AUT NATIONAL INSTITUTE FOR STROKE AND APPLIED NEUROSCIENCES

Newsletter

ISSUE 3 SEPTEMBER 2017

WELCOME TO THE THIRD NEWSLETTER OF THE RIBURST STUDY (REDUCING THE INTERNATIONAL BURDEN OF STROKE USING MOBILE TECHNOLOGY)

Progress of the Study

The study is progressing well with more than 9,000 participants.

Demographic data for the participants

Average age
45.6

Sex
48.5% female
51.5% male

Ethnicity

European	81%
Malay/Indo/SEA	6%
African	4%
Latin American	2%
Indian	2%
Chinese	2%
Other/Unspecified	3%

Country

Russia	46.51%
New Zealand	12.13%
Malaysia	7.42%
Italy	6.69%
Nigeria	3.09%
United Kingdom	2.90%
United States	2.40%
Brazil	2.20%
Kazakhstan	2.19%
Belarus	1.85%
Australia	1.58%
India	1.14%
Other	9.91%

What's inside:

Researcher profiles

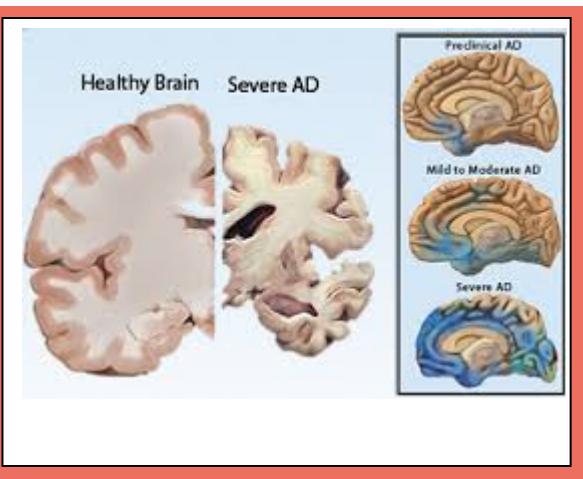
Professor Pablo M. Lavados
Clínica Alemana de Santiago, Universidad del Desarrollo
and Faculty of Medicine, Universidad de Chile
Santiago
Chile

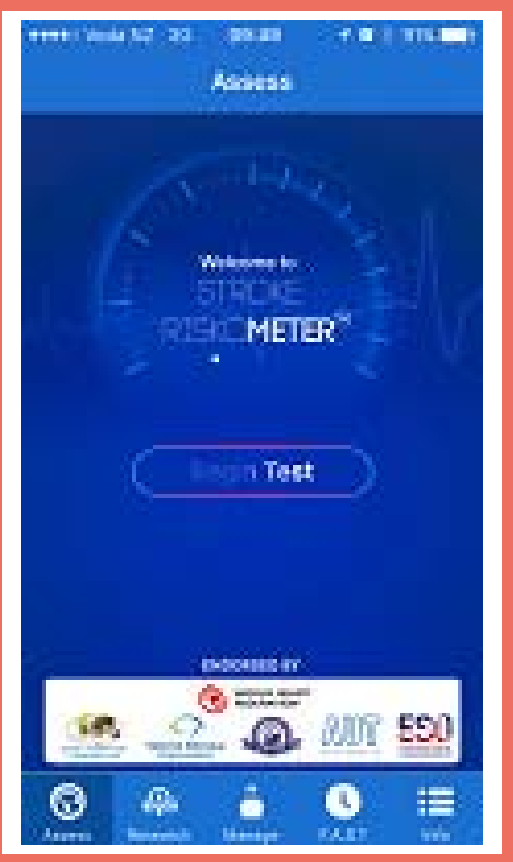
Pablo Lavados, MD, MPH, is Professor of Neurology at Clínica Alemana, Universidad del Desarrollo and Assistant Professor of Neurology at Universidad de Chile, both located in Santiago. Dr. Lavados is a clinician and researcher at the Vascular Neurology Unit, as well as the Director of the Research and Clinical Trials Unit, both at Clínica Alemana. He earned his medical degree and completed postgraduate training in Neurology at Universidad de Chile. Dr. Lavados obtained a Master's degree in Public Health at Johns Hopkins University School of Public Health, USA. He also completed a clinical research fellowship at La Sapienza University in Rome, Italy, and a Postdoctoral Clinical Research Fellowship in Cerebrovascular Diseases at Johns Hopkins University School of Medicine.

