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RIBURST Study (Reducing the International BURden of Stroke using mobile Technology)

Newsletter 13, September 2020

Welcome to the 13th issue of the RIBURST newsletter

It has been a long time since our last newsletter was issued. We apologise for this, but as we are all painfully aware, the COVID-19 pandemic has disrupted normal activities.

We hope all of you are staying safe and well.

Progress of the study

As of August 2020, there were 11,930 participants in the study, with 186 new participants since May 2019. We are hoping that the number of new participants will increase now that the updated app is released.

Updated app released

The new version of the Stroke Riskometer app has been released. It has been translated into 13 languages, and you can now download the app free of charge from Google Play and the App Store.

The new features of the app include:

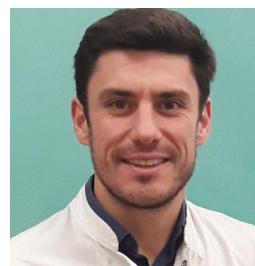
- Improved User Interface (UI) and User Experience (UX)
- Updated graphs with the opportunity to track changes in a user's risk factors
- Novel push-notifications
- Availability to share the test results with users' doctors and others

The app currently fulfils the criteria of the General Data Protection Regulation (GDPR) – the new EU law on data protection and privacy in the European Union and the European Economic Area.

Meet some of the collaborators responsible for translations

Below you will find a brief profile of some of the collaborators who have worked on translations, along with a note of how they plan to profile the new app in their country, so that current users of the app will be able to switch to the new version and new users are engaged to download it.

France



Yannick Béjot, Dijon Stroke Registry, University Hospital of Dijon, Burgundy, France

AND



Maurice Giroud, Service of Vascular Neurology, General Neurology and Neurodegenerative diseases, University Hospital of Dijon, Burgundy, France

In France, Professors Giroud and Béjot promote the Stroke Riskometer through

several actions towards the public and the Health Ministry: Public and health care gives meetings on risk factors for stroke and dementia and the usefulness of Stroke Riskmeter; Information on media, radio and TV on stroke and Stroke Riskmeter and posters in railway stations; Research on the long term impact of the Stroke Riskmeter on the incidence rates of stroke in the Burgundy-Franche-Comté region.

Bengal



Dipes Kumar Mandal, Founding President of the Stroke Foundation of Bengal

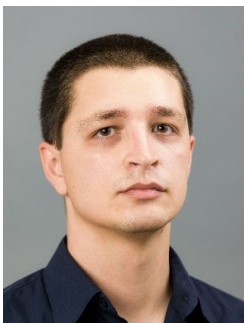
The current users of the app will be informed about the new version of the app through print and electronic media, and more importantly in social media including FB, Twitter, Linked in, Website etc.

Bulgaria



Klara Dokova, Department of Social Medicine, Faculty of Public Health, Medical University "Prof. Dr P. Stoyanov" Varna, Bulgaria

AND



Mihael Tsalta, Dept. of Neurology and Neuroscience, Faculty of Medicine, Medical University "Prof. Dr P. Stoyanov" Varna and University Hospital "St. Marina", Varna, Bulgaria

We plan to make a wide media campaign through the university television and all national and local media in order to promote the Stroke Riskmeter App in the Bulgarian Language. This media campaign will be joined with the start of the regional Stroke register. The app will be promoted through social media and the website of the Medical University.

Germany



Vitalij Kazin, Director, Centre for Precise Psychiatry and Neurosciences, Germany/Switzerland; Vice Rector, Venlo University, The Netherlands

AND



Martin Dichgans, President European Stroke Organisation (ESO); Director, Institute for Stroke and Dementia Research, Ludwig-Maximilians-Universität Munich, Germany

The app will be promoted via social media and several actions in medical and academic societies, through public and Health Ministry meetings outlining risk factors for stroke and dementia; Research on the impact of the Stroke Riskmeter on lifestyle changing patterns; development and promotion of the Stroke Riskmeter web-app.

Italy



Paola Santalucia,
ALT Vice-President and
stroke neurologist
Messina, Italy

The Stroke Riskometer Italian translation is endorsed by ALT -Associazione per la Lotta alla Trombosi e Malattie Cardiovascolari, Onlus-Italy.

ALT is a well-known and reliable Health Organization in Italy with a very active press office. The ALT staff is very happy to promote and spread the Stroke Riskometer information to the Italian population through its social media and a wide range of press releases.

