



WHL • NEWSLETTER

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

No. 173, September 2021

President's Column



Dr. Xin-Hua Zhang

The launch of the WHO 2021 guideline for the treatment of hypertension gives primary care workers more confidence to provide timely treatment to millions of untreated, confirmed hypertensive patients, in advance of completing the lab test and overall CVD risk assessment. It also provides guidance for the development of health care policies that allow trained and certified non-physician healthcare workers to issue prescriptions, to help more patients to achieve their BP goal. The recommendations of the guideline strengthen the HEARTS protocols and support the implementation of the Call to Action to Control Hypertension in Africa.

We invite our partners and member organizations to join us in promoting the WHO 2021 guideline and the Call to Action for Africa, to improve global hypertension control.

Xin-Hua Zhang

Note from the Editor



Dr. Dan Lackland

In this issue of the Newsletter we are so enthused to announce and promote the WHO Hypertension Guideline and Call to Action in Africa. Both efforts are key for hypertension control globally and launched at a time of need. This issue presents many hypertension activities from the member organizations as well as the great words from the WHL awardees regarding the benefits of lowering blood pressure. The WHL celebrates World Heart Day and World Stroke Day with our valued global partners. We do so appreciate the many submissions and welcome thoughts and ideas to facilitate the promotion of initiatives focused on lowering global risks from elevated blood pressure.

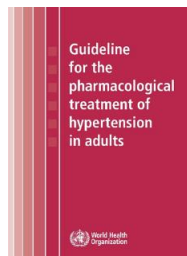
Dan Lackland

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WHO HYPERTENSION GUIDELINES

World Health Organization launches new guidelines on pharmacological treatment of hypertension in adults

Submitted by Dr. Taskeen Khan



For full guidelines [click here](#).

On 25th August 2021 the WHO launched new guidance for the pharmacological treatment of hypertension in adults.

Dr. Taskeen Khan, of the WHO Dept. of Noncommunicable Diseases, who led the guideline development, said, "The new global guideline on the treatment of hypertension, the first in 20 years, provides the most current and relevant evidence based global public health guidance on the initiation of treatment (with pharmacological agents) for hypertension in adults." The recommendations focus on the level of blood pressure to start medication for hypertension, the target blood pressure level for successful treatment, how often to have follow-up checks on blood pressure, and who in the health system can provide treatment.

The primary audiences for the guidelines are clinicians and health-care providers at all levels of health care. Secondary audiences are national NCD/CVD programme managers, health-care academics, policy-makers setting practice recommendations, students, and hypertension medicine manufacturers.

The availability of treatment should be complemented by other measures such as: promoting healthier diets and regular physical activity; more strictly controlling tobacco products; and identifying and treating comorbidities such as diabetes and pre-existing heart disease.

WHL President Dr. Xin-Hua Zhang commented on the guidelines, "The WHO new guidelines encourage initiating treatment of diagnosed hypertension before having the lab test and risk assessment. These recommendations will speed up hypertension control and coverage globally". **WHL Pres.-Elect Dr. Paul D. Whelton**, who contributed to the guidelines, noted "These guidelines provide

structured recommendations for the pharmacological management of hypertension. They are based on a rigorous interpretation of the available evidence and will be especially useful in middle- and low-income countries. I support the guidelines recommendations with high enthusiasm and hope they will facilitate control of hypertension globally." **Dr. Gianfranco Parati, WHL Secretary-General**, stated "These guidelines offer guidance on some controversial issues, such as when to start treatment and whether laboratory testing and cardiovascular risk assessment are needed prior to starting treatment. Such guidance is provided from a global perspective, and will have specific relevance to low- and middle-income countries, with the possibility for nonphysician professionals, such as pharmacists and nurses, to be directly involved in hypertension treatment after adequate training, specific management protocols and physician oversight."



The WHO guideline was promoted in all Chinese official media channels on 26 August, and published in the paper version of *Medical Doctors Newspaper*, the official newspaper of the Chinese Medical Doctors Association.

A CALL TO ACTION IN AFRICA



World Hypertension League

As announced on WHD May 17, 2021, the World Hypertension League led *A Call to Action to Control Hypertension in Africa* will soon be officially launched. As hypertension is the leading preventable risk factor for cardiovascular diseases in Africa, as in the whole world, it is important to stimulate all countries on the African continent. The Call to Action addresses social impact, disease burden and costs for national health systems. The present Call aims to stimulate all countries to adopt solutions and to achieve goals for hypertension control in Africa by 2030.

HOT OFF THE PRESS

SSaSS Trial Summary

Submitted by Prof. Norman R.C. Campbell, CM MD DSc

Both dietary sodium reduction and potassium supplementation are known to result in blood pressure lowering and the available evidence also suggests that both dietary sodium reduction and potassium supplementation prevent cardiovascular disease events. Behavioral recommendations to change dietary sodium and potassium intake are difficult to implement and maintain over long periods. Use of salts that partially reduce sodium content by substitution of potassium could provide an easy and cheap way to beneficially change intake of both electrolytes. The SSaSS study, published in the NEJM Aug 29th 2021, addressed the use of a low sodium salt (75% sodium and 25% potassium) compared to usual salt in a cluster randomized controlled trial in 600 rural villages in China¹. The participants were either age 60 or over with uncontrolled blood pressure or had a prior stroke. Those living in a household where someone had known serious kidney disease, were using potassium supplements or a potassium sparing diuretic were excluded. In the region, the major source of salt was likely to be added at home in cooking and at the table. Over 20,000 participants were entered, and the trial was just under 5 years in duration. Dietary sodium was reduced 15.2 mmol (350 mg) /day, potassium increased 20.6 mmol (803 mg)/day and systolic blood pressure was lowered by 3.3 mmHg. More than 3000 strokes, 5000 major atherosclerotic cardiovascular events (MACE), and 4000 deaths were observed during trial follow-up. The rate of stroke, MACE, and death were 14%, 13% and 12% lower, respectively, in those randomized to use the sodium substitute compared to regular salt. There were similar benefits in subgroup analyses. There was no increase in serious adverse events or hyperkalemia.

