

WHL • NEWSLETTER

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

No. 185, September 2024

Note from the Editor



Dr. Daniel T. Lackland

This Issue of the *Newsletter* reports accomplishments and activities from the Summer, and also exciting plans for the remainder of the year. The Science Writers Program section has been expanded to include content summarizing a topic

from the monthly webinars. This section also showcases the morning Writers Workshops organized for each day of the [World Hypertension Congress 2025 in Chennai](#). In addition, the Congress will provide a forum to showcase the Children's Art Program and the high impact activities of our member societies and partners on global hypertension that we have been privileged to include in the *Newsletter*. With the September edition we continue to celebrate the WHL Excellence Award winners, new findings in current scientific literature, and novel practical approaches focused on global hypertension control. As always, we appreciate each of you for your contributions to the *Newsletter*, and look forward to receiving your submissions and input.

Dan WHL Newsletter Editor-in-Chief

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President's Column



Dr. Paul K. Whelton

Dear Colleagues,

Greetings from New Orleans. I have had a busy but very pleasant summer of travel to Italy, Croatia, Slovenia and South Africa. Thanks to many colleagues who made the "journey" so delightful. As you may already know, we had

to change the dates of our [World Hypertension Congress to March 7-9, 2025](#). Nothing has changed except the dates. I am delighted that **Dr. Thomas Frieden, President and CEO of Resolve to Save Lives (RTSL)** and former Director of the US Centers for Disease Control and Prevention will deliver an address during the opening ceremony. RTSL is committed to saving 100 million lives through improved hypertension control, reductions in sodium consumption, and elimination of trans fats. RTSL is an exceptionally important partner for the WHL and holds an ex-officio seat on our Board of Directors. We are grateful to all our colleagues in RTSL for their vital health role in middle- and low-income countries, especially Drs. Frieden, Renu Garg and Andrew Moran. I am also delighted that **Dr. Katherine Mills, Tulane University, New Orleans, USA**, will present updated global estimates for hypertension prevalence, awareness, treatment and control and give us a "report card" based on temporal trends between 2000 and 2020 on Day 2 of the WHC in Chennai. This will be the first presentation of this study at an international meeting and promises to be very informative. For those of you who are WHL Council members, we will have an in-person meeting from 3:30 until 5:00 PM on March 6, the day before the Congress starts. I am

delighted to know that **Dr. Terry McCormick, immediate Past President of the British and Irish Society of Hypertension (BISH)** will be in Chennai to represent the BISH. I hope many other Council members will be able to join us. Elsewhere in the Newsletter you will find additional details for registration, abstract submissions, and hotel reservations.

The **World Stroke Organization (WSO)** is another important WHL partner, with whom we are developing a policy statement on the management of hypertension for prevention and treatment of stroke. The WSO will be holding its [Congress next month in Abu Dhabi \(October 23-26\)](#). Drs. Lackland and I will be there to represent the WHL, and we hope to see you during the Congress.

The **European Society of Cardiology (ESC)** meetings were held in London last month and the WHL was well represented by our President-Elect, Dr. Gianfranco Parati, and our Treasurer, Dr. Markus Schlaich. Dr. Parati represented the WHL in a WHL joint conference on “Global approach to hypertension management and cardiovascular risk reduction”. In addition, the ESC released its [2024 ESC Guidelines for the management of elevated blood pressure and hypertension new hypertension guidelines](#). Chaired by Drs. McEvoy and Touyz, the report is a careful and detailed report that will be a great reference document for those who use it. The management recommendation to add antihypertensive medication to lifestyle improvement for adults at high risk for CVD who have an SBP ≥ 130 mm Hg or DBP ≥ 80 mm Hg is similar to recommendations in the WHO and ACC/AHA guidelines. One of our sessions at the WHC in Chennai will focus on guidelines and Dr. McEvoy will provide additional details of the ESC guidelines. An updated ACC/AHA BP Guideline is well underway and is expected to be released in 2025. At the just completed **American Heart Association Hypertension Council Meeting in Chicago**, I participated in a guideline session and the WHL was also represented by Dr. Schlaich and WHL Board of Directors member Dr. Michael Weber. The ESC and AHA meetings also featured many other interesting presentations. In particular, three trials using a new single pill low-dose triple-therapy combination of telmisartan, amlodipine, and indapamide for initial

treatment of hypertension were reported, with corresponding publications in the Lancet, JAMA and JACC. The Veronica trial conducted in Nigeria reported a significant reduction in home SBP (primary outcome) of almost 6 mmHg compared with usual care, and no increase in discontinuation of trial treatment due to adverse events. One of the goals for this new triple therapy combination is to make it available at low cost in middle- and low-income countries. The potential for this novel approach to therapy in low- and middle-income countries will be highlighted by **Dr. Anthony Rodgers during his Keynote Address on Day 2 of the WHC in Chennai.**

We have a lot to look forward to at the Congress in Chennai.

Paul

WHL President

WORLD HYPERTENSION CONGRESS

REVISED DATES

MARCH 7-9, 2025



6th World Hypertension Congress
March 7-9, 2025, Chennai, India
“Controlling Hypertension Together”
[Register Here!](#)
Scientific Abstract deadline is September 30, 2024.

2024 WHL EXCELLENCE AWARDEES

Addressing Priorities in the prevention and management of hypertension



Kids are not just small adults!

Submitted by Prof. Elaine M. Urbina

Winner, Claude Lenfant Excellence Award in Population Hypertension Control Through Educational Activities & Guideline Implementation

My work in the Bogalusa Heart Study and International CV Cohort Consortium has confirmed that BP levels in youth predict adult hypertension, target organ injury (TOI) and adult CV events. The SHIP-AHOY study also demonstrated that TOI may occur at levels below what is considered hypertensive in youth. However, we have no Pediatric placebo-controlled studies that compare different agents, demonstrate regression of TOI and there has been insufficient investigation of underlying pathophysiologic mechanisms driving the development of hypertension in children.

Unfortunately, we cannot extrapolate directly from adult drug studies for a variety of reasons (different metabolic rates, effect of maturation, etc.). Therefore, prevention of obesity with better access to healthy foods and safe spaces to exercise are critical to prevent development of primary hypertension in youth.