The Stroke Riskometer is an important tool for stroke prevention and vascular risk factors management, our goal is to reach as many people as possible to give them the opportunity to be aware of the benefits of its utilization for their health.

Sweden



Katharina Stibrant Sunnerhagen,
Institute of
Neuroscience and
Physiology,
University of
Gothenburg,
Sweden

Czech Republic



Hana Maršálková,
Stroke Research Program,
International Clinical
Research Center of St.
Anne's University Hospital
Brno, Czech Republic

The app will be promoted via social media, websites and stroke awareness events. It will be also recommended to patients at the Neurology Outpatients Clinic. The national launching strategy will be discussed within the Czech Stroke Coalition and specifics of the app's dissemination in the Czech Republic will be mapped in a thesis.

India



Man Mohan Mehndiratta,
Department of
Neurology,
Janakpuri Super
Speciality Hospital
Society, New Delhi,
India; President
Society of

Neurosonology, India; President Asian Oceanian Association of Neurology (AOAN); Secretary-General Asian Pacific Stroke Organization (APSO); Chairman Scientific Committee Asian Pacific Stroke Organization (APSO).

Prof. Mehndiratta will promote the updated app through the websites of the APSO, ISA and Society of Neurosonology, as well as posting on the website and Facebook page of www.jsshs.org (Janakpuri Super Speciality Hospital Society).

China



Wenzhi Wang,
Beijing
Neurosurgical
Institute, Capital
Medical University,
Beijing, China

Cyprus/Greece



Marina Charalambous,
President, Cyprus Stroke Association;
Adult Neuro Expert Scientist, Cyprus University of Technology

Marina plans to announce the launch of the Greek version via the Facebook page <https://www.facebook.com/strokecyprus/> and website <https://stroke.org.cy>, where both have many visits both from Greek and Cypriot people. In addition, in November she will be hosting a Greek version Stroke Riskometer event at the Annual Neuroscience Conference of the University of Cyprus in Nicosia. In addition, they will be disseminating the app via email, newsletters and meetings to collaborators and allies both in Cyprus and Europe via SAFE (Stroke Alliance for Europe).



Releasing the Stroke Riskometer in Cyprus

Important publications

- 1) Brainin, M., Feigin, V., Norrving, B., Martins, S., Hankey, G. J., & Hachinski, V. (2020). Global prevention of stroke and dementia: The WSO Declaration. *The Lancet Neurology*, 19(6), 487-488. doi: [https://doi.org/10.1016/S1474-4422\(20\)30141-1](https://doi.org/10.1016/S1474-4422(20)30141-1)

At the end of this newsletter you will find a copy of the media release, issued by the World Stroke Organization.

- 2) Brainin, M. (on behalf of the World Stroke Organization) & Sliwa, K. (on behalf of the World Heart Federation) (2020). WSO and WHF joint position statement on population-wide prevention strategies. *The Lancet*, 396, 533-534.

You will find a copy at the end of this newsletter, along with the press release jointly issued by the WSO and WHF.

MARS International trial

There is accumulating evidence of the feasibility and effectiveness of using mobile applications to improve health but there is no evidence of their effectiveness for primary prevention of stroke and cardiovascular disease.

This project aims to determine effectiveness of the Stroke Riskometer app in reducing modifiable risk factors for stroke. The Stroke Riskometer app intervention has been shown to be feasible and, potentially effective in a pilot trial in New Zealand.

This study is an NHMRC-funded phase III randomised controlled trial including 400 participants in New Zealand and 390 participants in Australia. Should the trial be positive, it may open up brand new, far-reaching motivational population-wide primary prevention strategies via innovative mobile technology not only for stroke but also for other major non-communicable disorders, such as ischaemic heart disease, dementia, type 2 diabetes mellitus, and some types of cancer, with the potential to reduce morbidity and mortality and extend the life and wellbeing of people at risk of these disorders. The findings of the trial are also certain to influence clinical practice. It will provide data to inform decision making at a national and international levels in relation to primary stroke prevention,

thus improving health sector performance and health service delivery.

MARS studies with similar study designs are currently securing funding in the EU and Russia.

ICNE conference 2021

The COVID-19 pandemic and its implications are set to continue for some time. The global health crisis has challenged our model of face-to-face meetings – many of us still have travel restrictions and the role of social distancing continues to be crucial to control infection rates.

To adapt to the current situation, the ICNE 2021 Conference Planning Group has come to the decision to transform the International Conference on Neurology & Epidemiology (ICNE) into a fully virtual meeting that will be held on 19-20 March 2021.

