



WHL • NEWSLETTER

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

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President's Column



Dear colleagues,

It is a special privilege to represent you as your President for the next three years. WHL has a legacy of outstanding leaders from Dr. Tom Strasser down to my predecessor, Dr. Xin-Hua Zhang. Dr. Zhang

set a high bar for leadership during her term as President and I look forward to taking advantage of her advice as immediate past President. I am also fortunate to be supported by a great President-elect, Dr. Gianfranco Parati. WHL has a stellar globally-representative Executive Committee (EC), consisting of myself (USA), Drs. Zhang (China) and Parati (Italy), Secretary General, Dr. Bader Almustafa (Saudi Arabia), Vice-President, Dr. S.N. Narasingan (India), and Treasurer, Dr. Markus Schlaich (Australia). Our Board of Directors includes the EC members, Dr. Leilani B. Mercado-Asis (The Philippines), Dr. Mario Fritsch Neves (Brazil), Dr. Mayowa Ojo Owolabi (Nigeria), Dr. Rajdeep Padwal (Canada), and Dr. Michael Weber (USA). In addition, we have ex-officio BoD representation from the World Health Organization (WHO), Pan American Health Organization (PAHO), Resolve to Save Lives (RTSL), and the International Society of Hypertension (ISH). Finally, Dr. Liu Lisheng (China), Dr. Norman Campbell (Canada), and Daniel Lackland (USA) serve as Special Advisors to the President.

My goal as your President is to serve WHL members in our shared aspiration to prevent and control high blood pressure. We are working on

a new WHL website and a refreshing of our logo, both subject to EC and BoD approval. I have asked Drs. Parati, Schlaich, Narasingan, and Lackland to assist me in revitalizing our WHL corporate relations and will be asking others to assist in ensuring coordination and collaboration between our WHL regional offices. I thank Dr. Lackland and Ms. Trifault for their continued, diligent stewardship of the quarterly WHL Newsletter. I also thank Dr. Weber for his careful oversight of WHL publications planning and facilitation. We are fortunate to have great publication partners in Mr. Sebastian Fruehwirth at Nature Publishing and Dr. Michael Stowasser, Editor-in-Chief at the *Journal of Human Hypertension* (our official journal). I would be remiss if I did not mention our outstanding partners at WHO, including Drs. Taskeen Khan, Slim Slama, and Dr Bente Mikkelsen, at PAHO, including Dr. Pedro Ordunez, at RTSL, including Drs. Andrew Moran, Renu Garg, and Tom Frieden, at the CDC, including Dr. Qaiser Mukhtar and Sushma Acharya, at the ISH, including Dr. Bryan Williams, and at our many other professional organization partners.

My thanks to all of you who made our WHL Board and Council meeting in Kyoto such a great success. It was lovely to see many of you in person at the meeting and at the President's Dinner. We had two very productive WHL joint scientific sessions in Kyoto and another at the American Heart Association Scientific Sessions in Chicago. My first few weeks as President have been busy with meetings in Kyoto, a WHL Presidents welcome address at the 2022 Hypertension Summit in Amritsar, India, and a presentation at the HOLD Medicon 2022

conference, in India. I look forward to presenting at the upcoming China 2022 Hypertension Conference, the 6th Big Sky Cardiology Update Conference 2023 in Saudi Arabia, and the 28th Joint Philippine Society of Hypertension and Philippine Lipid and Atherosclerosis Society Annual Convention.

As we plan for the future, I encourage you to provide your advice. What additional WHL resources or initiatives would be most useful for you? I also ask for your support and help during the next three years. Together, I hope we can make important contributions to improvements in the prevention and control of high blood pressure, worldwide.

Paul

Paul K. Whelton, MB, MD, MSc

Note from the Editor



The final quarter of 2022 has been exceptionally eventful for this Issue of the Newsletter. The WHL completed three joint sessions described in this issue, at the International Society of Hypertension meeting in Kyoto, the World Stroke

Congress in Singapore, and the American Heart Association meeting in Chicago.

The Newsletter congratulates Professor Xin-Hua Zhang on her WHL leadership and welcomes Professor Paul Whelton as he begins his presidency. With high enthusiasm, this Issue reports the high impact accomplishments of the membership and partners in global hypertension control. As well, evidence-based considerations for salt intake and blood pressure measurement are described in detail. The Newsletter wishes everyone a true season of peace and good will and looks forward to joining ranks for good hypertension health for all.

Dan

Daniel T. Lackland, DrPH

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WHL BOARD MEETING IN KYOTO

The WHL Board/Council Meeting was held on October 12, 2022 in Kyoto, Japan and via Zoom, in conjunction with the International Society of Hypertension Congress.

Dr. Xin-Hua Zhang, WHL President 2019–2022, reported on the highlights of her term of office:

- Welcomed the *Journal of Human Hypertension* as the new official WHL journal
- Held annual themed international meetings co-organized with member organizations
- Produced policy statements on Sodium Reduction and Call to Actions on hypertension control globally and in Africa
- Promoted validated BP measurement devices
- Promoted implementation of HEARTS and the use of automatic BP devices at clinics and at home
- Identified global champions in improving hypertension control through the Excellence Awards



Dr. Zhang welcomed Dr. Paul Whelton as the new WHL President. Dr. Whelton thanked Dr. Zhang for her tremendous contributions during a difficult period of time and thanked the Board members for their support. He summarized WHL's history as focused on the implementation of policy in low- and middle-income countries, in partnership with other hypertension organizations. He highlighted recent major initiatives in China and Sub-Saharan Africa, and a desire to work more closely with WHL members to promote hypertension detection, prevention, treatment and control. He noted that priorities over the next three years will be continuing with population-based research toward implementation and application of scientific method to hypertension issues.



WHL Board Members meet at ISH in Kyoto.