Reducing Dietary Sodium

Submitted by Prof. Norman R.C. Campbell

Winner, Graham MacGregor Excellence Award in Dietary Salt Reduction

Graham MacGregor has been a lead researcher and advocate for population sodium reduction who can be largely attributed to reducing dietary sodium, being a global and World Health Assembly priority.

High blood pressure is not a natural phenomena and was rare in hunter gatherer societies where blood pressure did not rise with age and atherosclerotic disease did not occur. Currently, nearly all people living to age 80 will develop hypertension. Approximately 80% of hypertension is attributed to unhealthy diets with 30% or more due to excess sodium and 20% to lack of potassium (genetics and disease are modifying factors).

In Canada, I led nongovernmental efforts to make reducing dietary sodium a national priority. Canada currently has a national sodium reduction strategy that has had modest success. Globally, I have led coalitions through the World Hypertension League to:

- 1) outline key issues in the controversy about reducing dietary sodium (e.g. low-quality research, financial conflicts of interest),
- 2) set minimum standards for human research on dietary sodium,
- 3) provide regular systematic updates on dietary sodium research and how to reduce dietary sodium and
- 4) provided up to date calls to action on dietary sodium.

I had the honour of being the inaugural chair and co-chair of the Pan American Health Organization Expert and Technical Advisory Groups on dietary sodium when the number of countries with sodium reduction programs increased from 3 to 20 and the first technical document was developed to guide countries how to reduce population sodium ([Salt Smart Americas](#)). Efforts to reduce dietary sodium are still at preliminary stages and much more work needs to be done.

I am deeply honoured to have been able to contribute, and to have been awarded the WHL MacGregor award.

Resetting Priorities for Prevention of Hypertension in Black Populations



Submitted by Prof. Gbenga Ogedegbe

Winner: Daniel Lackland Excellence Award in Collaboration & Advocacy for Population HTN Risk Reduction

Affiliation: Professor of Medicine and Population Health, Director, Institute for Excellence in Health Equity, NYU Grossman School of Medicine, New York, NY

Historically, poor hypertension control in Black populations has been blamed on patient-level factors like poor medication adherence, and provider-level factors like poor adherence to clinical guidelines. Recent data on high levels of uncontrolled hypertension in Black populations necessitates the shift of our current priorities from patients and providers to population-level factors. The good news is evidence-based interventions are well established. However, their implementation is suboptimal due to pervasive social determinants of health (poor access to healthcare, food insecurity, limited availability of healthy foods, lack of safe places to engage in physical activity) that make population-level approaches difficult. In order to blunt the scourge of hypertension in Black communities, four major priorities are essential: 1) programs must mitigate adverse effects of SDOH that are pervasive in Black communities; 2) researchers must partner with Black communities to develop effective multi-level strategies that support adoption of evidence-based lifestyle interventions; 3) health systems must partner with payors to incentivize community-clinic linkage models for prevention of hypertension; and 4) researchers must generate crucial scale-up data to drive action from policymakers. Our RESTORE Network funded by the American Heart Association has pioneered the implementation of these priorities in addressing the preventable scourge of hypertension in Black populations in America.¹

References

1. Spruill TM, Muntner P, Popp CJ, Shimbo D, Cooper LA, Moran AE, Penko J, Bibbins-Domingo K, Ibe C, Nnodim Opara I, Howard G, Bellows BK, Spoer BR, Ravenell J, Cherrington AL, Levy P, Commodore-Mensah Y, Juraschek SP, Molello N, Dietz KB, Brown D, Bartelloni A, Ogedegbe G. AddREssing Social Determinants TO pRevent hypErtension (The RESTORE Network): Overview of the Health Equity Research Network to Prevent Hypertension. *Am J Hypertens.* 2023 Apr 15;36(5):232-239. doi: 10.1093/ajh/hpad010. PMID: 37061798; PMCID: PMC10306079.

Prioritising Hypertension Prevention and Management



Submitted by Dr. Puhong Zhang, PhD, The George Institute for Global Health, China
Winner, 2024 Organizational Excellence Award

Hypertension, a pressing global health concern, necessitates urgent action in terms of prevention and management. The George Institute for Global Health, China has prioritised reducing high salt intake, a leading risk factor for hypertension. Through our innovative salt reduction programs, initiated in 2003, we have developed several scalable intervention models that are adaptable to various cultural contexts, particularly where most meals are cooked at home.

Aligned with the Healthy China 2030 Action Plan, we are striving for a 20% reduction in salt intake. Collaborating extensively with domestic and international partners, we have implemented comprehensive salt reduction packages across diverse populations. Our school-based initiatives, such as EduSaltS, leverage mHealth technology to equip young students and their families with knowledge about healthier diets. Furthermore, our research has been instrumental in shaping national policies, including guidelines for salt reduction at home and pre-packaged food labelling.

By pioneering evidence-based research and influencing policy development, The George Institute for Global Health, China remains steadfast in its commitment to enhancing global hypertension control and improving public health outcomes.

Priorities in prevention and management of hypertension in Pakistan

Submitted by Prof. Aamir Hameed Khan



Chairman, Guidelines Comm., Pakistan Hypertension League; Prof. and Consultant Cardiologist, Ziauddin Univ. and Hospital, Karachi

Winner: Regional Excellence Award in Population Global Hypertension Control

Every second Pakistani adult has hypertension. We are hit with a triple burden of infectious diseases, non-communicable diseases, and annual floods/erratic earthquakes, which makes prioritizing non-communicable diseases very challenging. Of awareness, treatment and control, lack of awareness is the crux of the problem. To tackle, we have written the National Hypertension Management Guidelines. We have also started the PREACH hypertension project, which is an implementation project of the public health wing of one of the leading pharmaceuticals (GETZ pharma), in collaboration with leading professional societies. We have an advisory panel with national leaders, key opinion leaders and stakeholders. This program trains physicians creating awareness at the grassroots level. In a period of 3 years, we will train thousands of physicians, affecting millions of the affected population through creating awareness for prevention and streamline evidence-based treatment of established hypertension. Simultaneous data are being collected for improvement in planning for the immediate future.