We have a fantastic programme organised, with keynote and plenary presentations and teaching workshops by over 40 internationally recognised experts from all over the world.

This international conference will bring together scientists and experts in all major fields of experimental and non-experimental neurology, with presentations ranging from clinical trials and meta-analyses to cohort, case-control and case-report studies.

The benefits of participation in this conference include:

1. Affordable registration fees stratified by the level of training (students, trainees, regular delegates) and country income level (developing vs developed countries)
2. Ability to participate in all presentations (no time overlap between presentations)
3. All accepted abstracts published in online issue of Neuroepidemiology before the conference
4. Ability to view all presentations up to 3 months after the conference

5. CME credits and certificates of participation

The main topics of the conference are all major neurological disorders, including stroke, dementia, movement disorders, epilepsy, headache.

This conference will provide an excellent opportunity for neurologists, public health experts, neurosurgeons, epidemiologists, neuropsychologists, rehabilitation specialists, geriatricians, nurses, aged care specialists and health care providers working in the area of experimental and non-experimental epidemiology of neurological disorders to share their new ideas, research findings and experience.

For more information, please refer to the conference website at: <https://icne2021.ianeneurology.org>.

We believe the virtual International Conference on Neurology & Epidemiology will be a great success and look forward to meeting you online.

Contact information

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Success stories

We invite RIBURST members to submit details of their 'success stories' of the use/implementation of the app to bvangils@aut.ac.nz, for inclusion in future editions of the newsletter and sharing with the entire group.

NEWS RELEASE 29th May 2020, Geneva

GLOBAL STROKE LEADERS LAUNCH RADICAL STROKE AND DEMENTIA PREVENTION STRATEGY

The World Stroke Organization (WSO) has published a radical strategic framework that aims to transform prevention of stroke and dementia.

Published in [latest edition of The Lancet Neurology](#), the WSO Declaration on Global Prevention of Stroke and Dementia recognizes the commonality and reciprocity of stroke and dementia risk and calls for urgent action by governments and healthcare policy bodies to address the limitations of current prevention strategy. Over the past ten years the adult lifetime risk of stroke has increased from 1 in 6, to 1 in 4.

Without new evidence-based interventions, the WSO projects a current trajectory of disease that will lead to an annual death toll of 12 million stroke deaths and 5 million dementia deaths by 2050.

Highlighting the need for action in low- and medium-risk populations, who will ultimately represent 80% of the stroke and cardiovascular disease burden, the Declaration identifies four interdependent interventions that will significantly reduce the incidence and prevalence of stroke and dementia. The strategy also takes into account the specific challenges experienced by governments and communities in Low- and Middle- Income countries, putting in place a lower cost alternative to current prevention approaches.

Key principles of the Declaration

1 Adoption of population wide strategies that reduce exposure to stroke risk factors such as tobacco, alcohol and food policies, as well as action to address environmental risk factors, including air pollution, across the lifespan of the whole population.

2 Implement and promote the adoption of motivational mobile technologies, e.g. the WSO endorsed [StrokeRiskometer](#) to identify individual risks and support action on lifestyle risk factors among adults.

3 Access to low dose combination of generic blood pressure and lipid-lowering therapies in one polypill for middle age and older adults with at least two behavioural or clinical stroke risk factors.

4 Investment, training and deployment of community health workers to facilitate implementation.

WSO presents combined research evidence that shows a combination of these interventions would lower the incidence and of stroke by 50% and dementia incidence by 30% while contributing to decrease in incidence of other non-communicable diseases which share common risk factors.

Another proposed shift of approach is to change the way risk is communicated to patients, by health professionals. Current categorisation into low-, medium- and high-stroke risk can give a false sense of security for those who are told they are low or medium risk and may not take into account all risk factors that are present. The global stroke body instead calls for a more holistic approach, that places stroke risk on a continuum and encourages early intervention and a life-course approach to risk reduction.

WSO President Prof Michael Brainin, who champions the organization's prevention effort said 'COVID-19 has spurred previously inconceivable levels of government intervention and individual behaviour change around the world, but we have been effectively living with a stroke pandemic and a failing prevention strategy for years.

The need for radical action is clear and our prevention principles provide low cost, evidence-based approaches that if implemented globally would not only save millions of lives but would deliver savings of hundreds of billions of dollars annually. This is money that will be desperately needed to strengthen global health systems and to fuel economic recovery in the wake of COVID-19.'