JOINT SESSIONS AT ISH KYOTO

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

In addition to a successful Board/Council meeting in Kyoto, WHL co-sponsored two scientific sessions. The first, which was jointly sponsored by the WHL, ISH, and Resolve to Save Lives (RTSL), focused on current challenges related to sodium reduction worldwide. The session was chaired by Drs. Michael Weber and Xin-Hua Zhang, and featured a presentation by Dr. Daniel Lackland (WHL) on the importance of

dietary sodium reduction even when patients are being treated with diuretics and a presentation by Dr. Paul Whelton (WHL) on adherence to sodium reduction in behavioral intervention studies, feeding trials, and national sodium reduction programs. A lively discussion ensued, with questions regarding the validity of sodium reduction reports from national programs, the role of potassium replacement salts in strategies to lower dietary sodium intake, and the application of public policy approaches to reducing the addition of sodium during food processing and preparation. The second session was jointly sponsored by the WHL, ISH, and the Lancet Commission on Hypertension (LCH). It focused on the clinical validity and precision of automated blood pressure measurement devices (BPMDs). It was chaired by Drs. Paul Whelton (WHL) and Gianfranco Parati (WHL) and featured an introduction to the topic by Dr. Parati. It included presentations on minimal standards for clinical validity of BPMDs by Dr. James Sharman (LCH), ways for clinicians and the public to determine the clinical validity of BPMDs by Dr. George Stergiou (ISH), policy approaches to ensuring BPMD clinical validity by Dr. Pedro Ordunez (Pan American Health Organization), and the need to ensure clinical validity of BPMDs being sold by Dr. Aletta Schutte (ISH). The presentations were followed by an informative discussion of the topic. There was consensus that there has been considerable progress during the past decade but much more remains to be accomplished.

JOINT SESSIONS AT WSO Singapore

Submitted by Prof. Daniel T. Lackland, DrPH

High Blood Pressure has been identified as a high priority for global prevention of noncommunicable diseases (NCDs). However, the global population assessment of blood pressure levels represents a major public health logistical dilemma. The assessment of stroke provides a more reasonable and practical indicator of hypertension control. This theme was addressed at the WHL-WSO Joint Session at the 2022 World Stroke Congress in Singapore. The Session, chaired by Professors Valeria Caso and Daniel Lackland, provided strategies and approaches to implement metrics

including stroke mortality and morbidity as indicators of high blood pressure control.

Speakers and topics included:

Stroke Outcomes in Sub-Sahara Africa – Professor Mayowa Owalabi

Assessing Stroke Outcomes in Brazil and South America – Professor Sheila Martins

Seven-action approaches for the management of hypertension in Asia – Professor Kazuomi Kario

Roadmap for Hypertension and the overall Global Plan – Professor Daniel Lackland

The Session also provided the forum for presenting Professor Michael Brainin with the 2022 WHL Excellence Award for Diplomacy and Advocacy for Population Hypertension Risk Reduction (see photo below).



Prof. Brainin receives WHL Excellence Award at WSO 2022. (l-r: Prof. Michael Brainin, Prof. Daniel Lackland)

JOINT SESSIONS AT AHA

World Hypertension League (WHL) joint session at the American Heart Association (AHA) Scientific Sessions 2022, Chicago

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

The WHL, Pan American Health Organization (PAHO), and Public Health Foundation of India (PHFI), jointly sponsored a scientific session at the recently held AHA Scientific Sessions in Chicago. The session was focused on general population hypertension treatment and control. The first presentation was by Dr. Pedro Ordunez (PAHO), who reviewed the rationale, organizational structure, progress in implementation, and longer-term goals for the HEARTS in the Americas program. Next, Dr. Paul Whelton (WHL) discussed “the way forward”, during which he emphasized the need for

structured implementation programs that build on successful efficacy trial results. He identified the HEARTS model as a good example of the type of evidence-based approach that has proven to be successful in high-, middle-, and low-income countries. The final speaker was Prof. Dorairaj Prabhakaran (PHFI), who discussed the role of digital health strategies for management of chronic diseases and disorders such as high blood pressure.

During a subsequent discussion period, there was general consensus that use of simple algorithms for lifestyle improvement and pharmacological management provide a much better opportunity to control hypertension compared with approaches that focus on precision medicine management.

2022 EXCELLENCE AWARD WINNERS

Prof. Sohel Reza Choudhury, Winner, 2022 WHL Norman Campbell Excellence Award in Population Hypertension Prevention & Control



Prof. Sohel Reza Choudhury receives Excellence Award from WHL President Prof. Paul Whelton in Kyoto, Japan.

Priorities in Hypertension Management

Submitted by Prof. Sohel Reza Choudhury

Raised blood pressure is the most important risk factor for the global burden of disease. Lack of awareness, absence of screening systems, inadequate numbers of health care workers and ill prepared facilities for chronic diseases such as hypertension care are resulting in large number of undetected and uncontrolled hypertensive patients in Bangladesh. We at National Heart Foundation of Bangladesh are working closely with the Ministry of Health to implement several proven strategies for high blood pressure control at the primary care level with a grant from Resolve to Save Lives since January 2021. Introduction of community-based screenings, a team-based approach, adoption of standard treatment protocol, ensuring adequate drug supply and

monitoring by digital applications have been introduced at 54 sub-district hospitals covering an adult population of one million. As of October 2022, about 125,000 hypertensive patients have been registered with a blood pressure control rate of 59%. Distance to hospitals and out of stock drugs are identified as challenges in retention of patients. Multi month prescriptions and refilling of drugs from community clinics for patients have been introduced. We are expanding this program to 180 sub-districts of Bangladesh in the coming year.