CHILDREN'S ART PROGRAM

2024 WHL Art Program Certificates were presented to students from Beijing, China, at the following schools:

- Beijing Zhongshan Experimental School
- Cuicun Central Primary School in Changping District, Beijing
- Dongxiaokou Central Primary School in Changping District, Beijing
- Xifuguanhua School Changping District, Beijing



Photos submitted by Zhiyi MA, MD, PhD, Beijing Tsinghua Changgung Hospital; Member, Executive Committee of the Chinese Hypertension League (CHL)

View all art contributions on the [WHL website](#).

WORLD HYPERTENSION DAY REPORTS

Thank you to all of our Members and Partners for another very successful World Hypertension Day! Please see reports below:

China



The 7th Board of the Chinese Hypertension League coordinated the 2024 World Hypertension Day events in China. The series of activities included four major events organized nationally and separately in 29 provinces or cities, and 385 institutions reported their activities and provided photos or videos.

The first event was a one-day symposium with 3 sessions addressing the WHD themes, held in Beijing on 17 May 2024: Measure BP accurately - Know your real BP numbers; Control BP effectively - Implementing evidence-based, scalable and sustainable strategies; Healthy BP and healthy life - Taking actions together. The president of the Chinese Hypertension League **Liu Lisheng** chaired the symposium with eight speakers and 300 people attended in-person, while 470,000 health care professionals participated virtually via 9 media channels.



The health education session on prevention and control of hypertension for the general population was broadcast live on 17 May with more than 620,000 clicks on that day.



The third event involved free BP measurement and free consultation on treatment of hypertension and related diseases outside of hospitals.



More than 247 health care services organized community-based health education classes in 29 provinces or cities.



Several events were coordinated and supported by the Beijing Lisheng Cardiovascular Health Foundation and the Beijing Hypertension League Institute.



Aswan, Egypt

Magdi Yacoub Heart Foundation

Submitted by Saber Mostafa, Clinical Nurse Educator
Aswan Heart Centre, Magdi Yacoub Foundation

Magdi Yacoub Heart Foundation's nursing team marked this year's World Hypertension Day through various activities, including:

- Raising awareness about the different symptoms of hypertension
- Educating patients on the proper steps for measuring blood pressure
- Highlighting ways to prevent hypertension

These activities were conducted through health awareness sessions, distribution of informative booklets, and viewing of various educational videos about blood pressure.



Summary of Activities

- Health awareness sessions provided patients with valuable information about hypertension, including its symptoms, risk factors, and prevention strategies.
- Distribution of informative booklets served as a handy reference for patients, allowing them to review the information covered during the sessions and share it with others.
- Educational videos presented engaging and informative content on various aspects of hypertension.



Cairo, Egypt Egyptian Hypertension Society (EHS)

Submitted by M. Mohsen Ibrahim, MD
President of the Egyptian Hypertension Society

On behalf of the board of the Egyptian Hypertension Society (EHS), I am happy to inform you that the EHS celebrated World Hypertension Day 2024 through many activities throughout May.

- The annual scientific meeting of the Egyptian Hypertension Society on 1-2 May stressed the importance of proper blood pressure measurement, hypertension prevention and complications through lectures given by esteemed faculty members and speakers from abroad.



Faculty members at the meeting in Damietta

- EHS members visited Ras El Bar, Damietta, where a concise course was given to pharmacists and primary care physicians about the correct measurement of blood pressure, devices and techniques, on 22nd May. The course included 3 lectures: classification of hypertension, how to measure blood pressure correctly, and when to refer a patient to a physician. This is the 4th wave of the campaign of blood pressure measurement community-based pharmacy service. A pre-and post-lectures questionnaire was distributed among the audience aiming at comparing the change in audience knowledge after listening to the lectures. An open discussion was allowed to answer all questions and clarify any confusion. Those who attended the course and achieved more than 80% of the post course questionnaire were given a certificate of attendance signed by the President of the Egyptian Hypertension Society and the President of the Pharmacy syndicate.



Pharmacist meeting in Damietta

- The [official website of the EHS](#) announced that May is the month of increasing hypertension awareness.

- The official [facebook page of the EHS](#) announced WHD and provided daily posts focused on hypertension awareness, correct blood pressure measurement and lifestyle modification, mostly in Arabic, being the official language of Egypt. We added the hashtag #worldhypertensionday to all the posts in May to increase the awareness of the day.

- The WHL course on home BP measurement was promoted through the EHS official facebook page, with media coverage of all activities through electronic journals and social networks.

El Salvador

Submitted by Dra. Nancy Lizeth Góchez V., Coordinadora de Clínica de Hipertensión; Consultorio de Especialidades; Instituto Salvadoreño del Seguro Social

Objective of WHL Activities: Raise awareness about the importance of measuring blood pressure with precision, perform optimal control, as well as combat risk factors risk.



Educational talks to patients in areas of the center



World Hypertension Day blood pressure screening and cardiovascular risk calculation (HEARTS strategy)



Medical students taking blood pressure



Delivery of gifts to winners of learning dynamics about hypertension

Results

- 64 people had blood pressure taken and cardiovascular risk calculated using the HEARTS strategy.
- detection of 22 people with low risk and 42 people with medium and high risk.
- 6 referred for uncontrolled hypertension
- 7 talks given to visitors of the office, making a total of 215 people informed about hypertension

- 60 people participating in a workshop on blood pressure self-measuring and healthy lifestyle dynamics.
- 130 gifts delivered in participation dynamics.
- 70 healthy snacks delivered.

Thanks to....

- The authorities of the Clinic
- The Hypertension Clinic work team: doctors, nursing staff, social work & service assistants
- UES medical students
- Internal medicine residents
- External collaborators

With great enthusiasm we dedicate this effort to our patients!

Pune, India

Submitted by Dr. Harshal Pandve, MBBS, MD, Professor & Head, Dept. of Community Medicine, PCMC's Postgraduate Institute & YCM Hospital (PGI-YCMH) Pimpri, Pune, Maharashtra State, India

We carried out a hypertension screening activity for all employees, including the bus drivers, conductors, clerks, mechanics, and other supporting staff of the Vallabh Nagar State Transport Bus Stand, Pimpri, Pune, India.

On this occasion Dr. Harshal Pandve, Prof. & HOD, Dept. of Community Medicine, provided health education for prevention & control of blood pressure. Ninety-five individuals were screened.



