared was about risk factors, prevention and diagnosis of high blood pressure, as well as the relationship between COVID-19 and hypertension. Finally on October 17<sup>th</sup> we organized a webinar and we had 100 participants. Below are some photos of the blood pressure measurements, screenshots of the posts on our social media, and some of the infographics that we created.



## India

Report by Dr. S.N. Narasingan, President, Indian Society of Hypertension (InSH)

I am very much pleased to submit the report of activities performed during World Hypertension Day on October 17 and World Hypertension Month observed from September 17 to October 17. Members of the Indian Society of Hypertension (InSH) were enthusiastic in collecting information as per the guidance issued by WHL.

## Activities conducted by Dr. S.N. Narasingan Children's Art Contest:



Two children sponsored by the Indian Society of Hypertension participated in the art contest and were declared as winners. Their artwork is displayed on the WHL website and the WHL certificates were distributed to them.

## WHD & WHM Data Collection:

Though we received data for more than 1200 patients we were able to collect the complete information requested by WHL from 200 patients. I am in the process of compiling the details required [Newly Detected Hypertension, Controlled Hypertension, Uncontrolled Hypertension and Co-Morbid Conditions with details of drugs included].

## Social Media Campaigns:

- 1) Produced an NDTV Program which lasted for 1 minute and was focused on the WHD Theme, which covered PAN India, at [this link](#).
- 2) Conducted an interactive Facebook interview on Hypertension and its non pharmacological management through the [Target Hypertension Facebook page](#), initiated by USV, which was viewed by 10,000 people on WHD.
- 3) Gave an interview on October 18 for [Speak Health Facebook page](#) [Sun Pharma] on "Measure Your Blood Pressure, Control It & Live Longer", the 2020 theme for WHD. This was viewed by more than 1000 people in 1 hour. I received nearly 68 questions from doctors and provided appropriate answers for the management of Hypertension.

## Activities conducted by Dr. Anuj Maheshwari and Dr. Narsingh Verma

- 1) Dr. Anuj Maheshwari, InSH Treasure/Academic Coordinator, addressed members of a Lions Club meeting as Chief Guest and Keynote speaker on October 18, where he motivated their members to measure their blood pressure and share the data with InSH. This program was organised by Dr. Padmshri Gulati, a member of the Indian Society of Hypertension, who trained members of the Lion's

Club how to measure blood pressure at home. About 346 people participated in this program.



Lions Club Zoom Call with Dr. Anuj Maheshwari

2) InSH organised a training program for health care workers, including doctors working in the periphery, in four modules. A total of 856 health care professionals completed this course and were designated "Hypertension Activists of 2020".

3) InSH brought other societies working in the same direction onto one platform while working on the "Hypertension Knowledge Network", in which stalwarts of the Cardiological Society of India, the Indian Nephrology Society, the Association of Physicians of India and the Research Society for Study of Diabetes in India participated.

4) A patient-assisted mobile application was launched providing scientific input by the Indian Society of Hypertension. Queries from patients who downloaded the app will be resolved by members of the Indian Society of hypertension.

5) Because of COVID-19, in-person meetings could not be organised but InSH continued its door to door campaign in several villages throughout India, directed by Dr. Narsingh Verma and Dr. Anuj Maheshwari under the leadership of Dr. Narasingan.



**Activities conducted by Dr. A. Muruganathan, Chair, Shristi A.G. Hospital, Tamilnadu, India**

110 Master Class webinars on hypertension were completed in the month leading up to World Hypertension Day. For more information go to [www.billionheartsbeating.com](http://www.billionheartsbeating.com)

**Master Class webinar series on Hypertension**

S.No	Module (Topic)	Date	Time
1	Indian Epidemiology and Classification	28 <sup>th</sup> Aug 2020	09:00 – 10:00 PM
2	Pathophysiology (Primary and Secondary)	29 <sup>th</sup> Aug 2020	09:00 – 10:00 PM
3	Clinical Examination and Investigations	4 <sup>th</sup> Sep 2020	09:00 – 10:00 PM
4	ECG and Echo in Hypertension	5 <sup>th</sup> Sep 2020	09:00 – 10:00 PM
5	Management of Hypertension (Drugs, Choices and Combination)	11 <sup>th</sup> Sep 2020	09:00 – 10:00 PM
6	Acute severe Hypertension	12 <sup>th</sup> Sep 2020	09:00 – 10:00 PM
7	Difficult to control Hypertension	18 <sup>th</sup> Sep 2020	09:00 – 10:00 PM
8	Hypertensive disorders in pregnancy	19 <sup>th</sup> Sep 2020	09:00 – 10:00 PM
9	Hypertensive crisis which changed the practice	23 <sup>rd</sup> Sep 2020	09:00 – 10:00 PM
10	Conquering the silent killer (Hypertension clinics and Hypertension Specialist)	28 <sup>th</sup> Sep 2020	09:00 – 10:00 PM