Prof. Empar Lurbe, Winner, 2022 WHL Claude Lenfant Excellence Award in Population Hypertension Control



Prof. Empar Lurbe, Head of Pediatric Department, Hospital General Valencia, Full Professor of Pediatrics, University of Valencia, Valencia, Spain

Cardiovascular disease to which hypertension is the major contributor has been dubbed, the largest epidemic known to mankind. Although

most of the adverse outcomes occur in adulthood it has become clear that high BP is a life course problem that can become evident in early life. While few would dispute the importance of taking effective steps to identify and manage this condition in middle-aged and elderly people, relatively little attention has been paid to the problem of high BP in children and adolescents. The necessity for a definitive exercise to increase the bulk of knowledge in the prevention, diagnosis and treatment of high BP in children and adolescents is absolute. I am honored to have been awarded the 2022 WHL Claude Lenfant Excellence Award in Population Hypertension Control which encourages me to continue working on concerted actions such as guidelines (JHypertens 2009 and 2016) and international projects (HyperChildNET, COST Action 19115) introducing changes in clinical practice that will provide new important evidence over the next several years.

SODIUM REDUCTION NEWS

Opportunities to turbo charge salt reduction strategies

Submitted by **Professor Jacqui Webster** | PhD, RPHNutri; Head, Public Health Advocacy and Policy Impact, Food Policy; Centre Director, WHO CC Salt Reduction; Professor, Faculty of Medicine, UNSW Sydney; **The George Institute for Global Health** | AUSTRALIA

Salt reduction strategies are a World Health Organisation ‘best buy’ to reduce the growing burden of non-communicable diseases globally (1). The most recent review revealed that whilst 96 countries now have some sort of salt reduction program in place, few have managed to achieve significant reductions in salt consumption (2). Reasons for this are varied and include lack of political commitment combined with the fact that it is nigh on impossible for people to choose to eat low salt diets when salt is deeply ingrained in cultures or ubiquitous in the food supply. Two promising opportunities have the potential to reverse this. Firstly, the WHO Global Sodium benchmarks (2021) set out challenging but feasible salt level targets that all countries could easily adopt (and ideally mandate) to reduce salt in processed foods and meals (3). Secondly, new trial evidence directly linking the use of reduced sodium (potassium enriched) salts to reduced death and disease means we must now seriously consider policy options for increasing the uptake of this low-cost public health intervention (4).

1. World Health Organization. Global action plan for the prevention and control of noncommunicable disease 2013-2020 Geneva: World Health Organization; 2013 [Available from: http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf.
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3. World Health Organization. Global Sodium Benchmarks for different food categories. 2021 <https://www.who.int/publications/i/item/9789240025097> (accessed 06.12.22).
4. Neal B, Wu Y, Feng X, Zhang R, Zhang Y, Shi J, et al. Effect of Salt Substitution on Cardiovascular Events and Death. *The New England Journal of Medicine.* 2021;385(12):1067-77.

Addressing the ‘sodium controversy’

Norm RC Campbell MD, Daniel T Lackland DrPH, Juliet Guichon SJD, ICD.D, Marcelo Orias MD PhD, Paul K Whelton MB MD MSc

Despite increasingly strong evidence from randomized controlled trials, high-quality cohort studies and consistent recommendations from mainstream scientific organizations, an aura of controversy remains around the benefits of reducing dietary sodium (1). Randomized controlled trials show a linear reduction in blood pressure and cardiovascular disease down to a sodium intake of 800 mg/day and 2300 mg/day respectively. High quality cohort studies of healthy populations that assess dietary sodium intake with 2 or more 24 hr. urine collections show a linear association with cardiovascular disease down to a sodium intake of 1846 mg/day. These studies do not define a lower limit where sodium intake does not produce further benefit. Nevertheless, despite the evidence, reviews of the science and recommendations from small groups of scientists continue to warn of harms from reducing dietary sodium and, some even claim increased cardiovascular disease can occur from reducing dietary sodium below 3000 mg/day (2).

There have been strong critiques of these controversial ‘reviews’ of the evidence (3, 4). It is now well documented that low quality research study designs and methods can produce spurious results of harms from lower sodium intake and notably many of the scientists suggesting harms from lower dietary sodium were investigators in these low-quality studies (3-5). One of the main studies with a likely spurious result related to the use of a spot urine sodium and estimating equation to assess individual sodium intake is the PURE study. Repeated requests to independently examine and more thoroughly analyze PURE study data have been declined by the lead investigator of the PURE study, Dr S Yusuf. Also concerning is increasing documentation that controversial publications on dietary sodium contain false and misleading statements and claims about dietary sodium. This raises ethical issues related to scientific conduct that university administrators, editors, reviewers, funding bodies and ethics committees need to be aware of and take appropriate actions.

The World Hypertension League (WHL), International Society of Hypertension (ISH), and Resolve to Save Lives (RTSL) have been active in reviewing and promoting best evidence and research methodology

on dietary sodium. To reduce controversy related to low quality research the WHL, ISH and RTSL have just developed a policy statement that strongly recommends to not conduct, fund, or publish research studies that use spot urine samples with estimating equations to assess individuals’ sodium (salt) intake in association with health outcomes. This policy statement is available to health and scientific organizations to review and support before Jan 5, 2023, to be included in the publication, but support can still be provided after that date. Currently the following organizations have already provided their support: Dr Bindu Menon Foundation, Chinese Hypertension League, Consensus Action on Salt, Sugar and Health, Hypertension and Nutrition core group of India Association for Parenteral and Enteral Nutrition, Mongolian Society of Hypertension, Nigerian Hypertension Society, Philippine Society of Hypertension, Primary Aldosteronism Foundation, School of Medicine, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil, The WHO Collaborating Centre on Population Salt reduction at the George Institute for Global Health, World Action on Salt, Sugar and Health.

The WHL, ISH, Resolve to Save Lives, and over seventy partner organizations developed a fact sheet and call to action to help clarify critical facts and accelerate efforts to reduce dietary sodium (in the references below). Organizations interested in obtaining or supporting the policy statement or the call to action can do so by contacting Dr. N Campbell (ncampbel@ucalgary.ca). Since publication the following organizations have added their support: World Health Organization-Regional Office for the Eastern Mediterranean, Canadian Society of Internal Medicine, and the Libin Cardiovascular Institute.