Iran

Submitted by Alireza Khosravi, MD

Professor of Interventional Cardiology, Head of Hypertension Research Center, Director of Cardiovascular Department of Isfahan Medical School Isfahan University of Medical Sciences, Isfahan

BP awareness outreach activities

The Hypertension Research Center, Cardiovascular Research Institute, Isfahan, announced our campaigns via social media. Campaigns were held by other organizations as well, including Isfahan Hypertension Association, Iranian Heart Foundation (IHF), Heart Friends Scientific Association, and Heart Friends Association.

To celebrate World Hypertension Day, two separate campaigns were held along with blood pressure screenings for one month. The first campaign involved the collaboration between the Hypertension Research Center and the Cardiovascular Research Institute, along with Chamran Heart Center. In this campaign, a lecture was arranged for the clinic's patients. Dr. Seyedeh Mahnaz Mirbod, a cardiologist, spoke about the importance of prevention, control and treatment of high blood pressure. Mrs. Maryam Maghroon, a dietitian, explained the importance of healthy diet to prevent and treat high blood pressure. The blood pressure of attendees was assessed and documented. In cases of uncontrolled high blood pressure, attendees were referred to the hypertension clinic. Educational pamphlets regarding the prevention and treatment of high blood pressure were distributed.

The second campaign involved the collaboration of the Hypertension Research Center, Isfahan Cardiovascular Research Institute, the Heart Association, Scientific Association of Heart Friends, and Shahid Chamran Medical Education Center. It took place on May 17th at Mellat Park. Dr. Saeide Bahrani, a cardiologist, presented a lecture on prevention, control and treatment. Mrs. Motahare Bateni, a dietitian, presented a lecture on the importance of nutrition in the prevention and control of high blood pressure. Various entertainment and educational programs for children and teenagers, as well as medical consultations, were held.

From April 17th to May 17th, a total of 409 individuals underwent screening and their blood pressure was assessed, of which 20 participants were not aware of their high blood pressure and were referred to the hypertension clinic.

Please find below the link to the newly developed and published paper on Hypertension Guidelines, a good step toward hypertension treatment and control for our health services system:

[Update of clinical guidelines for hypertension diagnosis and treatment in Iran](#)

Iran WHD Campaign Photos





Islamabad, Pakistan

Submitted by Prof. Dr. Mohamaad Naeem Malik, Chairman/Head of Cardiac Centre, Pakistan Institute of Medical Sciences (PIMS) Islamabad

The Cardiac Centre at PIMS, Islamabad, commemorated World Hypertension Day with a series of activities aimed at raising awareness about hypertension and its impact on health. The event featured an awareness walk and a seminar with distinguished speakers presenting on various aspects of hypertension.



Awareness Walk in front of the Cardiac Centre

Participants included faculty members, the hospital executive director, medical professionals, students, patients, and the general public. The walk aimed to highlight the importance of regular blood pressure monitoring and lifestyle modifications in preventing and managing hypertension.

Seminar: Following the awareness walk, a seminar was held in the Cardiac Auditorium, inaugurated with a welcome note by the Head of the Department of Cardiology Professor Dr. Mohammad Naeem Malik. The keynote speakers were experts in their respective fields, who presented on the following topics:

Prof. Jai Krishan emphasized the increasing prevalence of hypertension in children, its risk

factors, and the importance of early detection and management to prevent long-term health complications. **Prof. Shifa'at Khatoon** discussed the unique aspects of hypertension in women, including hormonal influences, pregnancy-related hypertension, and the need for gender-specific treatment approaches. **Prof. Mazhar Badshah** highlighted the strong correlation between hypertension and stroke, stressing the importance of controlling blood pressure to reduce the risk of stroke. **Prof. Atif Inam Shami** presented on how bariatric surgery can be an effective intervention for obese patients with hypertension, leading to significant improvements in blood pressure control. This was a one of its kind lecture since no one has ever included talks on such curative approaches in their WHD activities. **Dr. Shahana Arshi** explained the bidirectional relationship between hypertension and kidney disease, underscoring the need for integrated care to manage both conditions effectively. **Dr. Fazlul Aziz Mian** provided an overview of the epidemiology of hypertension in Pakistan, discussing the current statistics, risk factors prevalent in the population, and public health strategies needed to address the issue.



Conclusion

The seminar concluded with the distribution of tokens of gratitude to the speakers, recognizing their valuable contributions to the event and the ongoing fight against hypertension.

The celebration of WHD at PIMS, Islamabad, was a resounding success, bringing attention to a critical public health issue and fostering community engagement and education on hypertension management and prevention.

Karachi Pakistan

Submitted by DR. GHULAM ABBAS SHAIKH, Chapter Coordinator PHL Karachi chapter

The Pakistan Hypertension League (PHL) Karachi Chapter celebrated WHD from 17th - 20th May, under the leadership of the PHL president, organized by Dr. Ghulam Abbas Shaikh, Karachi Chapter Coordinator at Department of Cardiology, Dr. Ruth K.M Pfau Civil Hospital, Dow Medical College Karachi. The program was attended by leading cardiologists of Karachi and Hyderabad.



The program was comprised of a press conference at the Karachi Press club and a pre-symposium workshop on ECG and BP Monitoring followed by a grant seminar at the Moin Auditorium Dow Medical College, Karachi, where scientific sessions were conducted and leading cardiologists and physicians delivered talks on different aspects of hypertension and its prevention.



The Chapter also conducted a 3 days screening program for hypertension in young people at the Dow University and Civil Hospital. The data will be presented at next year's Pakistan Hypertension League meeting.

Saudi Arabia

Submitted by Dr. Saleh Alshurafa, President, Saudi Hypertension Management Society (SHMS)

During May 2024, the Society organized screening and health awareness programs all over the country celebrating WHD. With the collaboration of different health sectors, the activities were conducted inside hospitals, in primary health care facilities as well as in public areas and shopping malls, with the theme "Measure your Blood Pressure Accurately, Control it, Live Longer".

A conference was held as part of the scientific and educational activity of the WHO. The most important topics and the latest information on hypertension were elaborated to health care workers in parallel with screening for adults at the conference venue.

During the hypertension awareness campaigns in May, 10,000 people were screened by 500 health care workers across the country. Educational materials were distributed along with explanation and discussion by professional physicians and other health care workers. Our society's hypertension awareness campaigns continue to be conducted throughout the year.