The study adds to prior data showing the blood pressure lowering impact of low sodium salts by demonstrating reductions in cardiovascular disease and death with no increase in adverse effects. The main study limitation relates to the

population studied where baseline sodium intake was higher than in many populations (187 mmol (4300 mg/day). Using a limited application to China alone, the intervention was estimated to prevent 461 thousand deaths and 1.2 million vascular events/year. Low sodium salts are being increasingly used in food processing as well as being encouraged as a replacement for regular salt where discretionary use of salt is high. The SSaSS provides strong evidence of the potential advantages of this approach, however, ongoing monitoring is required to assess the safety in free living populations in China and elsewhere.

1. Neal B, Wu Y, Feng X, et al. Effect of Salt Substitution on Cardiovascular Events and Death. *New England Journal of Medicine*. 2021.

Systolic blood pressure target during anti-hypertensive drug therapy in older adults

Submitted by Prof. Paul K. Whelton, MB, MD, MSc

Except for the African American Study of Kidney Disease and Hypertension (AASK)¹, randomization to a lower BP target has resulted in cardiovascular disease (CVD) prevention. In the Systolic Blood Pressure Intervention Trial (SPRINT)², randomization to a systolic blood pressure (SBP) <120 mm Hg reduced the primary outcome (CVD composite) and main secondary outcome (all-cause mortality) by 27% and 25%, respectively, during 3.33 years of follow-up. Similar benefits were observed in the 2636 SPRINT participants ≥75 years at baseline (mean age =79.9 years)³. Clinical practice guidelines recommend somewhat different SBP targets in older adults, with the Canadian and Australian, ACC/AHA, ESC/ESH, and ACP/AAFP suggesting <120, <130, 130-139, and <150 mm Hg, respectively⁴.

The Strategy of Blood Pressure Intervention in the Elderly Hypertensive Patients (STEP) trial⁵ was designed to assess the value of an SBP treatment target <130 mm Hg in older adults. The STEP trial was a multicenter, randomized controlled comparison of outcomes in 8511 Chinese adults 60-80 years (mean=66 y) with hypertension who were randomized to an SBP target <130 mm Hg (Intensive) or <150 mm Hg (Standard). The mean SBP during follow-up was 126.7 mm Hg (Intensive) and 135.9 mm Hg

(Standard), with a resultant difference of 9.2 mm Hg. The trial primary outcome was a CVD composite of stroke, acute coronary syndrome (acute myocardial infarction and hospitalization for unstable angina), acute decompensated heart failure, coronary revascularization, atrial fibrillation, or death from cardiovascular causes. The trial was stopped early due to benefit after 3.34 years (Hazard Ratio [HR], 95% Confidence Interval [CI] for the primary outcome = 0.74, 0.60 to 0.94). There was a consistent pattern of benefit for the most important components of the primary outcome, with an especially striking benefit for prevention of decompensated heart failure (HR, 95% CI: 0.27, 0.08 to 0.98). The results for safety and renal outcomes did not differ significantly between the two treatment groups, except for a higher incidence of hypotension in the Intensive group.

The STEP trial results are like those from previous trials that have compared randomization to different BP treatment targets in adults with high BP, including the SPRINT. At least three large event-based trials are comparing the efficacy of randomization to an SBP target <120 mm Hg and <140 mm Hg: the Optimal Blood Pressure for the prevention of Major vAscuLar Events in Patients With DIABETES Mellitus (OPTIMAL-DIABETES) and the Optimal Blood Pressure for the prevention of Major vAscuLar Events in Stroke Patients (OPTIMAL Stroke) trials in Brazil, and the Blood Pressure Control Target in Diabetes [BROAD] trial in China. The results of these trials will provide additional clarity regarding the optimal SBP target during antihypertensive drug therapy, including in subgroups such as older adults.

1. Wright JT et al. Effect of blood pressure lowering and antihypertensive drug class on progression of hypertensive kidney disease: results from the AASK trial. *JAMA*. 2002 Nov 20;288(19):2421-31.
2. The SPRINT Research Group. Final Report of a Trial of Intensive versus Standard Blood-Pressure Control. *N Engl J Med* 2021; 384:1921-1930.
3. Williamson JD et al. Intensive vs Standard Blood Pressure Control and Cardiovascular Disease Outcomes in Adults Aged ≥75 Years: A Randomized Clinical Trial. *JAMA*. 2016 Jun 28;315(24):2673-82.
4. Whelton PK. Evolution of Blood Pressure Clinical Practice Guidelines: A Personal Perspective. *Can J Cardiol*. 2019;35:570-581.

Pharmacological BP lowering for prevention of cardiovascular disease across different levels of baseline BP

Submitted by Prof. Paul K. Whelton, MB, MD, MSc

Determining the level of blood pressure (BP) at which antihypertensive drug therapy should be added to lifestyle improvement recommendations is one of the most challenging tasks that practitioners and BP clinical practice guideline writing committees face. The available options for exploration of this question are threefold. One can rely on the findings from older trials in which antihypertensive drugs were not being used or were being used infrequently at baseline. However, these trials were generally focused on diastolic BP (DBP) rather than systolic BP (SBP), and they were restricted to study of adults with relatively high levels of BP. They clearly indicate the value of drug treatment for those with an accurately measured average DBP >90 mm Hg prior to initiating BP lowering drug therapy but they fail to provide much information regarding SBP, especially lower levels of SBP. A second analytic option is to study the experience in contemporary trials in which BP lowering drugs have been administered to adults previously untreated with BP lowering drug therapy. Unfortunately, these trials have been designed to study the efficacy of drugs for management of diabetes mellitus, chronic kidney disease, prevention of atherosclerosis, and other goals rather than antihypertensive drug therapy. As such, they provide limited information of value. The third option is to use contemporary antihypertensive drug treatment trials to explore the relationship between baseline BP and cardiovascular disease (CVD) outcomes, while recognizing that most of the participants in these trials were being treated with BP lowering medication at baseline. The Blood Pressure Lowering Treatment Trialists' Collaboration (BPLTTC) recently reported the results of a meta-analysis that explored the efficacy of antihypertensive drug treatment within categories of baseline SBP and DBP in participants with and without CVD at baseline¹. It represents the largest analysis of its type and is an important addition to the literature.