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2. O’Donnell M, Mentz A, Alderman MH, Brady AJB, Diaz R, Gupta R, et al. Salt and cardiovascular disease: insufficient evidence to recommend low sodium intake. *Eur Heart J.* 2020;41:3363-73.
3. Campbell NRC, He FJ, McLean RM, Cappuccio FP, Woodward M, GA M. Dietary sodium and cardiovascular disease in China: addressing the authors’ response, statements and claims. *J Hypertens.* 2022;40:1831-6.
4. Cappuccio FP, Campbell NRC, He FJ, Jacobson MF, MacGregor GA, Antman E, et al. Sodium and health: old myths, and a controversy based on denial. *Curr Nutr Rep.* 2022;11:172-84.
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WORLD HYPERTENSION DAY REPORTS

Benin City, Edo State, Nigeria



On World Hypertension Day 2022, the Health Heart Community Project organized by Team Chris Charis Concept in conjunction with the Dynamic Youth of the Household of Peace held a blood pressure screening. Hypertension Awareness educational materials were provided to attendees and 45 individuals had their blood pressure taken. Of those, 10 percent were found to have elevated blood pressure and 5 percent were previously unaware of their high blood pressure numbers.



Isfahan, Iran

Hypertension Research Center Cardiovascular Research Institute (ICRI)

Submitted by Alireza Khosravi, Professor of Cardiology, Head of Hypertension Research Center, Isfahan Cardiovascular Research Institute, Isfahan University of Medical Sciences, Isfahan, Iran

The Hypertension Research Center conducted the following blood pressure awareness outreach activities on WHD 2022:

- Requested and received educational pamphlets and posters from Vice Chancellor for Health of Isfahan University of Medical Sciences

- Follow-up of hypertensive patients in our hypertension clinic (BP measurement, patient training about prevention, treatment, and control of hypertension orally and with booklets and brochures).
- Blood Pressure Screenings in the general population during the month leading up to WHD, measuring blood pressure of 77 asymptomatic personnel and the general population during this period (30 ICIR personnel and 47 general population).



Results

- 20.8% (29.8% in the general population and 6.7% in personnel); Proportion of those screened with elevated blood pressure (>140 systolic/>90 diastolic)
- 45.5% (70.2% in general population and 6.7% in personnel); Proportion of those screened who were being treated with antihypertensive medications
- 68.6% (66.7% in patients and 0% in personnel); Proportion of those screened being treated with antihypertensive medications and whose blood pressure readings were below 140 mmHg systolic and below 90 mmHg diastolic

Monthly BP measurement

Proportion of participants who measured their blood pressure 0, 1-4, 5-9 and >9 times a month was 44.2%, 50.6%, 2.6% and 2.6%, respectively.

COVID19 Status

Among 77 participants, 27 (35.1%) reported they had a positive PCR test for COVID-19 (31.2% with mild symptoms, 2.6% without any symptoms, and 1.3% with severe symptoms and hospitalization). Vaccination for influenza was performed in 13 (16.9%) participants. Home

measured blood pressure equal to or more than 130/85mmHg before and during lock-down for COVID-19 was 29.9% and 28.6%, respectively. Regarding night sleep status during COVID-19 lock-down 2 (2.6%) of participants reported their night sleep has become better than usual while 16 (20.8%) reported it as worse than usual.



Blood pressure screening at the Hypertension Research Center

JHH - OFFICIAL WHL JOURNAL

Journal of
Human Hypertension



SPRINGER NATURE



BIHS
British and Irish Hypertension Society

Hypertension arising after 20 weeks of gestation: gestational hypertension or masked chronic hypertension?

Submitted by Prof. Gloria Valdés, Associate Editor
Journal of Human Hypertension

Much has been advanced regarding the pathophysiology, diagnosis and prevention of the different forms of hypertension in pregnancy, but we continue to need new tools to those already in use (biomarkers, doppler ultrasound) to predict

the incidence of preeclampsia (PE), which confers to mother and child greater risk of short and long-term complications, by identifying their early subclinical phases in order to increase the frequency of controls and introduce preventive interventions. For this reason I would like to highlight the paper "[Hypertension arising after 20 weeks of gestation: gestational hypertension or masked chronic hypertension?](#)" by Espeche et al. from La Plata, Argentina, in the July issue of the [Journal of Human Hypertension](#).

The previous experience of this group led them to routinely add ambulatory blood pressure monitoring (ABPM) to office determinations (OBP) in all high-risk pregnancies from January 2016 onwards. The current observational study analyses the diagnostic value of combining OBP and ABPM before 20 (> 10 - <20. median 15) weeks of gestation with the maternal outcome of PE in the consecutive 227 women with high-risk pregnancies evaluated up to March 2020. They identified 67 (29.5%) cases who had high OBP+ABPM or received antihypertensives as Chronic Hypertensives. Of the remaining 160, 10% had normal OBP and ABPM and subsequently developed True Gestational Hypertension, which did not increase the risk of later PE as compared to normotensive women. Lastly, and most importantly, 23 (20.9%) of untreated pregnant women presented with normal OBP and hypertensive ABPM and were characterized as Masked Hypertension; according to routine obstetric controls these subjects would have been classified as gestational hypertension but under the new strategy had the greatest absolute risk and OR for PE of all groups (Table 1).

Predicted diagnosis at < 20 weeks (n)	(121)	(16)	(67)	(23)
	Uncertain	Uncertain	Confirmed	Confirmed
Diagnosis at delivery	Normotension	True Gestational Hypertension	Chronic Hypertension	Masked Hypertension
Absolute risk of PE at delivery (%)	15.7	2.5	32.8	43.5
Adjusted odds ratio PE	1	0.72	2.81	4.47

The short-term purpose of presenting this study to the global network of the World Hypertensive League is to underscore the importance of early

detection and risks of PE associated with masked hypertension, and to thereby stimulate the early combined assessment of OBP and ABPM in high-risk pregnancies in clinical settings of high-income countries and reference centres of middle- and low-income settings, giving a green light to preventive treatment with aspirin in chronic and masked hypertension.

