President’s Column

Thank you to all our colleagues who celebrated World Hypertension Day 2022 with excellent educational activities, screening and promotional programs, research symposiums and strategic dialogues for improving hypertension control globally. These events were organized by international and national organizations and by health care providers, from primary care services to tertiary hospitals and research institutions, as in the examples we see in this issue of the Newsletter and those shared in other media. The 5th World Hypertension Congress co-organized by WHL and cardiovascular societies registered in the south of China also highlighted the theme of World Hypertension Day 2022. Our sincere thanks to all of the 100 invited speakers and moderators, as well as the 2022 WHL Excellency Awards receivers from 25 countries for your great contributions to the conference. Each session was attended by more than 5000 individuals virtually during the conference, including the joint sessions with ISH, RTSL, WHO, PAHO and CDC, with more people visiting the Congress website for all recorded sessions after the conference.

We look forward to meeting you in person for the next World Hypertension Day event. Xin-Hua Zhang

Note from the Editor

With this issue of the Newsletter, we are excited to showcase the many components and celebrations of World Hypertension Day 2022, including the successful World Hypertension Congress, global submissions from the Children’s Art Program, recipients of the 2022 WHL Excellence Awards, and the extensive regional WHD activities. The Congress in May had more than 100,000 clicks and over 8300 registrants. This issue also continues to showcase the many global hypertension control activities from WHL’s partners and members. The Newsletter continues its education features from the Journal of Human Hypertension and recent publications of note.

Dan Lackland

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Congratulations and thank you to all of those who participated and shared in this year’s celebration of World Hypertension Day. This year our theme continued to be “Measure Your Blood Pressure Accurately, Control It, Live Longer” with the goal of increasing awareness of high blood pressure and the risk for hypertension-related non-communicable diseases (NCDs).

Our members and partners held hypertension awareness and educational events around the globe, virtually and in-person, via calls to action, webinars, blood pressure screenings, community events, lectures, media releases, and many other creative communications.

On page 6 below, please see some of the World Hypertension Day reports that we have received. We ask that you continue to send in your reports, for inclusion in our next Newsletter.

Congratulations to the WHL staff, speakers and our colleagues for a highly successful conference!

This year’s WHL 5th World Hypertension Congress received 114,000 clicks with over 8,300 registrants. Each session was attended by over 5,000 individuals virtually and in-person.

To re-play the sessions on the conference website click here and for the five-minute highlights video click here.
We are so excited to announce the contributions for the 2022 WHL Children's Art Program here with several examples below. This year's theme was "Promoting Healthy Lifestyles" and the artwork was showcased on World Hypertension Day, May 17th. Contributors received a special excellence award certificate entitled the "Edward J. Roccella Excellence in Art Award for Hypertension Awareness" in memory of WHL Art Program co-sponsor Dr. Edward J. Roccella.

Children's Art Program Sponsors:
Daniel T. Lackland, DrPH, Prof. of Epidemiology, Medical Univ. of South Carolina
Bonita Falkner, MD, Professor Emeritus, Thomas Jefferson University
**HOT OFF THE PRESES**

**2022 FACT SHEET & GLOBAL CALL TO ACTION ON DIETARY SODIUM (SALT)**

The published World Hypertension League, Resolve to Save Lives and the International Society of Hypertension fact sheet and global call to action on reducing dietary sodium (salt) was supported by 70 additional national and international health and scientific organizations. The **Call to Action** can be rapidly accessed at [https://rdcu.be/cNIMn](https://rdcu.be/cNIMn) and represents the position of mainstream scientific and health care organizations.

**The Global Call to Action outlines:**
- the burden of disease caused by high dietary sodium,
- scientific evidence supporting recommendations to reduce dietary sodium,
- dietary recommendations to reduce dietary sodium,
- estimated levels of sodium intake,
- cost effectiveness of programs to reduce dietary sodium,
- sources of controversy,
- interventions to reduce dietary sodium and
- updated resources on the adverse health effects of high dietary sodium and interventions to reduce dietary sodium.

The Call encourages all health care professionals, scientists, and the organizations that represent them to advocate for sodium reduction to be a high global priority and for all nations to develop effective programs to reduce sodium intake to recommended levels. Organizations can review the Global Call to Action and indicate their support for the Call by contacting the World Hypertension League [here](#). An updated list of supporting organizations will be maintained until 2025. Since the Call’s publication, the Libin Cardiovascular Institute (Canada) has also indicated its support bringing the number of sponsoring/supporting organizations to 74.