**Iran**

**World Hypertension Day Activities**

Submitted by Prof. Alireza Khosravi, Professor of Cardiology, Head of Hypertension Research Center, Isfahan Cardiovascular Research Inst., Isfahan Univ. of Medical Sciences, Isfahan, Iran

Our Hypertension Center took 100 Blood Pressure Screenings during the period leading up to World Hypertension Day. We could not invite people for blood pressure screening due to the COVID-19 Pandemic, so we screened people who voluntarily came to our hypertension clinic. We provided awareness of hypertension-related stroke and cardiovascular disease during these visits, as well as the importance of lifestyle, i.e. physical activity, nutrition, dietary salt reduction, for preventing or controlling hypertension.



**Findings:**

39%: Proportion of those screened with elevated blood pressure (>140 systolic/>90 diastolic)

7%: Proportion of those screened with elevated blood pressure who were not aware of having hypertension

77%: Proportion of those screened who were being treated with antihypertensive medications

55%: Proportion of those screened being treated with antihypertensive medications and whose blood pressure readings were below 140 mmHg systolic and below 90 mmHg diastolic



## Nigeria

### Fighting Hypertension & Stroke in Africa

Submitted by Prof. Mayowa Owolabi, MBBS, MSc, DM, FMCP, FAAN, FANA, FRCP, FAS  
Dean, Faculty of Clinical Sciences, University of Ibadan, Ibadan, Nigeria

For Prof. Owolabi's full PP presentation of WHD and year round hypertension and stroke prevention efforts in Nigeria, [click here](#).

### WHD activities of the Nigerian Hypertension Society included:

- Provision of evidence-based context-specific guidelines for the management of hypertension in Nigeria. The most current guideline was launched in September, 2020.



- Population screening for hypertension, facilitated by networking with individual members across the

36 states of the Federation and the Federal Capital Territory in Abuja.

- Annual participation in the May Measurement Month for opportunistic screening for detection of hypertension in the population, in conjunction with the International Society of Hypertension and World Hypertension League.



### CE Activities of SIREN (Stroke Investigative Research & Educational Network):

- Ongoing Community Advisory Board meetings to guide our work with Communities
- Newsletter to share SIREN Activities, Findings & Culturalized Messages for Healthy Lifestyles, Controlling Blood Pressure and Reducing Stroke Risks.
- Videos to share SIREN Community Findings and Messages via phone, social and electronic media
- SIREN Phone app, Print media, TV and Radio broadcasts
- Entertaining award-winning **SIREN dance** describing some features of stroke to educate youths on how to recognize symptoms of stroke.
- Launch of the African Stroke Organization (ASO)



## South Africa

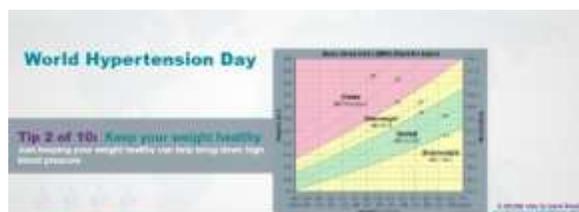
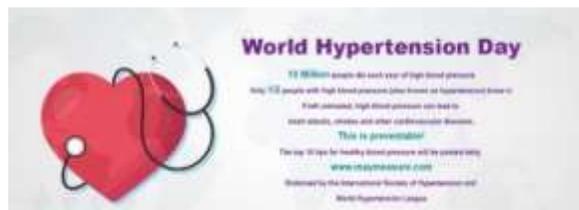
### North-West University (NWU)

#### Hypertension in Africa Research Team

Provided by Dr. Lisa Uys, Subject Specialist, NWU Hypertension in Africa Research Team

To help observe World Hypertension Day, NWU Hypertension in Africa Research Team promoted the following graphics via Social outreach on Facebook and Twitter:

#### “World Hypertension Day and 10 Tips to Prevent and Control Hypertension.”



## USA

### Resolve to Save Lives (RTSL)

Resolve to Save Lives (RTSL), an initiative of Vital Strategies, joined the World Hypertension League and many other partners in marking World Hypertension Day. In keeping with this year's theme — “Measure Your Blood Pressure, Control It, Live Longer”— RTSL highlighted the work of some of its partners to reduce hypertension:

**The World Health Organization and PAHO** hosted a virtual global launch event of new virtual tools and an online course to support the measurement and management of blood pressure, including panel events featuring Resolve to Save Lives President/CEO Dr. Tom Frieden, WHO Director General Tedros Adhanom Ghebreyesus, and Dr. Pedro Ordunez, Regional Advisor for NCD at PAHO/WHO and lead person for HEARTS initiative in the Region of the Americas.

**LINKS grantee INCIENSA** hosted a Spanish-language webinar “HTA y Covid-19” (Hypertension and COVID-19) discussing the impact of nutrition on hypertension prevention and control. More information can be found [here](#).

The **World Hypertension League** and the **Pan American Health Organization** opened enrollment for their free online blood pressure measurement certification course, which includes a final test for participants. For information and to enroll [click here](#).

Additionally, to support World Hypertension Day, Resolve to Save Lives highlighted the following new tools for addressing hypertension in a diverse set of contexts:

#### [Six-step Guide](#)

For hypertension program managers, this brand-new practical guide walks through resources and strategies for scaling up hypertension management.

#### [FAQs on Hypertension](#)

This updated FAQ is designed to assist trainees and health care providers in low- and middle-income settings.

## CIC/WHAG Website Roll-Out

By Dr. John G. Kenerson, Colleagues in Care

As a perfect way to celebrate World Hypertension Day, Colleagues In Care/World Hypertension Action Group ([cicwhag.org](http://cicwhag.org)) activated what will be a continuous rollout of website-based activity, essentially a clearing house of hypertension knowledge and education for low resource venues. The CIC/WHAG mission is simply to serve those who serve the poor, with a focus on Faith Based Organizations and small NGO groups. The practical mechanism is a simple phone-based fund of knowledge tool box.



CIC/WHAG website homepage

By visiting the Visitor's center on the app, participants will be able to self-select the appropriate level of activity and interests, ranging from the basics and education up to the complex. One area of specific focus is maternal health and hypertension in a woman's lifetime including pregnancy. Use and modification of the gifted education and training tools for local and organizational needs is already happening in Kenya and Haiti. There are multinational FBO partnering discussions for those who wish to partner in order to add hypertension arrows to present outreach activity quivers.

## Blue Cross Blue Shield Louisiana

Submitted by Dr. Ed Jeffries, Medical Dir. QBPC BCBSLA

This year, the BCBSLA Quality Blue Primary Care (QBPC) program once again recognized physicians who have demonstrated excellence in controlling the blood pressure in their hypertension population. These 50 physicians were the top 10% of physicians who have controlled (to less than 140/90) the highest percentage of their hypertensive population. ■

## NEWS FROM PAHO

### Activities to Address Cardiovascular Risk and Hypertension Continue in Latin America & the Caribbean during the COVID-19 Era

By Donald J. DiPette MD, WHL Envoy to Latin America and the Caribbean, Health Sciences Distinguished Professor, USC, Columbia, SC, USA

Appropriately the COVID-19 pandemic has required a significant amount of attention, effort (both governmental and public), and resources this year. The personal and economic burden of the pandemic has been overwhelming. Remarkably, efforts to address the increasing global cardiovascular disease (CVD) burden, especially hypertension control, continue to expand in Latin America and the Caribbean. These efforts continue to be led by the unique and synergistic collaboration of key stakeholders including the Pan American Health Organization (PAHO), the regional office of the World Health Organization (WHO) for the Americas, the US Centers for Disease Control and Prevention (CDC), the Resolve to Save Lives Initiative, and the World Hypertension League (WHL).

The HEARTS in the Americas Initiative of PAHO continues to expand. The present 12 countries are in various phases including initial implementation to scaling up to regional and national levels. Importantly, the expansion continues with the recent addition of Bolivia, Brazil, and the British Virgin Islands. Given the COVID-19 pandemic, virtual meetings, workshops, and webinars have been rapidly ramped up and are on-going.