In the medium-term, further studies are necessary to provide robust confirmation of the value of dual determination of office and ambulatory blood pressure in the first half of gestation. Future work should compare normal pregnant women with those at high risk of PE (age, previous complicated pregnancies, assisted reproduction, multiple pregnancies, altered Doppler at 11-13 weeks), chronic hypertension, renal disease, obesity, metabolic, immunological and PE and premature CVD in first degree relatives).

NEWS FROM OUR PARTNERS

COALITION FOR ACCESS TO NCD MEDICINES & PRODUCTS



**COALITION
FOR ACCESS**
TO
**NCD MEDICINES
& PRODUCTS**

Submitted by Sara Gray,
Senior Program Assistant,
Noncommunicable
Diseases

Alongside the UN General Assembly in September 2022, the Coalition for Access to NCD Medicines & Products celebrated its

5th anniversary with a gathering of members and special guests for a hybrid meeting and event. The global, multisectoral Coalition for Access to NCD Medicines & Products advocates and provides technical support and tools to strengthen supply security for people living with noncommunicable diseases (NCDs). Over the last five years, the Coalition has taken a systems approach to access, acting across four priority areas – advocacy, finance and costing, capacity building and supply management. The Coalition has implemented programs like the NCD Forecasting Program at regional and national

levels, as well as raised awareness and advocated for change leveraging key global fora, raising the unique barriers to access for PLWNCDs, releasing various publications and contributing a multi-sectoral perspective and technical knowledge to strategy-setting initiatives – such as the Global Diabetes Compact.

To celebrate its milestone anniversary, Coalition members gathered in-person and virtually for a two-day meeting during the UN General Assembly week, graciously hosted by Vital Strategies in New York City. Members reflected on Coalition accomplishments and deliberated over the strategy for the next five years. After the first meeting day, additional guests joined for a celebratory anniversary lunch. Dr Temo Waqanivalu, Integration Lead for NCDs, WHO provided the keynote address. Dr. Ephantus Maree of the Kenya Ministry of Health gave a toast celebrating the Coalition's five years and noted the immense contribution of the NCD forecasting program (developed by the Coalition) for Kenya. As a result of the NCD forecasting program, Kenya was able to develop five year costed forecasts for NCD medicines and products for the first time. Jeff Bernson, Chief Programs and Innovation Officer at PATH, and Jose Luis Castro, President and CEO of Vital Strategies, also gave speeches. Vanessa Peberdy of IFPMA gave a toast noting the importance of the inclusive nature of the Coalition, while David Heller of the Arnhold Institute for Global Health emceed the event. Speakers highlighted the unique contribution of the Coalition and noted the important role the Coalition can play in addressing access to NCD medicines and products.

The Coalition and secretariat thank all the members and guests who attended and have contributed to its success over the last five years. We look forward to continuing our efforts into the new year.

To learn more about the Coalition or to inquire about membership, please email Sara Gray at srgray@path.org. Check out our website at coalition4ncds.org/ or follow us on Twitter at [@CoalitionNcd](https://twitter.com/CoalitionNcd).

RESOLVE TO SAVE LIVES



New facility-level hypertension indicators from WHO

WHO's new [NCD facility-based monitoring guidance for NCD patient and program monitoring](#) includes critical facility-level hypertension indicators that will support patient care and follow-up:

- Availability of hypertension medications
- Availability of a functional (validated and if applicable, calibrated) blood pressure device
- Blood pressure control among people with hypertension
- Loss to follow-up

Members of the Resolve to Save Lives hypertension team contributed to the hypertension indicators, which are part of a larger set of standardized indicators that also cover other NCDs.

Hypertension control package for DHIS2

The world's largest health information system, DHIS2, now supports national-scale hypertension control programs.

Health care workers at the primary care level can use the standard DHIS2 Tracker Android application to manage their patients' blood pressure measurements, record medications and schedule follow-up visits, saving time and reducing paperwork and loss to follow-up. In Nigeria, it is already used daily to track more than 18,000 hypertension patients at more than 100 facilities, with positive feedback from health care workers. Watch a short video on the use of DHIS2 for hypertension in Nigeria [here](#).

[Just like in the Simple App](#), the data recorded using the DHIS2 tracker populates a dashboard in real-time, showing key indicators for hypertension control program management, including how many patients have their blood pressure controlled and how many are returning for care regularly.

The package was developed by the Nigeria HISP team for the Nigeria Federal Ministry of Health, in collaboration with University of Oslo, WHO Nigeria, and the World Health Organization. Resolve to Save Lives is a supporting partner. ■

PAHO HEARTS in the Americas Initiative



Global Events and Introduction in the United States

Submitted by Vicky Kolar and Karen Southard, Carolinas Center for Medical Excellence; Jennifer Price, Southern Medical Association; Cintia Lombardi and Pedro Ordunez, Pan American Health Organization; Donald DiPette, Envoy for Latin America and the Caribbean, USC

[HEARTS in the Americas](#) is the Pan American Health Organization's flagship initiative to improve hypertension control and prevention of cardiovascular disease through the adoption of a comprehensive model. It is currently being implemented by Ministries of Health of 25 countries in the Region of the Americas and now is being introduced to several states within the United States of America (U.S.).

The initiative was present at several key global events, including the International Society of Hypertension 2022 Meeting (ISH 2022), in Kyoto, Japan; the World Hypertension League annual meeting; the World Cardiology Congress & Brazilian Cardiology Congress, Rio de Janeiro, Brazil; the Argentine Congress of Cardiology, Buenos Aires, Argentina; and the American Heart Association Scientific Meeting, Chicago, USA.