1. Campbell NRC, Whelton PK, Orias M, et al. 2022 World Hypertension League, Resolve To Save Lives and International Society of Hypertension Dietary Sodium (Salt) Global Call To Action. *J Hum Hypertens.* 2022; [https://doi.org/10.1038/s41371-022-00690-0](https://doi.org/10.1038/s41371-022-00690-0).
The *Journal of Human Hypertension* aims to improve the management of hypertension by increasing awareness and promoting quality research on hypertension from around the globe. Towards this end, the Journal has published spotlight issues highlighting the various aspects of hypertension – including its prevalence as well as practical issues hampering optimal management – in different parts of the world. In 2019, the Journal published a spotlight issue on the Indian subcontinent, and the latest issue of the Journal (May 2022) includes a spotlight on the Middle East, featuring a collection of papers highlighting the different issues with hypertension management in the region.

Of particular note is the paper by Al-Riyami et al., which reports on three-years of data (2017-2019) collected by the May Measurement Month programme in Oman. Hypertension is a major issue in Oman, along with high prevalence of other cardiovascular risk factors such as obesity and diabetes at an earlier age than seen in the West. Indeed, the Middle East has among the highest rates of obesity and diabetes in the world.

Another problem highlighted in the spotlight issue is the differences in healthcare in the region. There are countries still reeling from the effects of war and internal strife, which is reflected in their healthcare, in contrast to other countries in the region that have a modern, state of the art healthcare system. The difficulties associated with the healthcare of migrant workers and refugees in the region are also touched upon, as in Zibara et al.’s article.

We hope that this and other spotlight issues will bring to the forefront the various problems associated not only with hypertension care, but with healthcare as a whole in different parts of the world, with the aim to find solutions for the obstacles faced by both patients and healthcare workers and ultimately improve patient care.

We welcome suggestions from the readers of this newsletter and WHL members for future spotlight issues – these can be on any topic and do not necessarily need to be geographically focused. If you would like to reach out, please email us either at sunil.nadar@nhs.net or jhh@nature.com. We would be very happy to hear from you and help take your ideas forward.

**Emerging Authors Program Expands**

The Emerging Authors Program for Global Cardiovascular Disease Research (EAP) continues to expand its reach and approach. It offers researchers from low- and middle-income countries scientific writing and publication mentorship from global CVD experts.

Five second-cycle authors recently published in the *Journal of Human Hypertension*. Ten researchers in the third cycle expect to publish in the *Preventing Chronic Disease* journal this fall. In April, the CDC initiated an eight-part webinar series on manuscript writing taught by WHL faculty Professors Daniel Lackland, Michael Weber, and Paul Whelton. Over 500 participants from around the globe have attended each of the first four sessions.

In May, Dr. Qaiser Mukhtar, CDC EAP Lead, presented a session at the 5th World Hypertension Congress on “FETP and EAP Implementing a Novel Early Career Writer Program” with Professors Lackland and Weber, moderated by Dr. Andrew Moran. The Congress organizers reported a global attendance of 5600 for this session.
HEARTS in the Americas, the Pan American Health Organization (PAHO) flagship initiative for hypertension control and CVD secondary prevention, currently implemented in 22 countries, commemorated World Hypertension Day 2022 with a stellar line up of speakers that ranged from ministry officials and civil society representative to academics and implementers from all geographical subregions of the continent. With attendance of over 1000 participants, the webinar agenda highlighted recent major publications in The Lancet Regional – Americas:

2021 World Health Organization guideline on pharmacological treatment of hypertension: Policy implications for the region of the Americas

Drivers and scorecards to improve hypertension control in primary care practice: Recommendations from the HEARTS in the Americas Innovation Group

These publications are expected to become tools for implementers at two levels: Policy and decision-making level and ground personnel at primary care centers, hence the webinar was designed around the two publications to share insights and comments from leaders, academics and implementers.

The first segment of the webinar, led by Dr. Norman Campbell, focused on the policy paper which presented specific recommendations to highlight the facilitating role of the HEARTS in the Americas Initiative to catalyze the implementation of the new WHO guideline on the pharmacologic treatment of hypertension. The presentation of the second paper, led by Dr. Jeffrey Brettler, highlighted the eight key drivers for hypertension control, a set of clinical and managerial recommendations to guide program implementation and improve hypertension control.

American Heart Association

AHA recognized World Hypertension Day on May 17th with a webinar on the management of resistant hypertension.
India
Submitted by Dr Kapil Sharma, MD, Asst. Prof. Dept of Internal Medicine, AIIMS, Bilaspur (HP)

The Department of Internal Medicine at All India Institute of Medical Sciences (AIIMS), Bilaspur, Himachal Pradesh, India, organised a public awareness program on May 17, 2022 on the occasion of World Hypertension Day. Concurring with the theme of this year, "Measure your BP Accurately, Control It, And Live Longer", different educational activities were performed.

Prof. Dr. Vir Singh Negi, Director AIIMS, presided over the function. He emphasized the role of adopting a healthy lifestyle to prevent as well as control high blood pressure. On the occasion, Dr Ajay Jaryal, spoke about the different causes of high blood pressure, its effects on vital organs of the body and about the measures of controlling high blood pressure.