In the BPLTTC analysis, Individual participant-level data from 48 randomized controlled trials (N=344716) were pooled to assess the efficacy of antihypertensive drug therapy, using an intention to treat analysis, in those with and without CVD at baseline, and in seven categories of SBP (<120, 120-129, 130-139, 140-149, 150-159, 160-169, ≥170 mm Hg) and six categories of DBP. The primary outcome was a major CVD event (defined as a composite of fatal and non-fatal stroke, fatal or non-fatal myocardial infarction or ischemic heart disease, or heart failure causing death or requiring admission to hospital). During a mean follow-up of approximately 4 years, a 5 mm Hg reduction in SBP resulted in a relative risk reduction of major CVD events by 10%. The corresponding risk reductions for stroke, heart failure, ischemic heart disease, and death from CVD were 13%, 13%, 8%, and 5%, respectively. The reduction in relative risk was proportional to the intensity of BP-lowering. Neither the presence of CVD, nor the level of BP at baseline modified the treatment effect.

The results of this study suggest that antihypertensive drug therapy is beneficial in adults at high risk for CVD, independent of their starting level of BP. The authors recommend basing the decision to initiate antihypertensive drug therapy on CVD risk rather than an individual's level of BP. The advantages and disadvantages of using this approach rather than a combination of BP level and CVD risk estimation have been reviewed elsewhere². Adults with existing CVD are at high risk for recurrent CVD events. In all others, use of a valid CVD risk predicting calculator is desirable. However, where this is infeasible, older age, the presence of chronic kidney disease, diabetes mellitus, and an accurately measured high average level of BP are useful surrogates for high CVD risk. Based on antihypertensive drug therapy clinical trial experience and feasibility of implementation, BP clinical practice guidelines such as the ACC/AHA, ESC/ESH, Canadian, Australian, and WHO guidelines recommend use of a combination of BP level and CVD risk for initiation of antihypertensive drug therapy, with increasing emphasis on the role of CVD risk

estimation at lower levels of baseline BP³⁻⁶. This seems to be a reasonable approach.

1. The Blood Pressure Lowering Treatment Trialists' Collaboration. Pharmacological blood pressure lowering for primary and secondary prevention of cardiovascular disease across different levels of blood pressure: an individual participant-level data meta-analysis. *Lancet* 2021; 397: 1625–36.
2. Whelton PK, Campbell NRC, Lackland DT, Parati G, Ram CVS, Weber MA, Zhang XH. Strategies for prevention of cardiovascular disease in adults with hypertension. *J Clin Hypertens*. 2020; 22:132-134.
3. Whelton PK, Carey RM, Aronow WS et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *J Am Coll Cardiol*. 2018;71:e127-e248.
4. Williams B, Mancia G, Spiering W et al. 2018 ESC/ESH Guidelines for the management of arterial hypertension. *Eur Heart J* 2018;39:3021-3104.
5. Whelton PK. Evolution of Blood Pressure Clinical Practice Guidelines: A Personal Perspective. *Can J Cardiol*. 2019;35:570-581.
6. Guideline for the pharmacological treatment of hypertension in adults. World Health Organization. <https://apps.who.int/iris/bitstream/handle/10665/344424/9789240033986-eng.pdf>

WORLD HYPERTENSION DAY REPORTS

Argentina

Submitted by Marcos Marin, MD
President, Argentine Society of Hypertension

One of the main objectives of the Argentine Society of Arterial Hypertension is to make the population aware of and control arterial hypertension. This is the fifth consecutive year that we aim to raise awareness among the population with our motto: KNOW AND CONTROL YOUR BLOOD PRESSURE.

This year, we have chosen to start on May 17th, World Hypertension Day, and end on September 14th, Argentina National Hypertensive Patient Day. We end on 14/9 alluding to our cutoff level for hypertension.

We are carrying out this campaign in modalities. As in previous years we went to the town plazas and with all the necessary precautions due to the pandemic, took blood pressure measurements in thousands of people. We also invited families that have automatic blood pressure monitors to measure their blood pressure at home and upload their data anonymously via the link [Virtual | Conoce y Controla 2021.](#)



If we continue to improve the knowledge and control of hypertension in Argentina, we will one day be able to say: mission accomplished!!

Cameroon

Submitted by Epie Njume, MD
General Supervisor, NCD Prevention and Control Program, Cameroon Baptist Convention Health Svcs.

The Cameroon Baptist Convention Health Services organized an event with two key participants: Think Big Association and the Coordinating Unit for Persons with Disabilities in the Northwest Region. A hypertension fact sheet and social media kit was prepared with awareness messages and shared online via CBC Health Services Facebook and Twitter (CBCHSORG) platforms, with many interactions, shares, likes, and comments. These messages educated our audience on hypertension, complications, and prevention, while highlighting the World Hypertension Day 2021 theme.



Secondly, there was screening for hypertension and obesity, principally targeting persons living with impairment, and sporting activities to promote and encourage physical exercise as a means of preventing hypertension and obesity. Ten community radio stations broadcasted our activities, and two newspapers covered and published articles about hypertension and our inclusive sports and screening events. We also had portraiture boards, posters, and placards carrying awareness messages on hypertension. We conducted a blood pressure screening during the month leading up to World Hypertension Day, with 29 persons screened at a sports event at the Baptist Center Nkwen, Bamenda.



Blood pressure screening

Germany

Submitted by Annette Kohl-Euskirchen
German Society of Hypertension

The German Society of Hypertension opened its first portal to an interactive and virtual event around the theme of WHD 2021 with various lectures and workshops as well as opportunities to talk to experts and people affected. More than 1,000 people visited the event which was launched under the leadership of Professor Dr. Florian Limbourg, member of the board of the German Society of Hypertension.



The portal to the virtual world of WHD in Germany was used by more than 1,000 visitors. The event was made possible with generous support by one of the largest German health insurances.

Under the German motto **#meinblutdruckpasst#** Professor Dr. Claudia Schmidtke, the Federal Commissioner for Patient Affairs, encouraged the public to keep an eye on blood pressure by measuring regularly and appreciated this year's campaign day by focusing, among other things, on how to measure blood pressure correctly and providing an interactive blood pressure pass.