Two webinars were produced to underscore messages of the [special issue of the Pan American Journal of Public Health](#) dedicated to the *HEARTS in the Americas*. The first ([Use HEARTS for every heart, everywhere](#)), held on occasion of World Heart Day 2022, highlighted the latest trends in population hypertension control and its association with CVD mortality in the Americas, and key interventions for strengthening national programs tackling CVD. The second webinar ([Economic case for good investment](#)) held on October 27, and in observance of World Stroke Day 2022, focused on the crucial economic implications of implementing HEARTS in the Americas, and presented a compelling case for government ownership and financial investment in hypertension control programs.

A new exciting initiative involves introducing HEARTS to the U.S. Recent U.S. national data demonstrates an ominous decrease in hypertension control rates from a high of approximately 55% in 2014 to approximately 45% in 2017 based on a blood pressure of less than 140/90 mmHg. This data prompted the U.S. Surgeon General to issue a national “Call to Action to Control Hypertension” in 2020, which included three goals: 1. Make hypertension control a national priority; 2. Ensure that the places where people live, learn, work, and play support hypertension control; 3. Optimize patient care for hypertension.

In response, the leadership of several stakeholders including consultants from the HEARTS in the Americas, the Carolinas Center for Medical Excellence, partner to the Health Quality Innovations Network which serves as the Centers for Medicare and Medicaid Quality Improvement Organization for the states of Kansas, Missouri, South Carolina, and Virginia, and the Southern Medical Association came together and discussed an effort to introduce HEARTS to the U.S.

The collaboration created the “urgency and burning platform” of the problem and discussed opportunities for program adoption and implementation and importantly the integration of HEARTS within primary care organizations across South Carolina. The project began in the spring of

2022 and included direct outreach, a “lunch and learn education series”, and technical assistance workshops and has already expanded to three additional states, Kansas, Missouri, and Virginia.



The lunch and learn education series provides participants the opportunity to engage with international HEARTS subject matter experts, learn about the HEARTS Technical pillars, hypertension clinical pathway, critical drivers of hypertension control in primary care, utilization of the cardiovascular risk assessment in hypertension, and opportunities to address health care disparities. As the HEARTS initiative continues to evolve across the U.S., it will be a key program to answer the Surgeon General’s “Call to Action”.



ISH NEWS



International Society of Hypertension



Submitted by Prof. Bryan Williams, MD, FMedSci, Chair of Medicine UCL and President, International Society of Hypertension

I have just returned from the ISH congress in Kyoto Japan, during which it was wonderful to have face-to-face meetings once again with many colleagues from around the world. The programme was very stimulating and it was good to see the vibrant discussion that makes a live conference so special. The close of the conference also heralded a very special moment for me as I begin my term as President of the International Society of Hypertension for the next 2 years. A key mission of my Presidency will be to continue the strong partnership between the ISH and the WHL

and I look forward to working very closely with Paul Whelton, the new President of the WHL.

It is an important time, as the world emerges from a pandemic, for us to refocus attention on non-communicable diseases and the powerful impact of poorly detected, treated and controlled hypertension on the global burden of disease.

In terms of my specific focus as the new ISH President, beyond the importance of partnerships, I have identified three areas of focus;

(i) ISH Academy; which will collate a number of resources to develop a high quality educational platform for clinicians and researchers in hypertension;

(ii) ISH Focus; establishing a small number of expert groups with global representation in key emerging areas of hypertension research and development, such as novel remote monitoring/therapeutic devices; emergent therapeutics such as RNA silencing and biologics; and data science and the opportunities of the big data revolution for hypertension research and models of care.

(iii) ISH Inform; which is beefing up our comms/social media outputs and will develop a patient-focused guideline to empower patients to seek the appropriate level of hypertension care, wherever they are in the world.

I look forward to working with colleagues at WHL wherever there are synergies.

ISH 2022 Kyoto Hypertension Zero Declaration, Position Papers / Publications

The ISH2022 KYOTO Hypertension Zero Declaration was signed by Professors Hiroshi Itoh (Chair, ISH Kyoto 2022 Meeting) and Maciej Tomaszewski (ISH President 2020-2022) during the Closing Ceremony on 16th October 2022 and published online as a co-publication between [Cardiovascular Research](#) and [Hypertension Research](#) on 27th October 2022.

Find out more about ISH [Position Papers and Publications](#).

Monthly E-Bulletin and Hypertension News



14 November 2022

Introduction from the ISH Secretary



ISH is very proud of its successful ISH2022 congress in Kyoto! Despite the issues with the pandemic and the visa restrictions in Japan, which were removed on the day before the ISH congress started, those who attended enjoyed an excellent scientific program with outstanding sessions, special social events reflecting the Japanese culture, and of course the wonderful city of Kyoto. At last, we had a 'physical' ISH meeting and a wonderful opportunity for all of us to meet again and exchange views on our mutual interests!

An important moment in the meeting was the announcement of the 2022 ISH awards! ISH is very proud of its list of awards for

We invite you to read:

- The latest issue of the monthly [ISH E-Bulletin](#) with an introduction from Professor George Stergiou ISH Secretary 2022-2024, ISH2022 news and Hypertension Zero Declaration, 2022 awardees, new Council Members, Position Papers and much more.
- The fall 2022 issue of Hypertension News featured a profile on hypertension research at Université Laval, a commentary on hidden sodium in paracetamol formulations by former ISH president Alta Schutte, and a Learning the Ropes feature on high blood pressure in the very old featuring contributions from Paul Whelton, Kazem Rahimi and Paul Muntner, Bo Carlberg, and Hiromi Rakugi. The issue can be downloaded [here](#).

Visit www.ish-world.com for further information on the work of the Society, or to submit your membership application, or follow us on Twitter [@ISHBP](#).