Dr Kapil Sharma conducted an activity in which patients were given demonstrations to measure their BP accurately at home. A workshop was also organized in which a large number of patients from rural areas measured their own blood pressure using automated BP devices under the supervision of trained nursing officers. They were also given pamphlets describing steps to measure their BP accurately at home.

A poster making competition was also organized on this occasion in which many nursing officers and MBBS students took part and displayed their creative skill to make the public aware of high blood pressure and its adverse effects on human health.

Visnagar, Gujarat, India
Community Medicine Department, Nootan Medical College & Research Centre, Sankalchand Patel University

Due to the pandemic, on World Hypertension Day 2022 we focused on virtual educational outreach, while continuing to promote blood pressure screenings. Our BP screening was held at the Urban Health Training Centre, and 300 persons attended.

Italy
Submitted by Massimiliano Melis, HEALTH&LIFE S.r.l.

On the occasion of World Hypertension Day and in collaboration with the Italian Society of Arterial Hypertension (SIIA), CardioTalk.it, an Italian professional information platform on cardiology, broadcasted the live webinar "Renal denervation: of much use or of little use?"

The webinar, moderated and conducted by Claudio Ferri (University of L’Aquila - past president of SIIA), involved Guido Grassi (University of Milan-Bicocca - SIIA president) and Stefano Taddei (University of Pisa - fellow of the European Society of Cardiology).
Professor Ferri said: "In Italy, on World Hypertension Day, there were conferences and a number of other cultural initiatives both locally and online. This webinar was a special event because it also involved the president of the "Italian Society of Arterial Hypertension", and during this initiative it dealt with a particular aspect such as renal denervation, interesting for doctors and often little known by citizens."

Kenya

The Root Cause, a Community Health Organization whose mission is to impact chronic diseases Diabetes and Hypertension, created a digital campaign to promote WHD 2022. The Root Cause focuses on the social determinants of health and disease-specific prevention and management in disadvantaged communities and rural communities, in conjunction with the Nyandarua County Health Department in Ndaragwa Kenya.

Nigeria and Ghana

Submitted by Prof. Mayowa Ojo Owolabi, MBBS, MSc
WHL Regional Leader, Sub-Saharan Africa

The World Hypertension League has designated the 17th of May every year as World Hypertension Day (WHD), with the goal of raising global awareness of hypertension. Hypertension has been named the world's leading cause of preventable mortality, and it commonly manifests itself as stroke, heart failure, heart attack, or kidney failure. WHD2022 was no exception in recognizing hypertension as a "silent killer," with a variety of activities. The year's theme, "Monitor Your Blood Pressure Accurately, Control It, Live Longer," serves as a rallying cry for people all over the world to raise hypertension awareness.

The Nigerian Hypertension Society (NHS) issued a press statement in Nigeria decrying the high prevalence of hypertension among Nigerians and the lack of awareness, treatment, and control rates despite the availability of effective drugs. There was a mention of the 2018 screening which revealed that hypertension affects one-third of the population, with just half of those diagnosed aware of their condition and only 18% of hypertensives having their blood pressure controlled. It concluded by outlining eight steps that should be taken by the populace to reduce the negative consequences of hypertension including regular BP checks, increased health seeking behaviour, compliance with recommended drugs, avoidance of excess salt intake, increased healthy diets, physical exercise, weight reduction, and avoiding health depleting lifestyles like smoking and consuming alcohol.

Screening people for HBP, blood sugar test, BMI in Ghana

The Stroke Association Support Network-Ghana (SASNET-Ghana), led by Ad Adams Ebenezer, Executive Director, organized the day’s activities in collaboration with the Ministry of Health (MoH), Ghana Health Service (GHS), Novartis, CSOs, Bono East Regional Health Directorate, and PATH-Healthy Africa Project in Ghana. It urged the government to focus on increasing the capacity of healthcare professionals, notably nurses, in order to improve blood pressure diagnosis and treatment in the country. There was also a plea for
the government to provide standardised digital blood pressure monitoring devices to all health facilities for accurate blood pressure measurement. Other initiatives included HBP and BMI screening, blood sugar and cholesterol testing, media and social media promotion, and interview requests.

Prof. Mayowa Owolabi, a hypertension expert and the Regional Director (SSA), World Hypertension League and Lead Co-Chair, WHO-World Stroke Organization-Lancet Neurology Commission on Stroke, echoed what has been said previously about the deadly nature of uncontrolled hypertension in an interview with a leading Nigerian newspaper, The Guardian. He claimed that around 50 million Nigerians are hypertensive, with nearly half of those over the age of 25 having a blood pressure of greater than or equal to 140/90 mmHg. Dr. Kingsley Akinroye, a consultant cardiologist, expressed similar sentiments, stating that while the ideal blood pressure is 120/80 mmHg, in Nigeria, normal blood pressure is 140/90 mmHg, with nearly one in three adults suffering from hypertension (blood pressure above 140/90 mmHg), and only one-third of this figure (roughly 26.7 million Nigerians) receiving treatment.