According to the German Society of Hypertension more than 25 million people in Germany are affected by high blood pressure and it is important for public health to create an awareness towards blood pressure, its consequences and related prevention measures. Videos of this event are open to the public and free of charge on You Tube and at the website: www.hochdruckliga.de/aktuelles

Iran BP awareness outreach - WHD 2021

Submitted by: Alireza Khosravi; Prof. of Cardiology, Head of Hypertension Research Center, Isfahan Cardiovascular Research Institute (ICRI), Isfahan Univ. of Med. Sciences (MUI), Isfahan, Iran

•Held a meeting with the Vice Chancellor for Health of Isfahan University of Medical Sciences

to decide on possible actions on World Hypertension Day

•Routinely followed-up on the hypertensive patients in our hypertension clinic (BP measurement, training about prevention, treatment and control of hypertension orally and providing booklets and brochures).

•Held Blood Pressure Screenings during the month leading up to World Hypertension Day.



We took 98 Blood Pressure Screenings during this period. We didn't conduct screening on the general population due to the COVID-19 pandemic, however we performed screening on 77 patients with cardiovascular problems attending our clinic and 21 personnel working at ICRI. We invited the patients who were in the Chamran Heart Clinic (located at the first floor of ICRI) to measure their blood pressure in completely safe conditions (patients and staff had standard face masks with a suitable distance from each other in a large room with open windows). Screening was performed from May 1-May 17, 2021, and we completed the WHL questionnaire-2021 for all 98 participants.

Acknowledgments: We would like to thank and acknowledge all the officials and personnel of the Hypertension Research Centre and ICRI who contributed. Program Managers: Dr. Nizal Sarrafzadegan, Professor, Director of Cardiovascular Research Institute, MUI; Dr. Alireza Khosravi, Professor, Director of Hypertension Research Center, Cardiovascular Research Institute, MUI; Dr. Asieh Mansouri, Assistant Professor, Research Deputy of Hypertension Research Center, Cardiovascular Research Institute, MUI; Executive team: Mahnaz Jozan, Hypertension Research Center, Cardiovascular Research Institute, MUI; Hassan Alikhasi: Isfahan Cardiovascular Research Center, Cardiovascular Research Institute MUI; Elham Hosseinzadeh, Hypertension Research Center, Cardiovascular Research Institute, MUI

Portugal

Submitted by Vitória Cunha, Secretary-General
Portuguese Society of Hypertension



In an again troubled year marked by the pandemic, the Portuguese Society of Hypertension decided once again not to let World Hypertension Day pass without notice. As in 2020, the celebrations went online during a full week: Youtube channel, Facebook, Instagram and social media. In each day a busy agenda kept the audience linked to information about healthy lifestyle, diet and exercise (live trainings), cooking shows, answers to questions posted by the public, patients testimonials, and several messages by the Portuguese Society of Hypertension board members about hypertension and salt, hypertension and COVID, drug adherence, BP definition/ target BP values, measuring technique, among others. Everyday several messages were posted and public figures launched a captioned video to the population.

The results were significantly positive: > 150.000 video visualizations, > 380.000 persons reached, > 25.000 likes and commentaries in the publications. The numbers speak for themselves: people are interested in raising HTN awareness, and Scientific societies have this responsibility.

<https://www.youtube.com/channel/UCixtQsnWT-VADWYlfasWMs4g/videos>

Thailand

Submitted by Weranuj Rousanthisuk, MD
On behalf of the Thai Hypertension Society

According to the worsening COVID-19 situation in Thailand starting in April 2021, the Thai Hypertension Society decided to set up activities for World Hypertension Day via virtual format. A 1-hr talk delivered by physicians and pharmacists working in hypertension and non-communicable disease area was broadcast live via Facebook. We encouraged our population to have their blood pressure measured regardless of their symptoms.



The current situation of hypertension in Thailand and home blood pressure monitoring for hypertensive subjects were the main topics in this year's activities. Our talk was followed by questions-and-answers, and a video is available on Facebook for those who missed our live session. Our ongoing Facebook page is also aimed at delivering essential knowledge for hypertensive patients to help our population achieve better BP control, lower their atherosclerotic risk, and prevent cardiovascular events in the long run.



JOURNAL OF HUMAN HYPERTENSION

Upcoming Special Issue of the JHH

In the March 2021 WHL Newsletter, it was announced that the *Journal of Human Hypertension (JHH)* became the official journal of the World Hypertension League. This is an important partnership with many advantages to members, including dissemination of high-quality scientific communications to advance the League's aspirations in global hypertension care.

In current development is a WHL-endorsed Special Issue of JHH comprising a collection of articles focussed on the accuracy and validation of automated blood pressure devices. The Special Issue will shine a spotlight on historical as well as contemporary knowledge and critical needs on various issues related to blood pressure device validation. It will also include a call to

action with an advocacy package for policy makers internationally.

Journal of Human Hypertension

The initiative is supported by authorship teams of international experts and is led by an outstanding group of Guest Editors in Professors Paul Whelton, Norm Campbell, Gianfranco Parati, George Stergiou, Tammy Brady and Dr. Pedro Ordunez. The special issue aims to be highly informative and translationally-focussed with provision of practical resources to ultimately improve measurement and management of blood pressure. The special issue collection of articles is expected to be available in early 2022.

Professor Michael Stowasser, Editor-in-Chief, *Journal of Human Hypertension*

Professor James Sharman, Associate Editor, *Journal of Human Hypertension*

JHH/WHL Partnership Announcement

To access the recently published article "***The World Hypertension League becomes a partner of the Journal of Human Hypertension***" in the JHH go to [this link](#).

2021 EXCELLENCE AWARD WINNERS

Priorities for Hypertension Prevention and Control: We would like to thank our [Excellence Award winners](#) for providing their perspectives on global hypertension priorities.