Dr. Lavados was the principal investigator of the PISCIS epidemiological stroke project and is the country leader of three international academic clinical trials: INTERACT2, ENCHANTED and HEADPOST MAIN, organised by The George Institute for Global Heath of Australia. He is the principal co-investigator of the HEADPOST PILOT clinical trial and the RECCA stroke registry in Clínica Alemana, and co-investigator in the OPTIC Stroke Registry, the SOCRATES, and NAVIGATE ESUS international clinical trials, as well as the ÑANDU stroke surveillance study in southern Chile. He has been awarded the Presidential scholarship, a PAHO scholarship and a Fulbright scholarship, among other awards. He is also a Ministry of Health advisor on the national stroke programme in Chile.

In his research, Dr. Lavados focuses primarily on the epidemiology of cerebrovascular disease and clinical trials in stroke. He has authored more than 100 papers in peer-reviewed journals such as *The New England Journal of Medicine, Lancet, The Lancet Neurology, Neurology, Stroke, International Journal of Stroke, Cerebrovascular Diseases, Journal of Stroke and Cerebrovascular Diseases* and others. Dr. Lavados has lectured around the globe on topics that include quality control in stroke care, organised stroke care, secondary prevention of stroke, epidemiology of stroke, thrombolysis in acute ischemic stroke and research in stroke.

Releases and app updates





New iOS version
Based on the feedback that has been received, the iOS English version of the app has been updated. A new version will be released shortly.

Malaysian collaborators doing validation trial
In a cross-sectional study, which will be performed at Universiti Kebangsaan Malaysia Medical Centre (UKMMC) in Kuala Lumpur, a Stroke Riskometer assessment in English and Bahasa Malaysia (BM) will be conducted by a user who is proficient in both English and Malay. The purpose of this study is to test the Bahasa Malaysia version of the Stroke Riskometer for its content reliability among the Malay users.

The MARS (Mobile Applications to Reduce Stroke) pilot study
This study is based on the Stroke Riskometer (the same as RIBURST). This trial is progressing well in New Zealand. Recruitment has been completed and assessments have finished. The team are waiting for the final assessments from the secondary study site and analyses will begin very shortly.

Translated versions of the app
Please refer to the NISAN website to see details of the current translations available.

- iOS version: https://nisan.aut.ac.nz/Stroke-Riskometer/available-languages
- Pro version: https://nisan.aut.ac.nz/Stroke-Riskometer/stroke-riskometer-pro-version

ANDROID APP ON Google play

Media releases and news

Editable advertising posters
There are advertising posters available for download in English, French and Russian, for you and for recruitment of study participants in your area. Please see: https://nisan.aut.ac.nz/Stroke-Riskometer/downloadable-posters. You can modify these as you see fit, e.g. by adding the QR of the app in your language and adding local details.

NISAN Stroke Riskometer webpage
The NISAN Stroke Riskometer webpage has been updated, and navigation has been made easier. You can find a lot of relevant information on this page. See: https://nisan.aut.ac.nz/Stroke-Riskometer

Article in *BMJ Global Health*
This paper directly relates to the RIBURST project, and may be of help for local/national fundraising, raising the profile of the study (via your local or national media) and recruitment of study participants. As this is an open access paper, we encourage you to circulate it to your local or national media, network contacts and social media platforms.
Feigin, V.L., Norrving,B., & Mensah, G.A. (2017). Primary prevention of cardiovascular disease through population-wide motivational strategies: Insights from using smartphones in stroke prevention. *BMJ Global Health, 2,* e000306. doi:10.1136/bmjgh-2017-000306.

Presentation at ESOC 2017
Michael Kravchenko (Russia) presented information at ESOC 2017 (*Preliminary results of stroke risk factors survey based on Stroke Riskometer app in Russia*). Please see the attached poster.

Stroke Riskometer app being used in Nigerian study
Dr. KW Wahab (University of Ilorin, Nigeria) is using the Stroke Riskometer App to assess the risk of stroke in hypertensive patients attending the outpatient clinic of University of Ilorin Teaching Hospital in a cross-sectional study.