Prof. Owolabi said that the witnessed increase in complications is due to the low proportion of individuals with hypertension who are diagnosed, treated, and controlled. He noted that this anomaly can also be found in other parts of Africa, where up to 93% of people with hypertension are unaware, untreated, or uncontrolled. These conditions increase the risk of stroke, heart attack, kidney failure, and heart failure. He went on to say that the high expense of treatment contributes to poor treatment adherence, and advised that governments and pharmaceutical companies should collaborate to ensure that hypertension treatment is covered by health insurance, that medical costs are subsidized, and that free generic drugs are available. He suggested that persons over the age of 18 be screened for hypertension as a means to reduce the disease's burden.

He also urged for its implementation in all health facilities, including primary health care centers, whose capability can be strengthened in the treatment and control of hypertension through a protocol-based referral system under supervision in the commencement of uncomplicated hypertension treatment. Because there is no known cure for hypertension, he recommended eating a healthy diet rich in green leafy vegetables, avoiding excessive diet rich in green leafy vegetables, avoiding excessive table salt and red meat, and maintaining a healthy weight and BMI. Please see this link for a more detailed view of the interview.

Portugal

World Hypertension Day 2022 was celebrated in the Centro Hospitalar de Entre o Douro e Vouga (Santa Maria da Feira, Portugal), with the goal to improve people's knowledge of Arterial Pressure Monitoring, and reached almost 100 people with elevated blood pressure.
Philippines, Sudan and Uganda
Submitted by Dr. Hardik Gandhi, Zydus Medical Affairs

We were able to collectively engage about 3000 stakeholders in the Philippines, Sudan and Uganda, under the banner of WHD2022.

- A five-step poster was distributed on WHD to 756 doctors in the Philippines and 900 doctors in Uganda.

- Allied health professionals – Nurses and Pharmacists – were also involved in these activities (about 100 individuals participated).

- A patient awareness camp on correct measurement of BP was conducted in Uganda which was attended by 200 patients.

- A hypertension screening camp was conducted at Rebuilder Centre Church, Uganda in collaboration with the Uganda Heart Association. Approximately 100 patients were screened. This was conducted through the support of Dr Judith Namuyonga, Secretary, Uganda Heart Association.

- A Blood Pressure camp was conducted in Sudan in collaboration with the Sudan Hypertension Society where approximately 300 patients were screened.

South Carolina Celebrates Annual State Hypertension Day

St. Lucia Observes World Hypertension Day
See youtube video at this link.

Syria
The Syrian Association of Nephrology and Transplantation held a symposium on May 19-20 in Damascus: “Updates in the diagnosis and treatment of hypertension and renal stones”.

Link to Facebook page of the Syrian Society of Nephrology and Transplantation
Thailand
Submitted by Sirisawat Kunanon, MD
On behalf of the Thai Hypertension Society

Due to the COVID-19 situation, the Thai Hypertension Society held a Facebook live talk on the topic of “Measure Your Blood Pressure Accurately, Control It, Live Longer” on World Hypertension Day, 17 May 2022.

During the talk, frequently asked questions about hypertension were discussed such as blood pressure (BP) measurement techniques, treatment of hypertension, complications of hypertension, and the importance of reducing salt intake.

Our audience was invited to measure their BP and complete the online questionnaire for the 2022 May Measure Month campaign. A video of the event was available on our Facebook page. We hope that our efforts will assist our community in becoming more conscious of their BP, improve BP control, and ultimately prevent cardiovascular events.

NEWS FROM OUR PARTNERS

RESOLVE TO SAVE LIVES

In early May RTSL launched “Under Pressure: Strategies to improve access to medicines to treat high blood pressure in low- and middle-income countries.” Developed in partnership with the Médecins Sans Frontières Access project, this report identifies barriers to affordable blood pressure medication in LMICs and underscores the need for a transformation of the global blood pressure medicines market to make life-saving medicines more affordable and available.

To introduce this report, RTSL invited health leaders and advocates from around the world — including representatives from the World Health Organization, The National Primary Health Care Development Agency in Nigeria and the Clinton Health Access Initiative — to discuss the importance of affordable and accessible medicines for all patients with high blood pressure.

The recording of the event is here and the full report is now available here.
May Measurement Month (MMM), the annual global screening campaign that helps people to get their blood pressure (BP) checked, launched in 90 countries on 1st May 2022. This is the campaign’s biggest year to date!