JOURNAL OF HUMAN HYPERTENSION (JHH) SPOTLIGHT

A proposed new rhythm: rhythmic components in ambulatory blood pressure monitoring for predicting cardiovascular risk in CKD patients



Submitted by Artemios G. Karagiannidis¹, Pantelis Sarafidis¹

¹First Department of Nephrology, School of Medicine, Aristotle University of Thessaloniki, Hippokraton Hospital, Thessaloniki, Greece

Referring to:

Nadim El Jamal et al. Prognostic utility of rhythmic components in 24-h ambulatory blood pressure monitoring for the risk stratification of chronic kidney disease patients with cardiovascular co-morbidity. *J Hum Hypertens.* 2024 May;38(5):420-429. doi: 10.1038/s41371-023-00884-0.

Chronic kidney disease (CKD) is a growing global health issue. It is responsible for approximately 1.5 million deaths globally, most of which are due to cardiovascular events. This increased cardiovascular burden demands effective blood pressure (BP) control and management; traditional in-office BP measurements miss the BP fluctuations throughout a 24-hour interval, which are more extended in people with CKD. To that purpose, 24-hour ambulatory BP monitoring (ABPM) is recommended to detect BP variability,

diurnal variations, and nocturnal dipping status. However, the definition of nocturnal dipping has been inconsistent across studies and do not explore the characteristics of a time series data set; these facts necessitate the use of more robust analytical methods.

In a recent issue of the *Journal of Human Hypertension*, El Jamal et al. investigated a novel approach for detecting diurnal rhythmic components in ABPM in order to better assess and stratify the risk associated with BP patterns, especially in relation to cardiovascular events. The authors applied the JTK_CYCLE algorithm, a non-parametric method originally designed to detect cyclical patterns over a 24-hour period in gene expression studies. The JTK_CYCLE algorithm has the advantage of capturing rhythmic components without requiring accurate sleep onset and offset data, a challenge in many clinical settings.

The study analyzed data from two large cohorts of pre-dialysis CKD patients, the Chronic Renal Insufficiency Cohort (CRIC) and the African American Study for Hypertension and Kidney Disease (AASK). Rhythmic components were evident in almost 1/3 of CRIC and 1/4 of AASK participants. Predictors of rhythmic components and dipping patterns were different and only overlapped in demographic traits and prior comorbidities. Of note, rhythmic profiling of BP identified subgroups of CRIC participants that were more likely to die from cardiovascular causes. In the fully adjusted model, a trend towards a significant association between absent cyclic components and cardiovascular death in the full CRIC cohort was evident. CRIC participants with prior cardiovascular disease (CVD) and absent cyclic components in their BP profile had 3.4-fold higher risk for cardiovascular death compared to participants with cyclic components present in their BP profile. This substantially increased risk was not driven by the dipping or non-dipping pattern. These results were not replicated in the AASK cohort, perhaps due to large differences in patient characteristics.

By shifting away from simplistic binary categorization of BP dipping, these results

suggest that the incorporation of rhythmic components in ABPM analysis may represent a prognostic indicator of cardiovascular mortality among CKD patients with prior CVD. While further research is needed to validate these findings, studies like this embracing more sophisticated tools for ABPM analysis could help to pave the way for better risk stratification strategies and, thus, mitigation of cardiovascular complications in CKD patients.



SCIENCE WRITERS PROGRAM

The Newsletter is pleased to be a part of the Science Writers Program. In addition to promotion of the webinars and recordings, a regular section will be implemented summarizing a specific topic from the Program. In this *Issue*, accuracy of blood pressure measurement considering sensitivity and specificity is discussed.

Sensitivity and Specificity with Hypertension Diagnosis

Accuracy in blood pressure measurement is clearly a critical consideration in the diagnosis of hypertension and elevated blood pressure. While there are validated standard and protocols for blood pressure measurement and equipment, the sensitivity and specificity for diagnosing high blood pressure varies based on different settings and processes. As an example, results from a meta-analysis of 15 studies and n of 11 309 patients described the screening for hypertension in adults for initial office-based blood pressure and home-based measurements. The initial office-based screening measurements demonstrated a pooled sensitivity of 0.54 (95% CI, 0.37-0.70) and a corresponding specificity of 0.90 (95% CI, 0.84-0.95). A companion meta-analysis of four 4 home-based confirmation studies with n of 1001 showed a pooled sensitivity of 0.84 (95% CI, 0.76-0.90) and a specificity of 0.60 (95% CI, 0.48-0.71). These results clearly show the significant accuracy limitations associated with initial office-based blood pressure screening, which can lead to misdiagnosis. It is important to note that the

meta-analysis found only minimal direct harm. The study concluded that further studies and research are needed to accurately determine the optimal screening and confirmatory algorithms for hypertension diagnosis in clinical practice.

Guirguis-Blake JM, Evans CV, Webber EM, Coppola EL, Perdue LA, Weyrich MS. Screening for Hypertension in Adults: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA*. 2021;325(16):1657–1669. doi:10.1001/jama.2020.21669

Science Writers Program at the World Hypertension Congress - Chennai, March 7-9, 2025

As part of the World Hypertension Congress, the Science Writers Program will offer an in-person series of three morning workshops focused on the strategies for successful publication of manuscripts in science journals. The faculty includes seasoned successful writers, journal editors, and academicians experienced with the manuscript submission process. While all Congress attendees are welcome, the workshops are designed for early career authors. The workshop participants are encouraged to bring their manuscripts of all types and in any stage of development. Workshop participants should register for the Congress AND the Science Writers Program. Participants attending all three workshops will be recognized with a Certificate of Participation.