Norman Campbell Excellence Award Winner in Population Hypertension Prevention and Control



Dr. Prabhdeep Kaur, MBBS, DrPH, DNB (Gen Med), MAE (Epidemiology)

Only one in ten hypertensives have blood pressure under control in low and middle-income countries. We need a

paradigm shift in hypertension management from a hospital-based approach to a community-centric primary care approach. The treatment in primary care using simple treatment protocols and building the capacity of non-physician health workers to provide services closer to the patient's home are two key priorities. Measurement of blood pressure for all adults visiting a doctor/health worker for any health condition using high quality professional digital blood pressure monitors can improve detection at no additional cost. Ensuring the availability of low-cost generic drugs in the primary care and capacity building of the health systems for efficient procurement and supply chain systems will improve treatment coverage. The simple strategies outlined here will reduce premature cardiovascular deaths due to hypertension in the next five years.

Detlev Ganten Excellence Award Winner in Hypertension and Global Health Implementation Winner



Prof. Joel Menard, Professor of Public Health, Paris Descartes, CPSC, Faculty of Medicine, Paris, France

The increase in awareness, diagnoses, treatment and control of hypertension is a major progression of Public Health during the last fifty years. It greatly contributes to an increase in healthy years of life in most countries. "Most countries" points out a first challenge, since too many countries in the world are far from achieving optimal performances. A second challenge is a plateau observed in the quality of hypertension management in many countries during the last ten years, with large inequalities between the performance of health systems within and between countries.

Main suggestions

1° Encourage more organisational research to adapt worldwide recommendations to local facilities: Repeated automatic blood pressure measurements in the absence of health

professionals or tele transmitted home blood pressure measurement for the diagnosis and treatment supervision of permanent hypertension; Definition and new management strategies of apparent and true resistant hypertension

2° Make available combinations of triple therapy, from very low to high doses of each component to counteract issues of patient observance and physician inertia

3° Invest in research: new concepts on sodium localisation and investigation, experimental and clinical investigation of PCSK9 or angiotensinogen Si RNAs, refinement of cardiovascular risk prediction, including genetics

Graham MacGregor Excellence Award Winner in Dietary Salt Reduction at the Population Level



Dr. Hye-Kyung Park, PhD, General Director, National Institute of Food and Nutrition Service (NIFNS), South Korea; Management Director of the Committee for Dietary Sodium and Sugar Reduction

Reducing sodium intake further would be the highest priority for hypertension prevention and/or management especially because we are still dealing with mean population sodium intake 60% higher than WHO's upper limit.

2021 Dietary Guidelines for Koreans announced last April for the coming 5 years have bullet point No. 2, '**Take foods with less salt, less sugar and less fat.**' We will continue working on education to increase awareness of various populations including young children for prevention and the elderly for management.

First, we will continue providing education and guidance for young children by disseminating necessary information to children & their parents through the operation of nationwide Centers for Children's Foodservice Management.

Second, we are planning to establish and operate the so-called 'Center for Welfare Foodservice Management' focusing on those serving the elderly at the national level to provide hygienic and nutritionally adequate meals in line with Dietary Guidelines.

Peter Sleight Excellence Award Winner in Hypertension Clinical Research



Prof. Lawrence Beilin, AO Emeritus Professor of Medicine, University of Western Australia

Priorities for hypertension prevention and control – The long road ahead

1. Overcoming hurdles to progress:

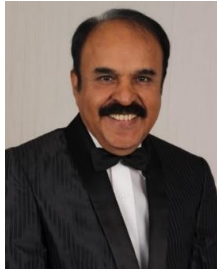
- Social, behavioural and political issues underly hypertensive cardiovascular disease via adiposity, physical inactivity, poor dietary patterns, stress, smoking and excessive alcohol consumption.
- Increasing social inequality exacerbates these issues.
- We need better ways to help and inspire politicians and other powerbrokers to reverse this trend.

2. Research/Research/Research:

- Developments in new anti-hypertensive drugs therapy have been minimal for decades. This contrasts with treatments for dyslipidemia and diabetes.
- New antihypertensives should stem from understanding the interactions of genetic, epigenetic and environmental influences leading to blood pressure elevation.
- Continue to lookout for antihypertensive and vascular effects of therapies devised for other disorders.
- Higher blood pressure tracks from infancy to adulthood, with important antenatal and familial effects. Research into mechanisms and safe interventions at early stages of life should be a priority.

- Cross-fertilize with disciplines outside the traditional medical mould.
- Nurture original thinkers rather than training them to reinforce our biases.

Excellence Award Winner in Population Hypertension Prevention and Control



Dr. A. Muruganathan, MD;
Chairman, Shristi A.G.
Hospital, Tamilnadu, India;

My priority for hypertension prevention and management is creating awareness and periodical screening, which we can achieve in the coming years by implementing the following methods in collaboration with the various stakeholders:

1. Create screening camps with the help of NGOs and professional bodies whenever there is an opportunity
2. Promote awareness about hypertension and its complications (if not controlled) in regional languages through television, radio, press, and social media
3. Sensitize Healthcare professionals about accurate measurement, provide periodical updates through webinars, journals, newsletters, and books
4. Promote more hypertension clinics, and train hypertension specialists who can focus only on hypertension
5. Create more hypertension centers of excellence where all specialists related to hypertension complications and state-of-the-art labs can diagnose and manage complications, secondary hypertension
6. Promote home blood pressure monitoring, ABBM, educate people about lifestyle modification, and implement telemedicine at various adopted villages
7. Advise the government to support needy people below the poverty line through health care workers visiting door to door to do screening and ensure supply of medicines
8. Promote simplified protocols

9. Promote research activities, hypertension registries, home blood pressure monitoring beyond the home in the library, barbershop, pharmacy, bus stand, railway station, airport
10. Use modern apps, artificial intelligence, Digi medicine

Excellence Award Winner in Diplomacy and Advocacy for Population Hypertension Risk Reduction



National Professor
Brig. (Rtd.) Abdul
Malik, Founder and
President, National
Heart Foundation of
Bangladesh

One in five adults in Bangladesh are suffering from high blood pressure (HBP). However almost half of the hypertensives are unaware of their HBP status and overall, control rate is around 14% according to a recent national survey of Bangladesh.

Ignorance of people, inadequate service at primary care, and cost of medication are a few causes of poor compliance and low control rate.

Raising awareness, establishing a screening system with referral linkage, transforming primary health care to cater to chronic diseases and supply of free medication along with GO-NGO collaboration will be important to control hypertension in low -middle income countries like Bangladesh.