Over 650,000 people participated in 2021, the results of which will be published in May 2022 to coincide with the launch of this year’s screenings. The 2022 campaign sees the introduction of not only MMM’s standard free blood pressure screening services but will also be offering atrial fibrillation detection in 15 countries across multiple regions.

With the pandemic still having an impact in many countries this year MMM will run from 01 May – 31 August allowing countries to carry out safe, covid compliant screening services.

For more information about the campaign please visit [www.maymeasure.org](http://www.maymeasure.org)

WORLD HEALTH ORGANIZATION

The 75th World Health Assembly: Spotlight on NCDs

The World Health Assembly (WHA) is the decision-making body of WHO. It is attended by delegations from all WHO Member States and focuses on a specific health agenda prepared by the Executive Board. The main functions of the World Health Assembly are to determine the policies of the Organization, appoint the Director-General, supervise financial policies, and review and approve the proposed programme budget.

This has been a landmark year for NCDs with NCDs a core priority of this year’s WHA. The Assembly approved a record number of recommendations relating to noncommunicable diseases (NCDs) such as cervical cancer, diabetes, and obesity, as well as mental health, including a landmark global strategy on oral health, global action plans on the reduction of harmful use of alcohol on epilepsy and other neurological disorders, and a set of recommendations to support to people living with NCDs in humanitarian emergencies.

Very relevant to the work on CVDs, for the first time ever, we saw delegates support global targets for the coverage and treatment of people living with diabetes, as part of recommendations to strengthen and monitor diabetes responses within national NCD programmes. The five new targets set the standard that, by 2030:

- 80% of people living with diabetes are diagnosed;
- 80% have good control of glycaemia;
- 80% of people with diagnosed diabetes have good control of blood pressure;
- 60% of people with diabetes of 40 years or older receive statins; and
- 100% of people with type 1 diabetes have access to affordable insulin and blood glucose self-monitoring.

The targets mark a landmark 12 months for diabetes, beginning in the creation of the WHO Global Diabetes Compact, aiming to reduce the risk of diabetes, and move towards a world where all people who are diagnosed with diabetes have access to equitable, comprehensive, affordable and quality treatment and care.

Together alongside our existing work, these new decisions create the potential to save hundreds of millions of lives. By prioritizing and integrating NCDs — the world’s single biggest killers — into strong health systems, including in primary health care, and to advance universal health coverage and learning from the perspectives of people living with NCDs, the world has the tools to immediately take steps that are effective, cost-effective and equitable.
President's Blog (May 2022)

Check out the latest ISH President’s Blog, written by Professor Maciej Tomaszewski (pictured left). Importantly, please note the announcement that Professor Bryan Williams (London, UK – pictured right) has been confirmed the President Elect of the ISH and will take up the Presidential office at the conclusion of the ISH 2022 meeting in Kyoto in October 2022.

ISH marks World Hypertension Day with release of key Position Paper
On World Hypertension Day 2022, the ISH was delighted to confirm the release of its latest position paper “International Society of Hypertension Position Paper on the Virtual Management of Hypertension: Lessons from the COVID 19 Pandemic”. Developed by an international panel of experts, the position paper identifies key modalities for the virtual assessment and management of hypertension and provides recommendations based on consensus of the writing group.

For more information, please view our press release. You can find the free full text of the position paper here.

Call for ISH 2022 Award Nominations

Find out more and nominate your colleagues.

Monthly E-Bulletin and Hypertension News
We invite you to read the latest issues of the monthly ISH E-Bulletins and April edition of ISH Hypertension News, the official quarterly newsletter of the ISH. This edition highlights the emerging public health programme with pre-hypertension and established hypertension in children and adolescents, with a new section on “African Voices”, and much more.

ISH Podcasts
The ISH Mentorship and Training Committee (MTC) has produced multiple podcast interviews featuring senior members of the society and hypertension community. These mentors have provided us with pearls of wisdom and allowed us to feel that we are getting to know our doyens despite much of the world being in lockdown. Listen to the latest podcasts on Spotify.

Women in Hypertension Research Newsletter
The ISH Women in Hypertension Committee (WiHRC) is making great strides in bringing together women working in hypertension research globally. We encourage you to read the latest issue of the Women in Hypertension Research Network newsletter and to find out more.

The International Society of Hypertension (ISH) is pleased to call for nominations for our 2022 awards. These will be presented on the occasion of the 29th Scientific Meeting of the ISH, which will be held in Kyoto, Japan from 12th to 16th October 2022 (www.ish2022.org).
New Investigator Network

The ISH New Investigator Network (ISHNIN) has been established to serve as a platform for interaction between students and new investigators to allow new avenues for communication, collaboration and education. Find out more

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.

ISH KYOTO 2022 MEETING 12-16 Oct

Registration is now open!

We look forward to welcoming as many participants as possible to Kyoto in October. The meeting will be held in a hybrid format, with flexible registration options, to enable those who are not able to travel to Japan to participate and present. Register here!