One such webinar, sponsored by PAHO, entitled **"Cardiovascular Disease and COVID-19: Inter-relationship and opportunities for change of two global crises"** was held this November. CVD including HTN are leading co-morbidities for COVID-19 and COVID-19 has disrupted the care of CVD and HTN. Thus, there is a real and disastrous inter-relationship between the two. Pedro Ordunez MD PhD described this inter-relationship and Donald J. DiPette MD presented an overview of a population to individual based approach to hypertension management, made even more urgent given the COVID-19 pandemic. Daniel T. Lackland DrPH discussed the current global CVD, stroke, and HTN outcomes crisis in the COVID-19 Era and Kenneth Connell MD discussed current

innovations in CVD and HTN care including lessons learned from the COVID-19 pandemic.

Jamario Skeete MD reviewed recent papers pertinent to CVD, HTN and COVID-19:

1. [Approaches to the management of hypertension in resource-limited settings: Strategies to overcome the hypertension crisis in the post-COVID era](#)
2. [Standardized treatment to improve hypertension control in primary health care: The HEARTS in the Americas Initiative](#)

Ludovic Reveiz MD, PhD reviewed the recent PAHO publication: [Ongoing living update of potential COVID-19 therapeutics: Summary of rapid systematic reviews](#)

The response to the webinar was so robust that a more detailed summary will appear in the next newsletter. Click [here](#) for the recording session.

The success and expansion of these efforts in Latin America and the Caribbean given the COVID-19 pandemic is a testament to the dedication of the individuals and supporting organizations.



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## NEWS FROM ISH

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### Message from the International Society of Hypertension (ISH) Secretary



Prof. Bryan Williams,  
ISH Secretary

This issue of the WHL newsletter heralds the end of an extraordinary year dominated by Covid-19 and a time of transition for the ISH, with a new President Maciej Tomaszewski and new Executive Officers having just commenced their terms

of office in October. We are also pleased to welcome a whole host of new Committee members to the leadership of the Society, many of whom were recruited as a result of our recent successful New Blood Campaign.

One of the consequences of Covid-19 has been the cancellation of face-to-face congresses around the world. The virtual [ESH-ISH joint Glasgow meeting](#) (11-14 April 2021) will take place in spring 2021. The organising Committee has done an excellent job to convert the congress to an online format and we encourage you to join us at this event next year.

I am delighted to confirm that plans are already underway for the 29th Scientific Meeting of the ISH scheduled to take place in Kyoto, Japan from 12-16 October 2022. We can really look forward to an outstanding meeting in a truly beautiful city.

Please take a moment to consider nominating colleagues for the ISH 2021 awards. They are a fantastic opportunity to celebrate the achievements of our colleagues in hypertension research. Existing nominations will be considered alongside any new nominations we receive for each award by the end of January 2021.

[Two new ISH mentorship podcasts](#) have just been released and we are delighted that one of these features the WHL President, discussing really important aspects of research mentorship and women in leadership. The podcasts are worth a moment of your time to listen, a nice alternative to another Zoom or Teams meeting!

Whatever you do as this year closes, keep safe and make sure you find time during what is a festive holiday season for many of us, to rest, reflect, recharge and enjoy your families, as we look forward to a healthy, happy and more fulfilling year for all in 2021.

### May Measurement Month Returns *Sleeves up, Risk Down*



May Measurement Month (MMM), the global campaign run by the ISH to raise awareness of the need for people to get their blood pressure checked, will be back in May 2021.

After three successful years, MMM was naturally forced to pause in 2020, but is returning in the spring with increased energy, asking people to ‘roll their sleeves up’ and take action.

MMM’s Chief Investigator, Prof. Neil Poulter, said: ‘Even with increased threats to public health this last year, raised blood pressure remains the biggest single contributing risk factor for global death and the worldwide burden of disease. We want **May Measurement Month** to increase public understanding, and help save lives that need not be lost’.