The National Heart Foundation of Bangladesh in collaboration with MoH&FW and Resolve to Save Lives, USA, has been implementing a project for strengthening hypertension care service at the primary health care level of four sub-districts of Bangladesh since October 2018. Through this project, adoption of a simplified treatment protocol, introduction of universal BP screening and nurse based NCD corners, and training of physicians and nurses were done. Medication free of cost supplied by the government was ensured. After its successful completion, the project has been expanded to 54 sub-districts since January 2021. We plan to expand this programme all over the country in the next five years.

WHL REGIONAL NEWS

Sub-Saharan Africa Region

Submitted by Prof. Mayowa Ojo OWOLABI; Dean, Faculty of Clinical Sciences, Director, Center for Genomic and Precision Medicine, College of Medicine, University of Ibadan

The Nigerian Hypertension Society (NHS) joined her counterparts from other parts of the globe to celebrate the 2021 World Hypertension Day. In many states of the Federation, there were public lectures and community outreaches to increase awareness of, and screen for hypertension. In addition to a press statement issued by the national secretariat of NHS, the Secretary-General of the Society, Prof. Kolawole Wahab was live on the University of Ilorin FM Radio Station to discuss hypertension in a public health enlightenment programme while other members across the country also organized public awareness programmes and granted media interviews.

Highlights and summaries of activities, across the federation in commemoration of WHD:

Enugu Team:



WHD Celebration outreach by the University of Nigeria Teaching Hospital Team (Enugu)

Abuja Team:

Sunday 4th July, 2021: The team visited the Awkuzu Progressive Union (APU), Abuja Branch and screened 55 members of the group for hypertension.

Tuesday 20th July, 2021: The team visited the Anglican Diocese of Kubwa for hypertension screening of the clergy including the diocesan Bishop. In addition, we carried out diabetes screening and Prostatic Surface Antigen (PSA). A total of 64 clergy men were screened. Prof Augustine Odili, the lead investigator of the Circulatory Health Research Laboratory also gave a lecture entitled “Hypertension and Diabetes: What you need to know”.



Saturday 31st July, 2021: The team visited Apo Mechanic Village, Apo Abuja and screened a total of 110 mechanics and artisans. All individuals noted to be hypertensive were referred to the Cardiology Clinic of the University of Abuja Teaching Hospital Gwagwalada, Abuja for further follow up.



A cross-section of the MMM (WHD) Team from Abuja

South Asia Region

Submitted by Dr. S. N. Narasingam, MD
National President, Indian Society of Hypertension

InSH has been offering a scientific program entitled SATH [Scientific Approach To Hypertension], with 24 modules, covering 2 modules per week and involving reputed national speakers from different specialities. This program focuses on practising doctors, physicians and specialists and was inaugurated August 1st by the Honorable Governor of Telangana [Hyderabad].

SATH
Scientific Approach To Hypertension



This activity has been well received by doctors and those who have registered for this program will be given a certificate in the field of hypertension after going through all criteria. This is an ongoing program which will be covered within the next 3 months. The first and the second program were attended by 300 doctors. For more information please visit the [InSH website](#).

WORLD HEART DAY September 29th



Making hearts better – a call to action

Submitted by Lisa Hadeed, Communications Officer

Every year, on 29th September, [World Heart Day](#) raises awareness and increases global action to help beat cardiovascular disease (CVD), the leading cause of death. Under the banner #UseHeart, we celebrate [heart heroes](#) and engage with decision-makers, the medical community and all individuals to advocate for universal access to CVD prevention, detection and treatment.

World Heart Day 2021 focuses on harnessing digital health to prevent and manage CVD. Promoting equity, prevention and community are among our best approaches for improving heart health for everyone, everywhere. It is imperative that countries' most vulnerable communities can also access continuous care through connection to medical services. Prevention is key to beating heart disease and we want to empower everyone to know about, and manage, their risk factors which include hypertension. Social connections are another important defence for the more than 500 million people living with CVD. World Heart Day is an inclusive platform for sharing real stories, struggles and triumphs.

Year-round, the World Heart Federation (WHF) unites medical and scientific groups as well as patients and their families to share knowledge and advocate for heart-healthy policies.

#UseHeart and download our [easy-to-use assets](#) for better heart health.

WORLD STROKE DAY October 29th



This year's #Precioustime campaign is focused on the importance of access to quality acute stroke care. For more information about World Stroke Day [click here](#).



NEWS FROM ISH



International Society of Hypertension

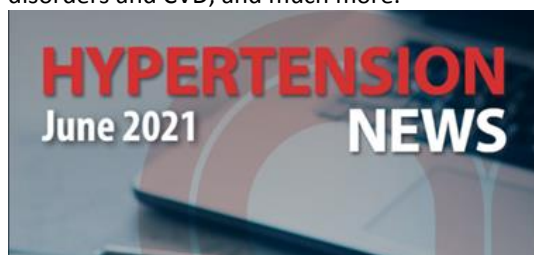
ISH newsletters

The International Society of Hypertension Women in Hypertension Committee (ISH WiHRC) is making great strides in bringing together women working in hypertension research globally. We encourage you to read the 1st issue of the Women in Hypertension Research Network newsletter to [find out more](#).



We also invite you to [read the latest edition of ISH Hypertension News](#), the official quarterly newsletter of the ISH. This issue features highlights from the 2021 ESH/ISH Joint Scientific

Meeting, a Learning the Ropes feature on sleep disorders and CVD, and much more.



Visit www.ish-world.com for further information on the work of the Society or follow us on Twitter @ISHBP.

ISH Kyoto 2022 Meeting (12-16 Oct 2022)



Please watch our [invitational Kyoto 2022 Meeting video](#) and help us to promote the meeting. You will find our [promotional toolkit](#) on the meeting website and you can [register here](#).