Please watch our invitational Kyoto 2022 Meeting video and visit the meeting website to find out more.

See you in Kyoto in October 2022!

Hiroshi Itoh, MD PhD Chair, ISH 2022 Kyoto #ISH2022 #Kyoto

NATIONAL FORUM FOR HEART DISEASE AND STROKE PREVENTION

The National Forum’s Value & Access Collaboration is pleased to share the recently updated SHARED decision-making resources in English and Spanish.

Each guide includes sample questions and talking points providers can use to discuss treatment planning with patients, a fillable treatment planning form, and a patient education handout. Topics include ASCVD, Familial hypercholesterolemia (FH), Statin treatment planning, Statin and other cholesterol-lowering therapy.

WORLD STROKE ORGANIZATION

As the World Health Assembly gathered, the World Stroke Organization set out global policy agenda to deliver lives free from stroke

Stroke remains the world’s second leading cause of mortality accounting for over 6 million deaths a year, it is also the third leading cause of disability. Around 100 million people in the world currently live with the impact of stroke which can include devastating loss of mobility, cognition and communication as well as on individual mental health, social inclusion, income and care costs. With figures like this it is shocking that only 38% of governments around the world report having a national strategy to specifically address stroke, and incredible that only 3% have identified resources to deliver it.

Meanwhile, the upward trajectory of stroke continues, driven by increased incidence in low- and middle-income countries where public stroke care systems are often under-developed.
With an estimated global cost of about US$1 trillion per year, stroke represents a significant brake on international and national efforts to develop sustainable economic growth. We know that governments around the world have committed to reducing non-communicable diseases and a series of WHO policy best buys provide clear guidance to decision-makers on how to act, nevertheless action remains too slow, and investment remains too low (and we use the term investment wisely - $1 spent on stroke prevention generates $10 to the economy).

Even before the world was faced with the challenges of a global pandemic, progress on international commitments to non-communicable disease was falling behind. While progress has certainly been undermined by the requirements of the pandemic response, recent years have starkly illustrated the close inter-relationship between communicable and non-communicable diseases. Any efforts to reduce vulnerability to the ongoing or future pandemics, requires us to take action that will address underlying health issues within the population which make people more vulnerable to communicable diseases and that require seismic interventions to protect both individuals and healthcare systems.

As the world takes stock and leaders gather at the World Health Assembly to discuss the potential for a global agreement of emergency preparedness, WSO has published a clear set of policy objectives for prevention, treatment and post-stroke care that would address the global burden of stroke and would increase resilience in the face of future health emergencies.

**Stroke Prevention**

While treatments for stroke have advanced considerably, scaling up care in low- and middle-income countries where the burden is highest is a particular challenge. The mainstay of national stroke strategies should be prevention. We know that 90% of strokes are linked to 10 modifiable risk factors including hypertension, smoking, overweight/obesity, exercise and alcohol. WSO’s **Cut Stroke in Half** is WSO’s flagship policy initiative that provides a roadmap to policy makers that combines population-wide and individual strategies that would reduce stroke risk for those at any level of increased risk. Pillars of Cut Stroke in Half include reducing exposure to stroke risk factors, implementing motivational digital and mobile technologies, facilitating access to low dose combination medications in a single poly-pill for specific groups and investing in the training and deployment of community health workers.

**Stroke Recognition**

From the moment of onset, stroke starts to destroy brain tissue, timely access to emergency medical treatment is therefore crucial to the outcome of stroke. New treatments for stroke can make the difference between a lifetime of disability and walking out of a hospital with minimal issues. Arriving too late to a hospital reduces the options for and effectiveness of treatment and increases the risks of complications.

With one in four of us at risk of stroke in our lifetime, it is vital then that everyone knows how to spot the signs of stroke, understands the need to take those signs seriously and seeks immediate emergency medical care. WSO leads a global awareness campaign in partnership with members and supports national advocacy to ensure on-going support for stroke symptom awareness as part of public health awareness programs.

**Acute Stroke Services**

Organized stroke care systems can reduce stroke mortality and morbidity by up to 30%. Administration of clot busting drugs within a few hours of onset, increases the chance of a positive outcome by a further 30%. Removing blood clots from the brain (mechanical thrombectomy) increases the chance of a good outcome by more than 50%.

The goal is therefore for all stroke patients to be treated at stroke units with access to evidence-based acute therapies. WSO has developed a context specific guideline for implementation of quality stroke care. The Global Stroke Services Guideline & Action Plan and the companion document WSO Roadmap to Delivering Quality
Stroke Care have been widely translated and provide a clear process for identification of care priorities and actions that are needed to improve provision at institutional level. We encourage governments, healthcare providers and clinicians to work together to ensure implementation at national level.