For more information please contact Anita Wiseman awiseman@kenes.com

END

Notes to Editors

- 1 The World Stroke Organization is the only global body solely focused on stroke. With around 90 organizational members from countries in every global region, we represent over 55,000 stroke specialists in clinical, support and community settings. The WSO vision is a 'life free from stroke'. We work towards this vision through a strategic programme that addresses key factors in stroke mortality and morbidity at global, regional and national levels. Our strategy combines evidence-based advocacy, context-sensitive guidelines, toolkits, clinical education and training programmes and public campaigns that aim to raise awareness of the symptoms of stroke and stroke prevention.
- 2 WSO is an NGO in official consultative relations with the UN Economic and Social Council and a WHO implementation partner.

We examined the sex ratio through the life course to see if the COVID-19 mortality sex-differential was the same at every age. We analysed data collated by the National Institute for Demographic Studies from national statistical agencies across England and Wales, France, Germany, Italy, Netherlands, Portugal, Korea, and Spain, covering an estimated population of 194 349 591 men and 201 715 364 women from the beginning of the pandemic until June 21, 2020.⁹ Belgium and USA were not included due to presentation of data in different age categories.

77 652 men died and 59 591 women died. The overall male to female mortality sex ratio per 100 000 population was 1.4 (crude ratio 1.3). This ratio was not equal at all ages. For example, for people aged 0–9 years the ratio was 0.81. The ratio was 1.9 in the 40–49 years age group, 2.3 in the 50–59 year age group, 2.6 in the 60–69 years age group, and 1.65 in people older than 80 years (appendix p 1).

There was some variation across countries, although broadly the pattern was similar, and the numbers became too small for clear-cut interpretation (appendix p 3).

These data alter our understanding of male–female differences; the relationship is not straightforward, and efforts should now be made to understand risk based on the interaction of sex and age, along with other factors.

Hypotheses based on risk factors that are known to change with both sex and age seem to be the most probable explanations for the differences observed. These include differences in occupation, lifestyle (including smoking and alcohol use), medical comorbidities, or use of medications. These explanations reflect social and cultural factors related to gender rather than the biology of sex. Genetic explanations will need to consider the interaction of age, sex, and the risk factors

previously mentioned through the life course, including gene expression and epigenetics.

Disaggregated data allow public health authorities to tailor mortality prevention strategies to prioritise those most at risk. Although we are developing indirect standardisation methods,¹⁰ we urge nations to supply age and sex specific data, not only for an accurate description of the pandemic, but also for the calculation of directly standardised rates internationally—something WHO cannot do globally for lack of comprehensive sex and age group specific data.

We declare no competing interests.

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- 1 Bhopal R. Covid-19 worldwide: we need precise data by age group and sex urgently. *BMJ* 2020; **369**: m1366.
- 2 Bhopal S, Bagaria J, Bhopal R. Children's mortality from COVID-19 compared with all-deaths and other relevant causes of death: epidemiological information for decision-making by parents, teachers, clinicians and policymakers. *Public Health* 2020; **185**: 19–20.
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- 4 The Lancet. The gendered dimensions of COVID-19. *Lancet* 2020; **395**: 1168.
- 5 Jin J-M, Bai P, He W, et al. Gender differences in patients with COVID-19: focus on severity and mortality. *Front Public Health* 2020; **8**: 152.
- 6 Krieger N, Chen JT, Waterman PD. Excess mortality in men and women in Massachusetts during the COVID-19 pandemic. *Lancet* 2020; **395**: 1829.
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- 8 Global Health 50/50. COVID-19: data disaggregated by age and sex. <https://globalhealth5050.org/covid19/age-and-sex-data/> (accessed June 30, 2020).
- 9 National Institute for Demographic Studies. Demographics of COVID-19 deaths: data and metadata. <https://dc-covid.site.ined.fr/en/data/> (accessed June 21, 2020).
- 10 Gallo V, Chiodini P, Bruzzese D, Bhopal R. Age- and sex-adjustment and the COVID-19 pandemic – transformative example from Italy. *Int J Epidemiol* (in press).

WSO and WHF joint position statement on population-wide prevention strategies

In 2008, Rod Jackson and colleagues¹ proposed that prevention strategies for high-risk cardiovascular disease, based on screening individuals at high risk of cardiovascular disease, would deliver large benefits for the population. Simon Capewell² cautioned that these strategies could mislead health professionals and politicians into thinking they can tick the box reading mission accomplished and, with screening completed, cardiovascular disease prevention would be resolved. Both sides of this debate were based on assumptions and therefore did not reach consensus, but the high-risk approach to the prevention of cardiovascular disease has since been widely recommended and implemented.