May Measurement Month runs between 1 and 31 May and builds on the WHL’s established World Hypertension Day—held on 17 May each year—with volunteer health professionals at local screening sites, in more than 100 countries. ■

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## NEWS FROM WHO

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### Improving Hypertension Control in Three Million People

#### Country Experiences of Programme Development and Implementation

By Cherian Varghese MD, PhD, Cross Cutting Lead for NCD and Special Initiatives, Dept of Noncommunicable Diseases, World Health Organization (WHO)



The World Health Organization, Resolve to Save Lives – an initiative of Vital Strategies – and other partners are working with national and sub national governments to support their work to improve the control of hypertension using the WHO HEARTS technical package. One of the main strategies is implementing the HEARTS technical package, which provides proven, affordable and scalable solutions to improve control of hypertension at the primary care level. Five components are necessary for a successful hypertension control programme: drug- and dose-specific treatment protocols; access to quality-assured medications and blood pressure monitors; team-based care; patient-centred care delivered in the community, and information systems to enable quality improvement.

This case series aims to showcase the experience of 18 countries that have adopted the HEARTS technical package for scaling up hypertension control. Countries included are: Argentina, Chile, Colombia, Cuba, Dominican Republic, Ecuador, Ethiopia, India, Mexico, Nigeria, Panama, Peru, Philippines, Saint Lucia, Thailand, Trinidad and Tobago, Turkey and Vietnam. National and subnational ministries of health are developing and implementing programmes with the support of



WHO and RESOLVE. In Latin America and the Caribbean, a programme led by the ministries of health and supported by Pan American Health Organization (PAHO) and other partners is active in 11 countries. HEARTS in the Americas has been supported technically and

financially by the US Centers for Disease Control and Prevention (CDC) and RESOLVE, along with the World Hypertension League, the World Heart Federation, Inter-American Society of Cardiology, Latin-American Society of Hypertension, and several universities across the Americas.

- Access the country case series [here](#).
- Access Hypertension country profiles [here](#).

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## NEWS FROM RESOLVE TO SAVE LIVES

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### Cost Effectiveness of Hypertension Management

By Jennifer Cohn, MD, MPH

Senior Vice President, Cardiovascular Health

Resolve to Save Lives, an initiative of Vital Strategies



We are excited to share a new article: [Cost effectiveness of hypertension management: A review of low-income and middle-income countries](#).

Hypertension kills over 10 million people a year around the world, and improving control of hypertension to 70% globally could save nearly 40 million lives over 25 years, but the cost of

implementing hypertension control programs can be a barrier.

This new study, co-authored by experts from Resolve to Save Lives, an Initiative of Vital Strategies, U.S. Centers for Disease Control and Prevention, RTI International and Johns Hopkins University, finds that most hypertension control interventions in low- and middle-income settings were cost-effective. The potential to reduce costs, such as the price of anti-hypertension treatment, can further improve the cost effectiveness of interventions.

The review also identifies intervention elements that are less cost-effective, including screening for hypertension at younger ages, addressing prehypertension, and treating patients at lower cardiovascular disease risk.

We hope you find this article informative—and if you do, we encourage you to share widely. The article is available online [here](#). You can find the press release [here](#) and the sample social media messages and graphics at this [link](#).

## Certification Program for Trans Fat Elimination

Nine months into the COVID-19 pandemic, the devastating impact of an infectious disease outbreak is impossible to ignore. Yet noncommunicable diseases remain the world's leading killer, with cardiovascular disease alone claiming nearly one third of all deaths worldwide.

Addressing risk factors for cardiovascular health is more urgent than ever. The elimination of artificial trans fat can prevent heart attacks, save hundreds of thousands of lives, and reduce burden on already overtaxed health systems. Artificial trans fat can be eliminated worldwide by 2023, as called for by the World Health Organization's (WHO) [REPLACE](#) initiative.

Recently, WHO announced a new [Certification Program for Trans Fat Elimination](#). The program will formally recognize countries that have eliminated artificial trans fat from their national food supplies—world leaders in protecting the heart health of their people. While other certification eradication programs exist for infectious disease,

this is the first of its kind to address a risk factor for non-communicable diseases.

Globally, there has been impressive progress toward WHO's target of global elimination of trans fat by 2023, [but we need to pick up the pace](#). The new Certification Program will commend the hard work of countries that have successfully eliminated this toxic compound. We hope it will also encourage more countries to enact policies and accelerate action toward global elimination.

I also want to share [Trans Fat Free by 2023 - A building block of the COVID-19 response](#), a policy brief recently released by NCD Alliance, which contextualizes the importance of trans fat elimination in the COVID-19 response. The NCD Alliance expanded on these insights in their [webinar on dismantling barriers to trans fat elimination](#) by 2023. This webinar is available in English and in Spanish.