Day 1 March 7 7:00 – 8:00 AM
Preparing a Manuscript for Publication

Day 2 March 8 7:00 – 8:00 AM
Targeting a Journal for Submission

Day 3 March 9 7:00 – 8:00 AM
Manuscript Review Process: Revision and Responding to Reviewers and Editors

REGIONAL NEWS

Blood Pressure Measurement in the Italian Mountains, 2024 Campaign

Submitted by Gianfranco Parati MD, FESC, President Elect, World Hypertension League

As regularly done over the last 7 years, in concomitance with World Hypertension Day, also during July/August 2024, an awareness campaign on arterial hypertension and on the cardiovascular effects of hiking or climbing at moderate-to-high altitudes has been organized in about fifty Italian Alpine Club shelters. This campaign has been endorsed by the WHL and promoted by the Italian Society of Hypertension, the Italian Alpine Club and the Italian Society of Mountain Medicine, with the support of the Italian Auxology Institute of Milan and the University of Milan-Bicocca. Shelters located at altitudes at or above 2,000 meters were selected.



Given that arterial hypertension, as highlighted by the WHO 2023 report, remains also at our time the most important “silent killer”, being the leading risk factor for cardiovascular disease and death worldwide, more attention needs to be paid to blood pressure behaviour under various conditions of our daily lives, with the aim of preventing the occurrence of fatal or disabling cardiac and cerebral events.

Recent studies by Parati et al. have clearly shown how blood pressure rises significantly during acute exposure at high altitudes (above 2,500 meters), beginning to change when reaching moderate altitudes (around 1,800 to 2,000 meters). This occurs in normal individuals as well as in patients already suffering from hypertension, thus raising the question of how to keep blood pressure controlled even in these conditions to ensure a safe and risk-free approach to the mountains for the cardiovascular system.

The awareness and prevention campaign “Blood Pressure in the Mountains” 2024 aimed to promote awareness about the reactions of the cardiovascular system at moderate and high altitudes in the many individuals, with or without cardiovascular problems, who especially in summer, decide to spend some time in mountain areas.



In addition to this goal of scientific outreach among hikers and mountaineers, the campaign also aimed to carry out a simple but important data collection for scientific research on mountain blood pressure behavior and on individual cardiovascular risk profile among hikers. For this

purpose, stations were activated in some 50 mountain huts that have decided to participate in the initiative all along the chain of Italian mountains, where hikers have been able to receive information on the relationship between blood pressure and mountain ascent, to measure their own blood pressure, heart rate and blood oxygen saturation. They have also been asked to fill out a short questionnaire on their cardiovascular health, thus not only contributing to scientific research (anonymously), but also checking in a simple and quick way their own cardiovascular situation and their reaction to exposure to moderate or high altitudes.

This represents an example that might be usefully followed in all those countries which include mountainous regions in their territory, with the aim to expand awareness on blood pressure behaviour in these conditions and facilitate screening of individuals with elevated blood pressure.



NEWS FROM OUR PARTNERS



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

Coalition members reflect on NCD Financing Dialogues

In 2018, the first international dialogue on sustainable financing for NCDs and mental health brought together more than 300 participants from all sectors. The Coalition for Access to NCD Medicines and Products, launched six months prior, presented evidence on the needed investment in access to NCD medicines and health products to reduce out-of-pocket health expenditures and the importance for multisectoral action during those dialogues. Since then, the urgency of these issues has intensified.

In June, a collaboration by the World Bank Group and the World Health Organization brought together a smaller group of health policy and financial stakeholders for a second International dialogue on sustainable financing for NCDs and mental health. We asked several Coalition members who participated to reflect on their takeaways from these important conversations.

Despite the impressive enthusiasm from attendees, several of us were concerned that access to NCD medicines and products was not a major part of the discussion. In many of the underserved communities that face the highest burden of NCDs, this stark inequity persists because essential medicines and other lifesaving supplies remain unavailable or unaffordable. Astronomic out-of-pocket costs and lengthy stockouts in low- and middle-income countries (LMICs) result in the most vulnerable people getting sicker and dying sooner.

There was a general consensus about the urgent and growing burden of NCDs, particularly in LMICs, and the need for multisectoral investment and cooperation. There is still more to be done to strengthen multilateral and multisectoral collaboration. IFPMA's Tamara Schudel noted, "health leaders need to be ready to support through international and domestic funding, leveraging innovative financing mechanisms and setting

realistic short- to mid-term, time-bound global financing targets for NCDs and mental health."

Sir George Alleyne hopes that the results from conversations at the meeting will have a significant impact on the documentation for the 2025 UN High-Level Meeting (HLM) on NCDs and Mental Health and will "include the need for financing and mechanism for mobilizing it apart from the rather pro forma declaration that financing must come principally from domestic sources."

The discussions exposed areas that are relevant to making medicines and products available without financial burden, including strengthening local data to inform forecasting and support supply chain efficiency; a strong primary health care system; and increased and targeted use of excise taxes to narrow the gap between supply and demand. It is a complicated road ahead, but there are many solutions that can lessen the out-of-pocket burden for people living with NCDs.

As we near the High-Level Meeting, we must collectively raise the priority of available and affordable medicines and products. From Sir George's perspective, "the actions needed to ensure this will include the NCD epistemic community being much more vocal about financing occupying a more prominent place in the discussions leading to the HLM." As a Coalition we will bring forward our successes and lessons learned to highlight actionable recommendations. To support these endeavors, we will cohost a high-level roundtable during the UN General Assembly and look forward to meeting with members and partners at the Global Forum on NCDs in October.

Hypertension Canada



New Study from the American Heart Association Shows the Importance of Pharmacists in Blood Pressure Control for Patients with Hypertension

A study recently published by the American Heart Association demonstrated that both pharmacists and community health workers were the most successful at intervening for their patients with hypertension. The editorial that was published along with the study (that was co-authored by Hypertension Canada President, Dr. Ross Tsuyuki) argued that the evidence overwhelmingly shows that there are benefits of having pharmacists treat hypertension. [Click here](#) to read more.



Putting the user first in digital health care

Resolve to Save Lives and the Bill and Melinda Gates Foundation co-hosted a [webinar](#) to share best practices in user-centered design for digital health tools. More than 600 people registered to hear from panelists from the BMGF - India office, RTSL, World Bank, World Health Organization, Google, and DHIS2. This short video by RTSL explains what it means for digital tools to be simple, effective, and user-centered.

[Digital tools for long-term treatment programs — done right](#)

RTSL Receives AHA award

Resolve to Save Lives recently received the [2024 Paul Dudley White International Scholar Award](#) from the American Heart Association for their abstract titled “Co-Created Intervention Promotes Uptake of Low Sodium Iodized Salt Substitute to Control Hypertension” highlighting how introducing an innovative intervention to promote low-sodium iodized salt (LSIS) can help reduce India’s significant hypertension burden.