There is reliable evidence from the Inter99 randomised controlled trial,³ which included 59 616 people aged 30–60 years followed up for 10 years, and a Cochrane meta-analysis⁴ of 15 randomised controlled trials, totalling 251 891 adults, that screening individuals in the general population for the risk of cardiovascular disease and risk factors (even with lifestyle counselling, as in the Inter99 trial³) has no significant effect on the incidence and mortality of ischaemic heart disease and stroke. At a population level, the age-standardised incidence and mortality of cardiovascular disease (including stroke) were decreasing before the implementation of high-risk prevention strategies, but have shown less decline since 2010 than the decline during the past 25 years.⁵

In some countries, such as the UK, the Netherlands, the USA, and New Zealand (specifically the Māori and Pacific people), the incidence and mortality of cardiovascular disease is increasing, particularly in middle-aged individuals. Furthermore, there is a paucity of robust



BSPI/Getty Images

See Online for appendix

economic evidence that screening for the risk of cardiovascular disease is cost-effective,⁶ there is some evidence that screening might exacerbate socioeconomic inequalities,⁷ and there are potential hazards in labelling people as being at low risk of disease, giving them false reassurance that they are protected from cardiovascular disease and compromising any motivation to control risk factors. Therefore, when communicating the absolute risk of cardiovascular disease to patients, the World Stroke Organization (WSO) has suggested that categorising people by low, moderate (mild), and high risk of disease (including heat charts) should be abandoned.⁸

Because many of the underlying causes of stroke and cardiovascular disease are well established, identifiable, and controllable, according to Geoffrey Rose,⁹ there is not a major role for the high-risk strategy in the primary prevention of stroke and cardiovascular disease. Rather this strategy has a complementary role to the more powerful population-wide strategy. Unfortunately, today the priority is given to the high cardiovascular risk strategy, and this reality needs to be changed.^{10,11} There is an urgent need to improve the primary prevention of stroke and cardiovascular disease, with priority given to population-wide primary prevention strategies⁴ that would also strengthen global health systems and aid economic recovery in the wake of pandemics such as COVID-19. Further references in support of this position statement are listed in the appendix.

We declare no competing interests.

**Michael Brainin, on behalf of the World Stroke Organization,
Karen Sliwa, on behalf of the World Heart Federation
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- 1 Jackson R, Wells S, Rodgers A. Will screening individuals at high risk of cardiovascular events deliver large benefits? Yes. *BMJ* 2008; **337**: a1371.
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- 3 Jørgensen T, Kart Jacobsen R, Toft U, Aadahl M, Glümer C, Pisinger C. Effect of screening and lifestyle counselling on incidence of ischaemic heart disease in general population: Inter99 randomised trial. *BMJ* 2014; **348**: g3617.
- 4 Krogsbøll LT, Jørgensen KJ, Gøtzsche PC. General health checks in adults for reducing morbidity and mortality from disease. *Cochrane Database Syst Rev* 2019; **1**: CD009009.
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- 7 Wallach-Kildemoes H, Diderichsen F, Krasnik A, Lange T, Andersen M. Is the high-risk strategy to prevent cardiovascular disease equitable? A pharmacoepidemiological cohort study. *BMC Public Health* 2012; **12**: 610.
- 8 Brainin M, Feigin VL, Norrving B, Martins SCO, Hankey GJ, Hachinski V. Global prevention of stroke and dementia: the WSO Declaration. *Lancet Neurol* 2020; **19**: 487–88.
- 9 Rose G. Sick individuals and sick populations. *Int J Epidemiol* 1985; **14**: 32–38.
- 10 Feigin VL, Brainin M, Norrving B, et al. What is the best mix of population-wide and high-risk targeted strategies of primary stroke and cardiovascular disease prevention? *J Am Heart Assoc* 2020; **9**: e014494.
- 11 Sniderman AD, Thanassoulis G, Wilkins JT, Furberg CD, Pencina M. Sick individuals and sick populations by Geoffrey Rose: cardiovascular prevention updated. *J Am Heart Assoc* 2018; **7**: e010049.

See Online for appendix

Department of Error

Nehring P, Przybyłkowski A. Think twice before operating on a pancreatic mass: could it be IgG4-related disease? *Lancet* 2020; **395**: 816–In this Clinical Picture, the prednisone dosing schedule described in the first sentence of the third paragraph should have read “prednisone 40 mg once daily for 2 months”. This correction has been made to the online version as of Aug 20, 2020.