We hope you find these resources relevant and that you would share widely with your networks. ■

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## IN MEMORIAM

**PROF. PETER SLEIGHT, MD, DM, FRCP, FACC  
1929-2020**

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The hypertension world lost a great pioneer with the passing of former WHL President Peter Sleight on October 7, 2020.

Professor Sleight provided brilliant leadership in multiple trials and studies that improved the treatment of cardiovascular disease with angiotensin-converting enzyme (ACE) inhibitors and statins. The large global trials including the International Studies of Infarct Survival (ISIS) randomized trials have made tremendous impact on clinical practice and policy for populations all around the world. As well, these studies led to large, randomized trials in various other conditions, including the RECOVERY

trial, which showed that dexamethasone reduces mortality from COVID-19.

Dr. Sleight studied at Gonville & Caius College Cambridge, and St Bartholomew's Hospital Medical School in London, UK, where he met his wife Gillian. As consultant physician at Oxford University, Professor Sleight was appointed as the first BHF Field Marshal Earl Alexander Professor of Cardiovascular Medicine. He studied blood pressure variability and regulation, developing hypotheses to large randomized trials with results that have improved the health for millions around the world.

Beyond his remarkable professional achievements, Peter Sleight will be remembered for his graciousness and delightful sense of humor. True, at times he could be just a bit acerbic, but never with the intent of diminishing his colleagues. Nothing could be more enjoyable than spending time with Peter, hearing his opinions on every possible subject and sharing his enthusiasms. For a person so highly accomplished in his field, he remained accessible to even the most junior members of his field. He loved to teach and encourage his younger colleagues and took great pleasure at their growth and successes in practicing and doing research in cardiovascular medicine.

Professor Sleight was President of the World Hypertension League from 1995 to 2000, with the 'Peter Sleight Excellence Award in Hypertension Clinical Research' named in his honor. Recipients of the award include Neil Poulter, Giuseppe Mancina, and Michael Weber.



Peter Sleight and Dan Lackland, Athens Greece 2014

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## EDUCATIONAL RESOURCES SECTION

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### HEARTS Resources

- [HEARTS Technical Package](#)
- [HEARTS-Diabetes Module](#)
- [WHO Global Diabetes Compact](#)



**How to Measure Blood Pressure –**  
**New training video posted on the World Hypertension League website [here](#)**



**On World Hypertension Day, HEARTS in the Americas** introduced a new virtual course to improve BP measurement. **To register [click here](#).**



**Comprehensive Hypertension Guide**  
**[Offered here at AHA Lifelong Learning](#)**

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## REGIONAL CORNER

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### H3Africa Consortium

**High Depth African Genomes Inform Human Migration and Health**

Submitted by Michelle Skelton, Project Manager/PI



H3Africa is proud to announce that the highly anticipated publication "High Depth African Genomes Inform Human Migration and Health" was recently published in the prestigious journal *Nature*, [at this link](#)

By collaborating globally in a new, large-scale effort, researchers have made strong progress in sequencing genomes from regions and countries across Africa, paving the way for more broadly representative and relevant studies ranging from basic through clinical

genetics. Their findings have been accepted for publication by the prestigious journal *Nature*.

“There is a dearth of baseline genetic data for African populations,” according to Neil Hanchard, MD, DPhil, Assistant Professor at the Baylor College of Medicine. In an effort to remedy this the Human Heredity and Health in Africa (H3Africa) Consortium, a collaborative effort supported by the National Institutes of Health Common Fund, conducted whole genome sequencing of 426 individuals from 13 African countries, whose ancestries represented 50 ethnolinguistic groups from across the continent.

Beyond the sheer amount of variation within and among the groups studied, the researchers were able to use the data to examine historic patterns and pinpoint migration events that were previously unknown. “For the first time, our data showed evidence of movement that took place 50 to 70 generations ago from East Africa to a region in central Nigeria,” said Adebowale Adeyemo, MD, deputy director of the Center for Research on Genomics and Global Health at the National Human Genome Research Institute, and a senior author on the study. “This data gives us a more complete picture of the genetic history of Africa.” *Human Heredity and Health in Africa (H3Africa)* [h3africa.org](http://h3africa.org)

The researchers found more than 100 areas of the genome with evidence of being under natural selection. A sizable proportion of these regions were associated with genes related to immunity. “When you consider which forces have shaped African genetic diversity, you might think of malaria and sleeping sickness,” Dr. Hanchard said. “Our study suggests that viral infections could also have influenced genomic differences between people, via genes that affect individuals’ disease susceptibility.” There were also noticeable variations in selection signals between different parts of the continent. “Our findings suggest that adaptation to local environments, diets, or pathogens might have accompanied the migration of populations to new geographic regions” added Dr. Dhriti Sengupta one of the lead analysts from SBIMB, University of Witwatersrand.