[Digital health tools are too slow and too hard to use](#)

Software can play a critical role in improving patient care and the success of health programs, but often they are too slow and too hard to use. A new op-ed from Daniel Burka, director of design for the digital team at Resolve to Save

Lives, shares how any design team can create healthcare software that is easy to use, improves programs, and that health workers actually like

[India Hypertension Control Initiative: decentralization of hypertension care to health wellness centres in Punjab and Maharashtra, India, 2018–2022](#)

Bringing high blood pressure treatment closer to home is crucial for enhancing access to care, expanding treatment coverage, and ensuring effective follow-up. Resolve to Save Lives India members—Dr. Anupam Khungar Pathni, Dr. Ashish Krishna, and Swagata Kumar Sahoo—contributed to a new study on the India Hypertension Control Initiative (IHCI) that looked at the outcomes of decentralized patient care for hypertension control in public healthcare facilities. The study finds that by bringing services closer to communities, programs can better control hypertension and improve overall health outcomes.

[Evaluation of the World Health Organization-HEARTS hypertension control package in Bangladesh: a quasi-experimental trial](#)

A new study published in BMJ’s *Heart Journal* shows that the WHO-HEARTS technical package championed by RTSL significantly improves high blood pressure treatment and control compared with current practice. The trial, conducted in rural Bangladesh, is the first to rigorously assess the complete HEARTS package for hypertension and provides evidence to scale-up HEARTS throughout Bangladesh and to support its implementation in other low- and middle-income countries.

[Text messaging to improve retention in hypertension care in Bangladesh](#)

As part of the Bangladesh Hypertension Control Initiative, experts from RTSL contributed to a study that evaluated the effectiveness of mobile text messaging in improving visit attendance among hypertension patients in Bangladesh’s primary healthcare facilities. The paper, published in the *Journal of Human Hypertensions*, found that text message reminders significantly increased visit attendance in both regular and overdue patients, with the cascade of reminders and single reminders both proving effective. The results suggest that text messaging is a valuable strategy for enhancing

patient retention in hypertension treatment in low and middle-income countries.

[Discovery, development, and deployment of a user-centered point-of-care digital information system to treat and track hypertension and diabetes patients under India Hypertension Control Initiative 2019–2022, India](#)

In a new article for *Sage Publications*, The India Council of Medical Research, with support from RTSL, detail a participatory approach to app development that co-designs the information system *with* the nurses and doctors who will be using it every day. As of October 2022, nearly 2.5 million patients with hypertension and 900,000 patients with diabetes under the India Hypertension Control Initiative were registered in the information system that came out of this user-centered design process. On average, registering a new patient took only 50 seconds and recording information for follow-up appointments took 14 seconds.

[On-demand mobile hypertension training for primary health care workers in Nigeria: a pilot study](#)
Health care workers play a critical role in improving the diagnosis and treatment of high blood pressure. A new pilot study published in *BMC Health Services Research* evaluates a self-paced, case-based, mobile-optimized online training to diagnose and manage hypertension among health workers in Nigeria. On-demand mobile digital hypertension training effectively increases knowledge of hypertension management.

[India Hypertension Control Initiative: Blood Pressure Control Using Drug and Dose-Specific Standard Treatment Protocol at Scale in Punjab and Maharashtra, India, 2022](#)

A new research paper investigated the effectiveness of various medication protocols in Punjab and Maharashtra, India to increase control rates among patients with hypertension. The researchers found that simple drug- and dose-specific protocols help improve hypertension treatment in the primary care setting, especially when starting with a single low-cost drug such as amlodipine 5mg and escalating with the same or another antihypertensive drug depending on the cost and availability.



Lucy Gilson and Johan Rockström awarded the Virchow Prize 2024

- ***Prize under High Patronage of the President of the German Bundestag endowed with €500,000 for significant contributions towards safeguarding human and planetary health***
- ***Award ceremony on October 12 at Rotes Rathaus with the Governing Mayor of Berlin***

[Youtube presentation](#)

The Virchow Prize Committee has decided to bestow the Virchow Prize 2024 upon Lucy Gilson and Johan Rockström for their holistic and systems-based approach safeguarding human and planetary health. With the Virchow Prize 2024, Gilson's and Rockström's pioneering contributions to the analysis and understanding of the importance of efficient health systems and the decisive role of climate and planetary boundaries to preserve the conditions for healthy lives on our planet earth are recognised.

Lucy Gilson heads the Health Policy and Systems Division at Cape Town University, South Africa, and serves as Professor of Health Policy and Systems at the London School of Hygiene and Tropical Medicine (LSHTM), UK. Gilson's research includes close cross-level collaboration driving transformative change towards more sustainable, resilient and just governance, advocating for people-centred health systems. Her innovative and consistent contributions to strengthening health systems, essential for achieving the health-related United Nations 2030 Agenda Sustainable Development Goals (SDGs), and to translating strategy into tangible improvements on the ground embody a strong commitment to solidarity and human rights, fostering substantial progress in universal health coverage and equitable access to quality healthcare.

Johan Rockström leads the Potsdam Institute for Climate Impact Research (PIK), holds

professorships at the Potsdam University, Germany, the Stockholm University, Sweden, and serves as Chief Scientist of Conservation International, United States. Rockström's pioneering work revolves around the planetary boundaries framework, which defines the safe operating space for humanity to thrive sustainably and responsibly for future generations. This concept which he further developed towards safe and just Earth System Boundaries, addresses critical processes such as climate change, biodiversity loss, freshwater use, and nutrient cycles, highlighting its direct relevance to health. By interconnecting this concept with the SDGs, Rockström exemplifies comprehensive systems thinking.

Both laureates have importantly advanced scientific understanding and awareness in their respective areas and beyond. Their advocacy for a holistic and systemic approach has influenced global policy debates and provided a science-based framework for tackling global health-related challenges at various levels while demonstrating that significant progress is possible by independent, interdisciplinary and cross-sectoral science towards the common goal "Health for All". Lucy Gilson and Johan Rockström share a common focus on human well-being, sustainability, resilience and global health. Recognising that health systems are interconnected with environmental and social systems, both scientists exemplify the importance of systems thinking in tackling urgent global challenges while highlighting the role of fundamental research, responsible communication and effective governance.