SAVE THE DATE – ISH 2024

www.ish2024.org



WSO NEWS

Singapore Success for World Stroke Congress

It was a pleasure to welcome participants from all over the world for the 14th World Stroke Congress that took place in Singapore & Online from 26-29 October 2022! We united in-person after 2 years of virtual meetings as *One Voice for Stroke* and spent 4 inspiring days officially opened with a video address by WHO Secretary General Dr Tedros Ghebreyesus. The program was filled with the latest discoveries in stroke science, research, and technology. Together we connected, collaborated, and advanced our medical practice. For over 2000 registered delegates, the on-site Congress was a great reminder of the value of in-person collaboration, and for the 2400 joining remotely an opportunity to engage from wherever they were in the world – and reduce their carbon footprint at the same time. While online participants were able to access key sessions and engage in active discussions, in person delegates didn't have to worry about session clashes, knowing that they could catch up online for another three months via the [Congress online conference platform](#).



A joint session with the WHL and WSO entitled “The Global Use of Stroke as an Indicator of Population Hypertension Control” saw presentations highlighting stroke and hypertension outcomes from Asia, Brazil and South America, and sub-Saharan Africa, and shared the “Roadmap and global plan for hypertension.” At a session to introduce the WSO’s new Implementation Taskforce, Dr Taskeen Khan, WHO lead for cardiovascular disease implementation in the NCD management unit spoke on the WHO HEARTS initiative saying,

“HEARTS has demonstrated feasibility and effectiveness in managing hypertension in primary healthcare, which will reduce morbidity and mortality from stroke and ischaemic heart disease – the world’s biggest killers.”

Minutes Can Save Lives – World Stroke Day 2022

Hot on the heels of the World Stroke Congress, on Oct 29th WSO moved its attention from advancing stroke science to improving public awareness of the key signs of stroke and the critical importance of saving #Precioustime by seeking emergency medical attention.

Activities organized by WSO members and supporters saw events in communities, healthcare centres, government buildings, newspapers and TV channels around the world. These were supported by a high-profile social media campaign, celebrity engagement and complemented community action with an online message that when it comes to stroke minutes can save, not just lives but mobility, speech and treasured independence. Working together the global community and public #worldstrokeday and #precioustime had a total potential reach of 485.3M on social media channels.

A World Stroke Day press release highlighting the implementation gap in quality stroke care provision and announcing the launch of the WSO Implementation Taskforce was viewed 90K+ times on the PR newswire platform and achieved a potential reach to 2.7bn.



WSO President Prof Sheila Martins shares #Precioustime message for World Stroke Day

We are thankful to our members, partners and supporters for participating and making both WSC and World Stroke Day 2022 a great success.

Looking forward to 2023!

The World Stroke Day 2023 campaign theme will be focused on prevention, with an emphasis on hypertension and cardiovascular risk. Conversations are already taking place to develop a collaborative approach to both World Hypertension Day and World Stroke Day in 2023. We're excited to see how the idea develops and look forward to sharing that with you soon.

We look forward to welcoming you to World Stroke Congress 2023 will take place from 10th-12th of October in Toronto, Canada. **Save the date!**

WHO NEWS



Submitted by Dr. Cherian Varghese, MD, PHD, Regional Adviser, Noncommunicable Diseases, Department of Healthier Populations & NCDs, WHO South East Asia Regional Office, New Delhi, India

The Department of Healthier Population and Nutrition of the WHO South-East Asia Regional Office organized a Webinar on WHO South-East Asia HEARTS initiative (SEA HEARTS) to observe World Heart Day on 29 September 2022. SEA HEARTS will serve as a platform to promote heart health and to reduce premature mortality from cardiovascular diseases (CVD), stroke, and diabetes and a collective force to change the trajectory of CVDs in WHO South-East Asia Region countries.



The focus of the Webinar was to showcase the

ongoing work in WHO South-East Asia Region as a cross learning opportunity and to bring together global partners in promoting cardiovascular health. Dr. Poonam Khetrpal Singh, Regional Director called for strengthened political will and accountability with focus on full implementation of the WHO HEARTS technical package.

Prof. Fausto Pinto, President, World Heart Federation, Dr. Xin-Hua Zhang, President, World Hypertension League, Ms. Aminath Maesha, Vice President, Tiny Hearts of Maldives and Dr. Monika Arora, President Elect, NCD Alliance reiterated the crucial role played by the global partners and pledged their support to SEA HEARTS.



Dr. Cherian Varghese, Regional Adviser, NCD, WHO SEARO presented the scope of SEA HEARTS for accelerating CVD prevention and control. Dr. Tom Frieden, President & CEO, Resolve to Save Lives, Padmashri Dr. Balam Bhargava, Chief, Cardiothoracic Centre, All India Institute of Medical Sciences, New Delhi, India, Dr. Jeyaraj Pandian, Professor of Neurology, Christian Medical College, Ludhiana, India and Vice-President, World Stroke Organization, Ms. Chhmi Lhamu, Deputy Nursing Superintendent, National Referral Hospital, Bhutan, Prof. Prakrit Vathesatogkit, of Action on Smoking and Health Foundation, Dr. Sohel Reza Choudhury, Professor & Head- National Heart Foundation Hospital & Research Institute, Bangladesh, Dr. Champika Wickremasinghe, Deputy Director General (NCD), Ministry of Health, Sri Lanka, Mr. Manoj Jhalani, Director, Health Systems Development, WHO SEARO, made presentations, highlighting the successful implementation and positive impact of elements of the WHO technical packages in the South-East Asia Region. A total of 332 participants attended the Webinar.

Compilation of the presentations and the video recording can be accessed [here](#). Event coverage is in this [link](#).

WHL EXCELLENCE AWARDS

Dr. David Wood receives the WHL Daniel Lackland Excellence Award in Diplomacy and Advocacy for Population Hypertension Risk Reduction



l-r: Prof. Dan Lackland, Prof. David Wood, Prof. Bill McEvoy

During an event on September 8th in Galway, Ireland, Prof. David Wood, Director of Science, Strategy and International Relations at the NIPC, was presented the 2020 Excellence Award by Dr. Professor Lackland, Past President of the World Hypertension League and Professor of Epidemiology at the Medical University of South Carolina, USA.