The researchers hope their work will lead to wider recognition of the extent of uncatalogued genomic variation across the African continent, and of the need for continued studies of the many diverse populations in Africa. The study authors noted that their findings have broad relevance, from population genetics research into human history and migrations, to basic research into the genetic structure of various groups, to clinical research into the impact of specific variants on health outcomes.

The study is also a major milestone in African genomics research capacity, as it was led predominantly by local researchers using local resources. “The work underscores the recent availability of both infrastructure and resources for large-scale genomics research on the continent,” said Dr. Ananyo Choudhury from SBIMB, University of Witwatersrand, the first author of the study.

The collaboration of research groups from all corners of the continent was critical in making this research possible. Shaun Aron, one of the lead analysts from SBIMB, University of Witwatersrand, pointed out “Initiatives such as H3Africa have laid the foundation to foster and encourage collaborative research in Africa, which has made studies like these possible.”

See full press release [here](#).

**Acknowledgements:**

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## HYPERTENSION MANAGEMENT IN HIGHLANDERS

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### Masked Hypertension Among Andean Highlanders

Submitted by Prof. Gianfranco Parati and Prof. Grzegorz Bilo; Dept of Medicine and Surgery, Univ. of Milano-Bicocca & Dept of Cardiovascular, Neural and Metabolic Sciences, Istituto Auxologico Italiano, IRCCS, San Luca Hospital, Milan, Italy.

Over the millennia humans learned to adapt to even the most extreme and inhospitable environments on the Earth. High altitude is one of the most challenging ones, due to the harsh climatic conditions and, most of all, due to the limited availability of the oxygen caused by low barometric pressure. In spite of this, worldwide at least 140 million people live above 2,500 meters above sea level, the traditional limit which defines high altitude. The vast majority of these populations inhabit three highland regions: Asian plateaus (mainly Tibet and Qinghai), Ethiopian highlands and the Andes.

Highlanders represent a fascinating example of human genetic adaptation to environmental conditions. The three main highland populations, in fact, show large differences in terms of physiological responses used to face chronic hypoxia. The Andean peoples are the ones who reached their current homelands most recently, possibly only 11.000 years ago and, apparently their adaptative mechanisms are also less efficient. In fact, at variance from their Asian and Ethiopian counterparts, Andean natives tend to respond to chronic hypoxia prevalently through increased erythropoiesis. This leads to excessive erythrocytosis, frequently complicated by a maladaptive condition known as chronic mountain sickness (CMS; Monge's disease), much more prevalent in Andeans, compared with other highland populations.

The prevalence of CMS was reported to exceed 20% in large mining settlements in Peru, some of them lying above 4,000 meters (such as Cerro de Pasco, 70.000 inhabitants) or even above 5,000 meters (La Rinconada, 17.000 inhabitants), where it represents a considerable health problem. Clinically, CMS closely resembles right heart failure but is also associated with several physiological alterations encountered in arterial hypertension: hypervolemia, increased

sympathetic activity and increased peripheral resistances associated with blood hyperviscosity.



Despite these pathophysiological features, arterial hypertension has not been extensively studied among Andean highlanders. A few available studies, based on conventional office measurement, reported quite low hypertension prevalence, possibly related to the young age of these populations. However, recently published data from HIGH altitude Cardiovascular REsearch in the Andes (HIGHCARE-ANDES) study (1) indicate that among the Andeans there might be a considerable group of individuals with hypertension only detectable by means of ambulatory blood pressure monitoring (ABPM). In fact, in a sample of 289 inhabitants of **Cerro de Pasco** in Peru, conventional office BP detected hypertension only in 7% of participants, while with 24-hour ABPM hypertension the prevalence was much higher (20%), with 15% prevalence of masked hypertension, a condition associated with increased cardiovascular risk.