Lee LYW, Cazier J-B, Angelis V, et al. COVID-19 mortality in patients with cancer on chemotherapy or other anticancer treatments: a prospective cohort study. *Lancet* 2020; **395**: 1919–26—In this Article, the authors, Contributors, Declaration of interests, and appendix cover have been updated. These changes have been made to the online version as of Aug 20, 2020.



NEWS RELEASE

For release 12:01 August 22nd 2020

World Stroke Organization and World Heart Federation Issue a 'Prevention Wake-Up Call' to Governments

In a joint statement published today in *The Lancet*, leaders of the World Heart Federation and World Stroke Organization have issued a call to governments to deliver radical shifts in public health policy in order to deliver progress on CVD and stroke prevention. Cardiovascular diseases and stroke are the number one cause of death globally with an anticipated global cost of US\$1,044 billion by 2030.

Pointing to a lack of global progress, the two leading NGOs, have called on governments to move away from the widely adopted approach of individual clinical risk factor screening towards investment in primary prevention at population level. This would see governments for example prioritising alcohol and tobacco control measures, reducing consumption of salt and trans fats from processed food and addressing sedentary lifestyles.

'Current approaches to prevention have failed to deliver any significant impact on CVD and stroke prevention', said WSO President, Prof Michael Brainin. 'The adult lifetime risk of stroke is now 1 in 4, compared to 1 in 6 less than a decade ago. Global progress on prevention has stalled, at an enormous cost to individuals and an increasing cost to society. The failure has been made even more visible by the current global health and economic crisis, where poor population health and fragile healthcare systems have combined with COVID-19 infection to deliver a perfect storm. As we navigate and emerge from the current global crisis, we strongly encourage governments to prioritise

population-based strategies that will improve health, build more resilient societies and aid the global economic recovery.'

'If we want to reduce premature mortality from non-communicable diseases by one third by 2030, we must refocus our approach to CVD and stroke prevention' said WHF President Prof Karen Sliwa. 'Current clinical practice strategies often fail to support people with low and moderate CVD risk and dissuade them from making healthier life choices. Now more than ever, we must ensure that approaches to prevent CVD are not only cost-effective and evidence-based, but that they also address inequalities in treatment and care.'

Prof Valery Feigin, a public health researcher based at New Zealand's AUT, who serves on the WSO Executive Committee added, 'When 80% of strokes happen to people who are not categorized as high-risk, we clearly need to rethink our approach. There is scant, robust scientific evidence that national screening programs offer value for money in terms of reducing the burden of disease. There is evidence however that identifying people and labelling them as low-risk gives them false reassurance and reduces their motivation to take action on smoking, physical inactivity, diet, and alcohol. By placing all our bets on identifying and treating diseases of the circulatory system, we are missing the opportunity to intervene on their shared causes much earlier in the prevention timeline where the costs are lowest. The benefit-cost ratio is 10.9 for every dollar spent on population-wide primary prevention. While there is a place for screening and management of clinical risk factors, our strong recommendation is that it should be complementary to population-based strategies, not the other way around.'

Both WHF and WSO are delivering campaigns focused on increasing public awareness of CVD and stroke and the prevention steps that individuals and healthcare systems can take.

For more information visit www.worldheart.org and www.world-stroke.org

ENDS

Notes to editors

1 The World Heart Federation (WHF) unites the cardiovascular community and drives the agenda to reduce the global burden of cardiovascular disease and help people live longer, healthier lives. Together with our Members, we are working to end needless deaths and build global commitment for improved cardiovascular health at the global, regional, national and community levels. We believe in a world where heart health for everyone is a fundamental human right. To learn more, visit worldheart.org

2 The World Stroke Organization (WSO) is the world's leading organization in the fight against stroke.

WSO has more than 4000 individual members and 90 society members from 85 different countries.

Our mission is to reduce the global burden of stroke through prevention, treatment and long-term care. We aim to accomplish its mission by:

- Fostering the best standards of practice
- Increasing stroke awareness among the population and among health professionals
- Preventing subtle cerebrovascular disease leading to gait disorders, imbalance, vascular cognitive impairment and behavioural changes
- Influencing policies for stroke prevention and improved health services
- Providing education in collaboration with public and private organizations
- Facilitating stroke research advocacy for people with stroke
- Fostering the development of systems and organisations for long term support of stroke survivors and their families