ISH2022KYOTO Program Topics	
ISH2022 Three main themes	AI/Dx, Food/Nutrition, Physical Fitness
SDGs & Hypertension ~Hypertension In The Real World In 2030~	Global Warming, Disaster Medicine, Human Isolation etc.
Global Health & Hypertension	Regional, Economic, Racial and Resource Disparities
Life Course & Hypertension	Preconception Care, Fetal Environment, Cancer Treatment etc.
Super-Aged Soc. & Hypertension	Frailty, Dementia and Social Resources
Next Generation Medical Care for Hypertension	Single Combination Drug, Medical App., Renal Denervation etc.
BP Control by "Japan Method"	"Hypertension Zero Town"
Convergence of Communicable (e.g. COVID19) & Non-Communicable Diseases	Lifestyle and Living Environment, Socio-economic Stress, Gender Differences, Disease Susceptibility etc.

See you in Kyoto in October 2022!

Hiroshi Itoh, MD PhD

Chair, ISH 2022 Kyoto #ISH2022 #Kyoto

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NEWS FROM COALITION FOR ACCESS TO NCD MEDICINES & PRODUCTS



Submitted by Molly Guy, Senior Program Officer, Noncommunicable Diseases

COALITION FOR ACCESS TO NCD MEDICINES & PRODUCTS

Globally, NCDs are described as an invisible epidemic, with morbidity and mortality that exceed that of communicable diseases. We know from many studies and our work in clinics and communities around the world, that hypertension and diabetes often co-exist. Living with uncontrolled diabetes can lead to increased rates of hypertension. For individuals with this co-morbidity there is a four-fold increase in mortality^[1].

To combat these issues, the [Coalition for Access to NCD Medicines and Products](#) remains committed to working with governments and partners to increase access to the life-sustaining medicines and products for people living with hypertension and diabetes. Our **NCD Forecasting initiative** (outlined in the Q2 newsletter) is helping governments identify and plan for their NCD medicine and product needs. The Coalition is also partnering with PATH on a new endeavor, the **Diabetes CarePak**, to explore ways to increase access to the necessary supplies for diabetes self-management through co-location, bundling, or "one-stop availability" innovations. This work is ongoing in Kenya and employs a human-centered design approach in partnership with the Ministry of Health. To learn more about this initiative, check out [this](#) recent blog.

NEWS FROM PAHO

HEARTS in the Americas launches updated App to estimate risk for heart attack, stroke, or cardiovascular death

By Dr. Pedro Ordunez and Dr. Andres Rosende

On June 18, 2021, [Hearts in the Americas](#) PAHO CVD-Hypertension program released its updated Cardiovascular Risk Calculator App that estimates individuals' 10-year risk of suffering a heart attack, stroke, or cardiovascular death.

Dr. Thomas A. Gaziano, Assistant Professor at Harvard Medical School, explained that in 2019, WHO published its new cardiovascular disease risk charts, recalibrated and validated using specific data available from 21 global regions. Those charts are the basis for the new App.

Dr. Carlos Tajer, Professor of Cardiology from Argentina, who led the process to transform the WHO color-coded tables into an online electronic calculator for computers and smartphones, presented the App. The variables used by the App including whether the user is a smoker or has diabetes, cholesterol levels, weight and height, and age and sex.

The new App, which can be downloaded for free, <https://www.paho.org/en/hearts-americas#CVD>, includes specific protocols for countries whose ministries of health have defined standardized treatment protocols for hypertension. Dr. Marc Jaffe from Kaiser Permanente, California, presented how to optimize the use of CVD risk assessment in clinical practice.

In the Americas, approximately 2.0 million people lose their lives annually due to CVD. Therefore, cardiovascular disease risk evaluation optimization is critical for both primary and secondary prevention, said Dr. Orduñez, PAHO advisor for HEARTS in the Americas.

HEARTS in the Americas, which provides a strategic approach for improving cardiovascular health in countries, supports ministries of health to strengthen hypertension and CVD management in primary health care settings. Currently, 16 countries in the Americas are implementing HEARTS, reaching a total of 739 health centers.

WEBINAR LINK

[HEARTS in the Americas introduces the new Cardiovascular Risk Calculator App - PAHO/WHO | Pan American Health Organization](#)



EDUCATIONAL RESOURCES SECTION

News from STRIDE BP

Submitted by Dr. George Stergiou, MD



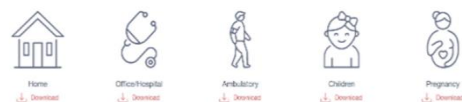
Chair, Prof. of
Medicine &
HTN, HTN
Center STRIDE-
7, Univ. of
Athens, Greece

STRIDE BP is an international scientific non-profit organization that provides guidance on the methodology and technology for accurate blood pressure evaluation. It is officially supported by the World Hypertension League, the International Society of Hypertension, and the European Society of Hypertension.

Accurate BP Monitors

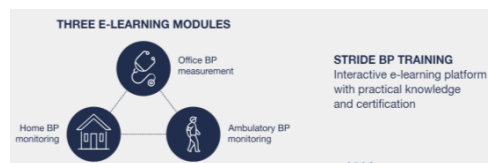
STRIDE BP provides information on **accurate blood pressure measuring devices**, by listing those that have fulfilled the validation criteria of international protocols. **Devices' lists** can be downloaded from the **STRIDE BP** website (www.stridebp.org) for office, home and ambulatory use for adults, children and pregnant women. These lists were developed through peer review of published evidence by its Scientific Advisory Board of 24 experts. To date its website has reached >130,000 views from >170 countries.

Validated blood pressure monitors



Certified BP Training

STRIDE BP provides a certified e-learning course for healthcare professionals with **3 interactive modules** dealing with office, home, and ambulatory blood pressure measurement, accessible to users through a link from the STRIDE BP website (www.stridebp.org/training).



Each module takes about 30-40 minutes to complete and the educational material is based on the latest ESH and ISH guidelines. After completing all 3 modules, learners may take an evaluation test to be awarded with a pass certificate. As with all the STRIDE BP services, the use of the e-learning platform will be free of charge.



News from ICCPR

Submitted by Sherry L. Grace, PhD, FCCS, FAACVPR, CRFC, Professor, Faculty of Health, York University Toronto, ON Canada



International Council of Cardiovascular Prevention and Rehabilitation (ICCPR)

The International Council of Cardiovascular Prevention and Rehabilitation (ICCPR), of which WHL is a member, will be launching their International Cardiac Rehab Registry (ICRR) this Fall. You can find more information on our website about the **data elements and their definitions**: (<https://globalcardiacrehab.com/ICRR-Variables-&-Data-Dictionary>), **registry policies** (<https://globalcardiacrehab.com/ICRR-Governance>), and **what is involved in participating** (<https://globalcardiacrehab.com/ICRR sites>).