Life after stroke
Over half of the people who have stroke in the world will survive, for many however survival will mean living with physical disability, communication difficulties and changes in how they think, feel and behave. These impacts are often accompanied by loss of work, income, independence and social networks. Ensuring access to specialist neuro-rehabilitation units and long-term rehabilitations units is essential to improving the quality of life of survivors.

Because the needs of survivors can be complex and long-term, community-based support with on-going health, well-being and social participation is crucial for people affected by stroke and their caregivers. Patients should also have a voice in the development of strategies and services. WSO works to establish and strengthen the capacity of stroke support organizations and advocates for government support for SSOs to ensure their role in participation and community support.

Stroke action and accountability
In its recently published policy agenda, WSO is calling for bolder evidence-based action and increased engagement from decision-makers aligned to WHO Best Buys as well as collaboration with NGOs, for example through the NCD Alliance, to increase visibility and action on the specifics of stroke in relation to prevention, treatment, rehabilitation and survivor support.

We know what needs to be done, we know how to do it, what we need now is action.

SODIUM REDUCTION NEWS
SUMMARY: DIETARY SODIUM (SALT): FACT SHEET AND GLOBAL CALL TO ACTION

Early in 2022, 70 national and international health and scientific organizations supported the World Hypertension League, Resolve to Save Lives and the International Society of Hypertension fact sheet and global call to action on reducing dietary sodium (salt). The Fact Sheet and Global Call to Action can be considered to represent the position of the mainstream global health and scientific sector.

This is a short summary of the global call to action which outlines:

a) the large burden of disease caused by high dietary sodium,
b) evidence supporting reductions in dietary sodium,
c) recommendations to reduce dietary sodium,
d) current levels of sodium intake,
e) cost effectiveness of reducing dietary sodium,
f) some of the sources of controversial opinions,
g) approaches to reduce dietary sodium and
h) sources of frequently updated evidence reviews on the adverse health effects of high dietary sodium and on how to reduce dietary sodium.

The call advocates health care professionals, scientists, and the organizations that represent them to more actively engage and advocate for sodium reduction to be a high global priority and for all nations to reduce dietary sodium to recommended levels.

Numerous governmental and nongovernmental scientific reviews indicate high dietary sodium is one of the most significant health risks facing populations largely by increasing blood pressure, and thereby causing cardiovascular disease. Meta analyses of high quality randomized controlled trials show blood pressure is linearly decreased with reductions in dietary sodium levels to 800 mg/day. High dietary sodium affects blood pressure in those with and without hypertension, old and young, differing ethnicities, males, and females. Meta analyses of randomized controlled trials support decreases
in dietary sodium to 2300 mg/day linearly decreasing cardiovascular disease. A meta-analysis of cohort studies, that defined intake by multiple 24 hr urine sodium collections, reported a linear association between dietary sodium levels above 1846 mg/day and cardiovascular disease. This high-quality research does not currently find evidence for a lower threshold of dietary sodium causing cardiovascular disease or increasing blood pressure. In contrast, increased cardiovascular disease with lower levels of sodium intake have been reported in low quality research with the results widely being attributed to weak research methods and study designs.

The World Health Organization recommends adults consume less than 2000 mg sodium (5 gm salt) per day with some variation in national recommendations (all recommend less than 2400 mg/day or lower levels). Children are recommended to consume less sodium than adults. The average sodium consumption in adults is estimated to be about 4000 mg/day. Economic studies indicate very high-cost effectiveness or cost savings and high returns on investment for programs to reduce dietary sodium. Reducing dietary sodium is indicated to be one of a few ‘best buys’ for improving population health by the World Health Organization.

Multiple strategic documents have been developed to guide programs to reduce dietary sodium. Strategies are largely based on reducing sodium additives to food during commercial processing or at home. These strategies call for broad comprehensive changes in nutritional policies to create healthy eating environments and population dietary behaviour change interventions. Replacing normal salt (sodium chloride) with a lower sodium (potassium enriched) salt has been shown to be both safe and to reduce cardiovascular disease and death. As of 2020, ninety-six countries had sodium reduction programs with several showing substantial reductions in sodium, reductions in population blood pressure and cardiovascular disease. Nevertheless, most of the current sodium reduction programs are at best modest and at an early stage. Much greater and higher priority actions are advocated by the World Hypertension League, Resolve to Save Lives and the International Society of Hypertension and the 68 supporting organizations of the global call to action.

All health care professionals, scientists, and the public need to advocate and work together and with governmental organizations to reduce dietary sodium, reducing high blood pressure, the global leading risk for death, cardiovascular disease and stroke, the leading causes of death globally. Organizations can review the Global Call to Action and indicate their support by contacting the World Hypertension League here. An updated list of supporting organizations will be maintained until 2025. The Call to Action can be rapidly accessed at https://rdcu.be/cNIMn.