The award was written up in the National Institute for Prevention and Cardiovascular Health (NIPC) in its [September issue](#). Professor Bill McEvoy, Medical and Research Director at the NIPC said “We are delighted that David has been recognised for his dedication, commitment and achievement in population hypertension risk reduction. This is a great international honour and it is truly deserved by David”.



At a special session of the Argentine Society of Hypertension Meeting, **Dr. Horacio Carbajal received the 2019 WHL Recognition of Excellence Award for Population Cardiovascular Risk Factor Control** and **Dr. Felipe Inserra received the 2019 WHL Recognition of Excellence Award in Dietary Salt Reduction**. The awards had not been handed out previously because of the pandemic.



Dr. Horacio Carbajal



Dr. Felipe Inserra

REGIONAL NEWS - AFRICA

Frequent vegetable consumption protects against hypertension in indigenous Africans

Submitted by Prof. Mayowa Ojo Owolabi, WHL Regional Director, Sub-Saharan

[A recent study](#) assessed the association between vegetable consumption and hypertension among 16,445 participants in five African countries (Nigeria, South Africa, Kenya, Ghana and Burkina Faso) of which 7,070 (42.9%) had hypertension. Multivariable-adjusted odds ratio for hypertension by the distribution of vegetable consumption using ‘low’ consumption (< 6 servings/week) as reference, were 0.80 (0.73, 0.88) for ‘sufficient (12-29 servings/week)’, and 0.81 (0.72, 0.92) for ‘high’ consumption (≥30 servings /week)’, P-for-trend <0.0001. The effect sizes were more pronounced among males and young adults in stratified analyses.

Consumption of at least 12 servings of vegetables per week could prevent hypertension among Africans. This could be explored as a cost-effective intervention for primary prevention of hypertension.

•**The Nigeria NCDI Poverty Commission** has prioritized hypertension as the topmost NCD and is quantifying the resources required for its control in Nigeria.

WHL Welcomes New Member

Guangdong-Hong Kong-Macao Greater Bay Area Hypertension League



粤港澳大湾区高血压联盟
Guangdong-Hong Kong-Macao
Greater Bay Area Hypertension League

On May 15, 2022, the Guangdong-Hong Kong-Macao Greater Bay Area Hypertension League, initiated by Professor Feng Yingqing, was inaugurated at the 5th WHL World Hypertension Congress.



Inauguration at WHL World Hypertension Congress

The mission of Guangdong-Hong Kong-Macao Hypertension League is to strengthen the construction of the hypertension prevention and control cooperation platform around the Guangdong-Hong Kong-Macao Greater Bay Area, promote the screening of hypertension in the Greater Bay Area through health education, academic exchanges and continuing education, optimize the prevention and control of hypertension-related cardiovascular and cerebrovascular events chain, and build a "Healthy China" together.

首页 视频 疾病症状 特别策划 问答

医联媒体
5.17世界高血压日

高血压早期可以不吃药吗?
良好生活习惯 或有助于有效控制

专家提醒: 高血压患者 切不可自行停药

冯颖青 广东省人民医院、广东省心血管病中心 副主任
欧艳秋 广东省人民医院、广东省心血管病中心 副研究员
罗泓元 广东省人民医院、广东省心血管病中心 主治医师

On World Hypertension Day and China Hypertension Day, our league conducted public education in various forms, such as multimedia, posters and local landmarks, to popularize knowledge of hypertension prevention and control and raise public awareness. In addition, the chairman and the members of the league often educate the population in the communities and villages through local government-led or health administrative organization-led large public activities.



Public Educational Activity

SIX STAGES OF HEART FAILURE

Recently, Six Stages of Heart Failure (HF) have been proposed, so as to identify earliest changes in cardiac dysfunction, because early diagnosis may be useful in the primordial prevention [1,2]. The intake of tobacco, alcoholism, western diet, emotional stress and biological risk factors such as obesity, and hypertension [2] can independently predispose pre-heart failure (PHF). Speckle tracking echocardiography(STE) via 2D and 3D echocardiography has demonstrated abnormalities in twist function and sub-endocardial function, apart from decrease in global longitudinal strain and area strain and strain rate, indicating PHF [1,2]. These patients with hypertension may not reveal any clinical manifestations of HF and 2D echocardiography may be within normal limits. Early diagnosis at the stage of PHF, in particular at first two stages of the Six Stages of HF may be useful in the reversal of HF [1,2].

1. Singh, RB et al. *Antioxidants* **2022**; *11*: 1464. <https://doi.org/10.3390/antiox11081464>.
2. Elkilany et al.. *World Heart J*, 2020,12:31-40.

LINKS OF NOTE

LINKS A global community for cardiovascular health

LINKS is a collaborative effort of [the World Health Organization](#), the [U.S. Centers for Disease Control and Prevention](#) and [Resolve to Save Lives](#), to improve cardiovascular health globally. For more information, go to [this link](#).



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



[WHO Essential Medicines List \(EML\) for Hypertension Combination Therapy NCD Alliance Newsletter:](#) [Click here](#)



WSO Newsletter: [Click here](#)



SCIENCE OF SALT WEEKLY: [Click here](#)

Weekly Medline articles on dietary sodium



KNOWLEDGE ACTION PORTAL (KAP)

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



[HEARTS CVD RISK CALCULATOR APP](#)

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

6th Big Sky Cardiology Conference

January 20-22, 2023
Novotel Fujairah, United Arab Emirates
virtual with local in-person participation

World Congress of Nephrology 2023

March 30 – April 2, 2023
Bangkok Thailand

[Click here for more information](#)

ESH-ISH 2023

June 23-26, 2023
Milan, Italy

[Click here for more information](#)