We hope to engage phase II programs offering initial assessment, structured exercise (supervised or not) and one other form of risk reduction (e.g., nutrition or pharmacotherapy for hypertension management) in low-resource settings to be a part, and work with us to document and improve care quality.

If you would like to learn more, please express your interest in participating in our informative webinar on Monday November 15th at 9 am Eastern time, by emailing us at iccpr.icrr@gmail.com (future webinar dates will be available).

New WHO benchmarks help countries reduce salt intake and save lives

“[WHO Global Sodium Benchmarks for Different Food Categories](#)” is a guide for countries and industry to reduce the sodium content in different categories of processed foods. Around the world, consumption of processed food is a rapidly increasing source of sodium. Access the full article at [this link](#).

WELCOME TO NEW WHL MEMBER



Marianne F Leenaerts, MHSA, PhD

Co-Founder and Co-Director

Web: www.primaryaldosteronism.org

Although highly prevalent, primary aldosteronism is considered a rare disease. As a result, 95% of affected patients are neither diagnosed nor treated. This imbalance represents a major public health issue. Primary aldosteronism not only affects 25% of those with resistant hypertension, it actually accounts for a considerable proportion of what is otherwise believed to be “essential hypertension.” The Primary Aldosteronism Foundation is a 501(c)(3) tax-exempt charitable organization committed to creating the paradigm shift that will lead to optimum diagnosis and treatment of primary aldosteronism by raising awareness, fostering research, and providing support to patients and healthcare professionals worldwide. Together with a presentation of its governing structure and programs, the Foundation’s website (www.primaryaldosteronism.org) offers an online directory of specialists and centers of excellence worldwide; a step-by-step description of the diagnostic process and treatment modalities; and the latest advances in research, including publications and clinical trials.



UPCOMING MEETINGS OF NOTE

AHA Council on Hypertension

Submitted by Curt D. Sigmund, Ph.D. Council Chair
James J. Smith & Catherine Welsch Smith Chair of
Physiology, Medical College of Wisconsin

For the second consecutive year, the Hypertension Scientific Sessions will be held virtually on Sept. 27-29. Over the past two years we have grown a terrific collaboration between the Councils on Hypertension (COH) and Kidney in Cardiovascular Disease (KCVD). This year, we will offer a streamlined program over 3 days featuring advances in fundamental and clinical science and clinical practice. Given the hardships experienced by every healthcare worker, clinician scientist and basic researcher during the past 18 months of COVID-19, we offered as many opportunities for abstracts to be programmed in an oral format as possible. The submission of over 300 abstracts is a testament to the resilience of researchers and hypertension practitioners during this challenging period.

This year we start what I hope will be a new and exciting tradition for the conference, an opening keynote address from a Nobel Laureate. Our inaugural address is by Dr. Gregg Semenza who will present an overview of his research on Hypoxia-Induced Factors in Physiology and Medicine. We will hold an informative sessions on Single Cell Epigenomics and Transcriptomics, a session on Uromodulin, and an extensive offering in the Clinical Practice/Clinical Science (CPCS) tract. As always, one of the highlights of the conference will be our award presentations this year featuring three recipients of the 2021 Excellence Award for Hypertension Research: Alan K. Johnson (University of Iowa), Daniel Levy (NHLBI), and Jane Reckelhoff (University of Mississippi Medical Center). We will be working with the American Heart Association to ensure that our 2022 meeting will be face to face.

WSC 2021

13th World Stroke Congress
28-29 October 2021 | Virtual



At WSC 2021 you will have access to live sessions presenting the latest international updates and debates on different hot topics in the field, stroke dilemmas, joint sessions with other organisations, presentations from the RAISE meeting and a lot more! Please note that when registering to WSC 2021 you will have the option to [become a member of WSO and get a registration discount.](#)

See you in October!

www.worldstrokecongress.org

World Health Summit

October 24-26, Berlin & Digital

As we find ourselves in the second year of the COVID-19 pandemic, it is safe to say that the world is now a different place than it was before.

There are many take home messages from this global crisis: The importance of health for the individual as well as for societies, the relevance of science and an evidence-based approach for political decision-making, and the significance of global health in research, politics and the economy.

This year's World Health Summit will reflect on pressing topics such as:

- Pandemic Preparedness and Response
- Vaccines: Health as a Global Public Good
- Mental Health and COVID-19
- The Role of the European Union in Global Health

Please find information and registration [here](#).

LINKS OF NOTE

LINKS A global community for cardiovascular health

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



WHF Global Heart Paper of the Month
SARS-CoV 2 Infection (Covid-19) and Cardiovascular Disease in Africa: Health Care and Socio-Economic Implications [click here](#).



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) Newsletter: [Click here](#)



SCIENCE OF SALT WEEKLY: [Click here](#)
Publication of weekly Medline searches related to dietary sodium



KNOWLEDGE ACTION PORTAL (KAP)
WHO's platform for NCD info, [Click here](#)



HEARTS CVD RISK CALCULATOR APP: [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

World Heart Day

September 29, 2021

[click here for information](#)

Hypertension Council Sessions 2021

September 27-29, 2021

Virtual Conference

[click here for registration](#)

World Health Summit

October 24-26

Berlin & Digital

[click here for registration](#)

World Stroke Day

October 29, 2021

[click here for information](#)

13th World Stroke Conference (WSC)

October 28-29, 2021

Virtual Conference

[click here for registration](#)

AHA Scientific Sessions

November 13-15, 2021

Boston, MA

[click here for registration](#)

World Heart Summit

November 22, 2021

Mombasa, Kenya and virtual

[Click here for registration](#)

World Congress of Nephrology

February 24-27, 2022

Kuala Lumpur, Malaysia

[click here for registration](#)

PreHT 2022

April 7-10, 2022

Zagreb, Croatia

[click here for information](#)