About the Virchow Prize

Established by the non-profit Virchow Foundation, the Virchow Prize is an internationally prestigious award annually celebrated in Berlin and in this year endowed with €500,000. Rudolf Virchow, inspiration and namesake of the prize, is a symbol and role model for the urgently needed holistic approach to improve health for all and thereby providing an example of global responsibility for generations to come. More information: virchow.foundation



International Society of Hypertension

ISH2024 Meeting Message from the organisers

The International Society of Hypertension 2024 Scientific Meeting in the beautiful city of Cartagena, Colombia is fast approaching. Ahead of the meeting, read a message from the ISH2024 Executive President Dagnovar Aristizabal and Chair of the Meeting's Scientific Committee Cesar Romero. [Register here.](#)



Incoming President for ISH



Prof. George Stergiou will take up the role of ISH President at the conclusion of the ISH2024 meeting in September 2024, succeeding the current President, Prof. Bryan Williams.

Professor Stergiou holds a senior academic position at the University of Athens. He is a clinically active senior physician with both in-patient and out-patient commitments in the Third University Department of Medicine, at Sotiria Hospital in Athens. [Find out more.](#)

Latest edition of Hypertension News out now

The July 2024 issue includes features on:

- air pollution and hypertension
- nighttime blood pressure measurement
- immunological insights into hypertension, and much more!

[Read Hypertension News](#) today!

Join the ISH for Free



Join the ISH for free
ish-world.com/join-ish

Anyone with an interest in hypertension can now join the ISH for free as an Associate Member. This new membership category is part of a series of changes to the ISH membership structure to make it easier and more affordable to join the ISH. [Find out more](#)

Save the date - ISH2026 Dubai Scientific Meeting
ISH is pleased to announce that our 2026 Scientific Meeting will be held in Dubai in the United Arab Emirates from 22 to 25 October 2026.

UPCOMING MEETING OF NOTE

WORLD HEALTH SUMMIT

October 13-15, 2024



3 Days - 60+ Sessions - 100+ Nations - 350+ Speakers - 3,000+ Participants On-Site - 10,000+ Participants Online

Register at [this link](#).

16th WORLD STROKE CONGRESS

October 23-26, 2024



The WSO Global Stroke Alliance in Istanbul, Turkey 17-19 October will bring together healthcare policy and decision makers, hospital administrators, stroke experts, industry, and

patient advocates from across MENA & Central Asia*.

Participants will share knowledge and expertise, with the goal of advancing national implementation of effective stroke prevention, treatment and rehabilitation. A powerful element of the WSO GSA is the Ministerial Meeting, where Ministers of Health and Ministry representatives come together with stroke experts to explore stroke care in their countries, identify gaps and opportunities to improve patient outcomes in their national healthcare context.

Register at [this link](#).

NATIONAL FORUM ANNUAL VIRTUAL CONVENING - October 24, 2024



Advancing Health Equity Throughout America: Novel Data-Driven Approaches for Cardiovascular Health

The 2024 National Forum Annual Meeting agenda will focus on awareness of the Vital Conditions for Wellbeing and how data-driven approaches may be used to implement its principles and recommendations.

Agenda Highlights:

- **Keynote:** An Office of the Assistant Secretary of Health Perspective on the Vital Conditions for Health and Wellbeing
- **Panel 1:** Vital Conditions for Cardiovascular Health and Well-Being
- **Panel 2:** Leveraging the Power of Data-Driven Approaches to Improve & Sustain Vital Conditions
- **Panel 3:** Voices of Action: Improving Health Equity through Community Engagement
- National Forum Members React to Vital Conditions for Cardiovascular Health & Well being
- Annual Business Meeting & National Forum Awards

[For more information and to register.](#)

PAST MEETINGS OF NOTE

National Hypertension Taskforce - Australia



The National Hypertension Taskforce – Advocacy Strategy Group met in June via zoom. For more information on the Taskforce, [click here](#).



Meeting Proceedings Available Online

All sessions from the National Forum's May 9, 2024, Making Equitable Hypertension Control a New Norm, are now available online on the [National Forum's website](#) and also below.

See/hear insights on successful strategies and practices on making equitable hypertension control a new norm. The information below includes links to the program book that has the agenda, resources, speaker biographies and collaborative Haiku from registrants. Below you will find each session's video recording, transcript, Q & A and Chat comments.

[Full Program Book](#)

[Chat Box Transcript with Links](#)

[Haiku Created by Meeting Registrants](#)

7th IqHS International Conference, August 8-9, Sulaymaniyah, Iraq

The 7th International Congress of the Iraqi Hypertension Society was a successful meeting in the eyes of the many attendees. We discussed the latest guidelines and new updates in the management of hypertension, and the

conference covered many aspects of hypertension like epidemiology, etiology including epigenetics, and the new risk factors like stress, noise, pollution, and various other medical situations that are associated with hypertension. The conference was a good refresher for both seniors and juniors alike. We hope we will continue to improve our doctors' keenness and knowledge for the sake of our patients. The IqHS has held many scientific meetings during the last few months, which you can follow on our website: www.iraqhs.com

Calendar of Events

ISH 2024

September 19-22, 2024
Cartagena, Colombia

[Click here for more information](#)

Pakistan Hypertension League 27th Annual Symposium

September 27-29, 2024

Chaudhry Pervaiz Elahi Institute of Cardiology Multan

[Click here for more information](#)

World Heart Day 2024

September 29, 2024

[Click here for more information](#)

World Health Summit

October 13- 15, 2024

Berlin, Germany & Digital

[Click here for more information](#)

16th World Stroke Congress

October 23-26, 2024

Abu Dhabi, UAE

[Click here for more information](#)

22nd Annual Meeting of the National Forum for Heart Disease and Stroke Prevention

October 24, 2024

Washington DC and Hybrid

[Click here for more information](#)

World Diabetes Day

November 14, 2024

[Click here for more information](#)

AHA Scientific Sessions

November 16-18, 2024

Chicago, IL

[Click here for more information](#)

6th World Hypertension Congress 2025

March 7-9, 2025

Chennai, India

[Click here for more information](#)

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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