1. 2022 World Hypertension League, Resolve To Save Lives and International Society of Hypertension Dietary Sodium (Salt) Global Call To Action. J Hum Hypertens. 2022; https://doi.org/10.1038/s41371-022-00690-0.

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EDUCATIONAL RESOURCES SECTION

Validation Status of Blood Pressure Measuring Devices Sold Globally

Published in the February 2022 issue of JAMA - click here for full text.

Elevated systolic blood pressure (BP) causes more than 10 million deaths every year.1 To identify and manage elevated BP, guidelines from hypertension societies recommend BP measurement using automated cuff-based devices that are clinically validated for accuracy. Validated devices are more likely to be accurate compared with devices without evidence of validation.2 However, regulations in most countries permit devices to be cleared for marketing without evidence of validation.

A recent Australian study revealed that only 18% of 278 upper arm cuff and 8% of 162 wrist cuff devices were validated.3 Whether these results are representative is unknown. We analyzed the only validated device listing with information on devices marketed globally, including validated devices as well as those without evidence of validation.
Accurate Automated Blood Pressure Measurement Certification Course

This free automated BP measurement course is available at this link, illustrating step by step how to properly measure blood pressure. This course is an initiative of PAHO joined by WHL, the Lancet Commission on Hypertension Group, Hypertension Canada, and Resolve to Save Lives.

WHL Excellence Award in Diplomacy

Dr. Ralph Sacco is presented with the 2021 WHL Daniel T. Lackland Excellence Award for Diplomacy and Advocacy for Population Hypertension Risk Reduction

The WHL 2021 Excellence Award was presented to Prof. Ralph Sacco with his team on May 9th by Prof. Daniel Lackland.

VIRCHOW PRIZE

Virchow Prize for Global Health is launched - Deadline June 30th, 2022

We are delighted to introduce to our partners, the “Virchow Prize for Global Health” which has been established by the Virchow Foundation for Global Health.

For the first time this year, the Virchow Prize for Global Health will be awarded on 15 October 2022, the day preceding the World Health Summit in Berlin.

Laureates of the Virchow Prize for Global Health will be awarded an endowment of €500,000 for their longstanding commitment and contributions towards improving health and well-being for all. These efforts must uphold the United Nations 2030 Sustainable Development Goals (SDGs), encompassing work which addresses research, treatment and prevention of non-communicable diseases e.g. hypertension and related heart diseases within SDG 3: “Ensure healthy lives and promote well-being for all at all ages.”

The nomination phase is now open and the deadline is June 30th. All information on the nomination process can be found here: https://virchowprize.org/nominations/

Read the full press release: https://virchowprize.org/virchow-prize-for-global-health-launched/

Stay up to date by subscribing to the Virchow Prize for Global Health Newsletter here and follow on Twitter and LinkedIn.
UPCOMING MEETINGS OF NOTE

14th World Stroke Congress (WSC) 2022
26-29 October 2022 | Singapore

We look forward to welcoming you to the 14th World Stroke Congress in Singapore from 26-29 October 2022. 2022 WSC will allow stroke professionals to meet in person after such a long time for an exciting scientific meeting with many opportunities for face-to-face interactions.

The program for the 2022 Congress will feature the latest and emerging topics in stroke care for stroke professionals, researchers and policy makers. Please note that when registering to WSC 2022 you will have the option to become a member of WSO and get a registration discount.

See you in October!
www.worldstrokecongress.org

LINKS OF NOTE

LINKS is a collaborative effort of the World Health Organization, the U.S. Centers for Disease Control and Prevention and Resolve to Save Lives, an initiative of Vital Strategies.

LINKS is aligned with the World Health Organization’s HEARTS, REPLACE and SHAKE. For more information, please 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
Publication of weekly Medline searches related to dietary sodium

KNOWLEDGE ACTION PORTAL (KAP)
WHO’s platform for NCD info. Click here

HEARTS CVD RISK CALCULATOR APP

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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<table>
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<tr>
<th>Calendar of Events</th>
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| **European Society of Hypertension 2022**  
  June 17-22, 2022  
  Athens, Greece and Virtual  
  [click here](#) |
| **15th Congress of Asian Society of Cardiovascular Imaging**  
  June 22-26, 2022  
  Hong Kong SAR China  
  [click here for information](#) |
| **Hypertension Council Sessions 2022**  
  September 7-10, 2022  
  San Diego, California  
  [click here for registration](#) |
| **ISH Kyoto 2022**  
  October 12-16, 2022  
  Kyoto, Japan  
  [Click here for information](#) |
| **World Health Summit**  
  October 16-18, 2022  
  Berlin & Digital  
  [click here for registration](#) |
| **14th World Stroke Conference (WSC)**  
  October 26-29, 2022  
  Singapore  
  [click here for registration](#) |