Cerro de Pasco, Peru, population 70,000

Such a pattern of hypertension phenotypes in this population was largely due to the elevated nocturnal blood pressure, frequently in the presence of

daytime values within normal limits. Interestingly, one of the factors independently associated with hypertension in this study was the presence of excessive erythrocytosis (regardless of the presence of CMS symptoms). These findings, recently published, pave the way to an epidemiological study (HIGH altitude Cardiovascular REsearch-Latin America Population Study - HIGHCARE-LAPS) now starting and aimed at evaluating the prevalence and determinants of hypertension by means of ambulatory blood pressure monitoring among the inhabitants of several high altitude locations in Peru, as well as in lowlanders residing in Lima.

The project is run by the collaboration of research groups from Italy (Istituto Auxologico Italiano and University of Milano-Bicocca from Milan) and Peru (Universidad Peruana Cayetano Heredia, Lima), and is endorsed by the World Hypertension League. Owing to the cooperation of the Peruvian Society of Cardiology, represented by Dr. Jose Manuel Sosa, the project relies on the collaboration of clinical centres in Huancayo, Juliaca, Cusco and Cajamarca. The study, initially hindered by the COVID-19 outbreak, will include 900 participants and involve an extensive evaluation of blood pressure phenotype, other cardiovascular risk factors, organ damage, sleep characteristics as well as genetic and epigenetic factors. The first results should be available by the end of 2022 and may represent an important step in defining the hypertension related cardiovascular risk profile of Andean highlander populations as well as in understanding the underlying pathophysiological mechanisms. Thanks to this last aspect, the results of the project will not only be useful for the cardiovascular health of the Andean populations but could also represent a pathophysiological model for the study of diseases characterized by chronic hypoxia.

Grzegorz Bilo, Lorenzo Acone, Cecilia Anza-Ramírez, José Luis Macarlupú, Davide Soranna, Antonella Zambon, Gustavo Vizcardo-Galindo, Martino F. Pengo, Francisco C. Villafuerte,\* Gianfranco Parati\*; on behalf of HIGHCARE-ANDES Highlanders Study Investigators.

[Office and Ambulatory Arterial Hypertension in Highlanders. HIGHCARE-ANDES Highlanders Study. Hypertension. 2020;76:1962-1970. DOI: 10.1161/HYPERTENSIONAHA.120.16010](#)

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## LINKS OF NOTE

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**LINKS** A global community for cardiovascular health

For more information, please go to [this link](#).



**Tool for Checking Validation Status of Blood Pressure Devices** [Click here](#)



**2019 WHO Essential Medicines List (EML) for Hypertension**

**Combination Therapy:** [Click here](#)



**NCD Alliance Newsletter** [Click here](#)



**World Stroke Organization (WSO) Current Newsletter** [Click here](#)



**Int'l. Society of Hypertension (ISH) Current Newsletter,** [Click here](#)



**SCIENCE OF SALT WEEKLY –**

Publication of weekly Medline searches related to dietary sodium, [Click here](#)



**KNOWLEDGE ACTION PORTAL (KAP)**

WHO's platform for NCD info, [Click here](#)



**RESOLVE TO SAVE LIVES** 90-second primer on HTN treatment protocols [Click here](#); 90-second primer on digital BP monitors: [Click here](#)



**NEW COURSE TO IMPROVE BLOOD PRESSURE MEASUREMENT** introduced by HEARTS in the Americas. To register [Click here](#)

### **Mission**

The objectives of the WHL are to promote the detection, control and prevention of arterial hypertension in populations. The World Hypertension League (WHL) is a federation of leagues, societies and other national bodies devoted to this goal. Individual membership is not possible. The WHL is in official relations with both the International Society of Hypertension (ISH), and the World Health Organization (WHO).

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## **Calendar of Events**

### **16<sup>th</sup> Asian-Pacific Congress of Hypertension**

February 19-21, 2021

Hyderabad, India

[click here](#)

### **AHA International Stroke Conference**

March 17-19, 2021

Virtual

[click here](#)

### **National Kidney Foundation's Spring Clinical Meetings**

April 6-10, 2021

Virtual

[click here](#)

### **Joint ESH-ISH Meeting 2021**

April 11-14, 2021

Glasgow, Scotland

[click here](#)

### **World Congress of Nephrology**

April 15-19, 2021

Virtual

[click here](#)

### **American College of Cardiology**

May 15-17, 2021

Atlanta GA and Virtual

[click here](#)