New study collaborator since last newsletter
Anthony Kim, University of California, San Francisco

Contact information

RIBURST project manager:
Rohit Bhattacharjee
T: +64 9 921 9999 ext. 7126
E: rbhattac@aut.ac.nz

Dr. Rita Krishnamurthi
T: +64 9 921 9999 ext. 7809
E: rkrishna@aut.ac.nz

NISAN (National Institute for Stroke and Applied Neuroscience) secretariat:
Brigitte van Gils
T: +64 9 921 9174
E: bvangils@aut.ac.nz

Visit the NISAN website:
https://nisan.aut.ac.nz

PRELIMINARY RESULTS OF STROKE RISK FACTORS SURVEY BASED ON STROKE RISKOMETER APP IN RUSSIA

Kravchenko M., Gnedovskaya E., Varakin Yu., Tanashyan M., Piradov M., Bhattacharjee R., Krishnamurthi R., Hussein T., Feigin V.

Research Center of Neurology, Moscow, Russia

Aim

To evaluate the feasibility of stroke risk factors prevalence assessment using smartphone application

Background

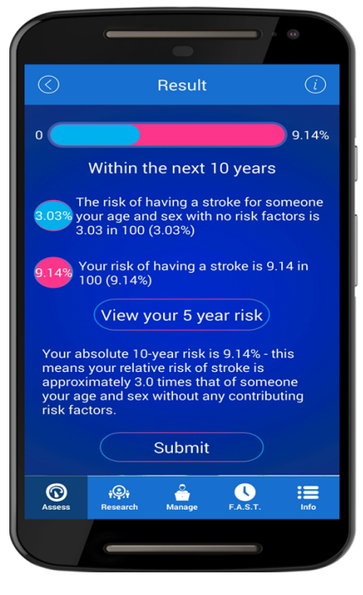
- Stroke Riskometer App is a new tool for stroke risk calculation
- It was designed to provide personal and comprehensible information about stroke risk factors and F.A.S.T. to any smartphone user
- There is a feature which allows everyone who wish to participate in epidemiological survey
- For more information please check https://www.researchgate.net/project/Stroke-Riskometer

Methods

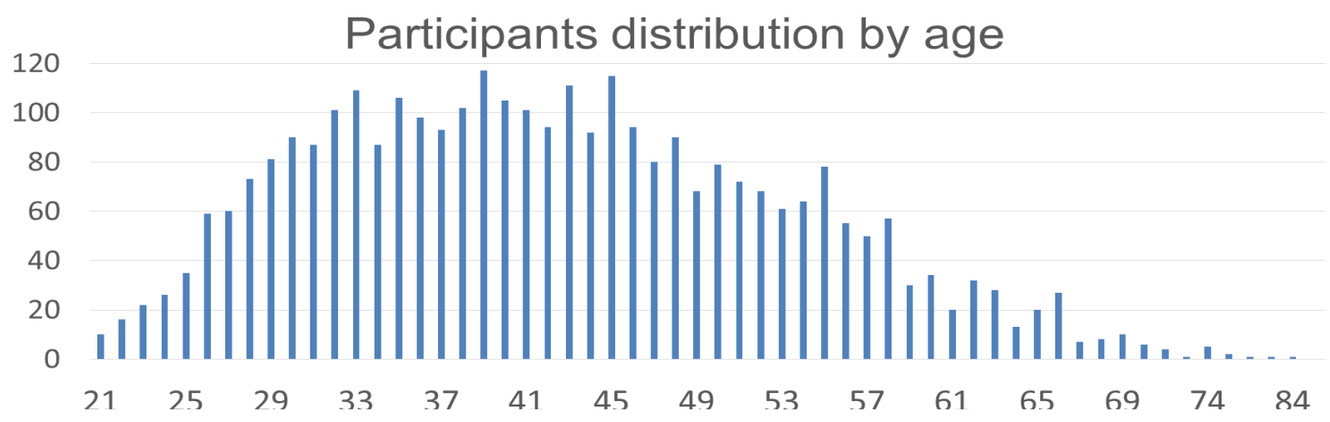
- Stroke Riskometer was presented for the first time on national health related TV show.
- After this it was downloaded from the app stores about 30.000 times and 3210 users decided to participate the survey.
- Using the App they answered 20 questions, accepted Participant Consent Form and sent their data to research database

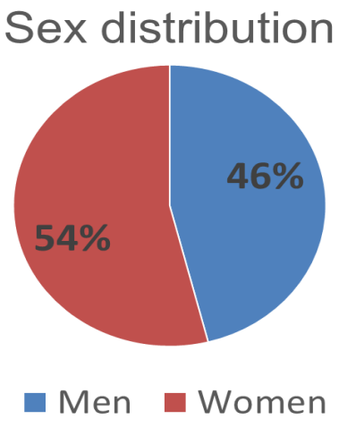
Download on the App Store

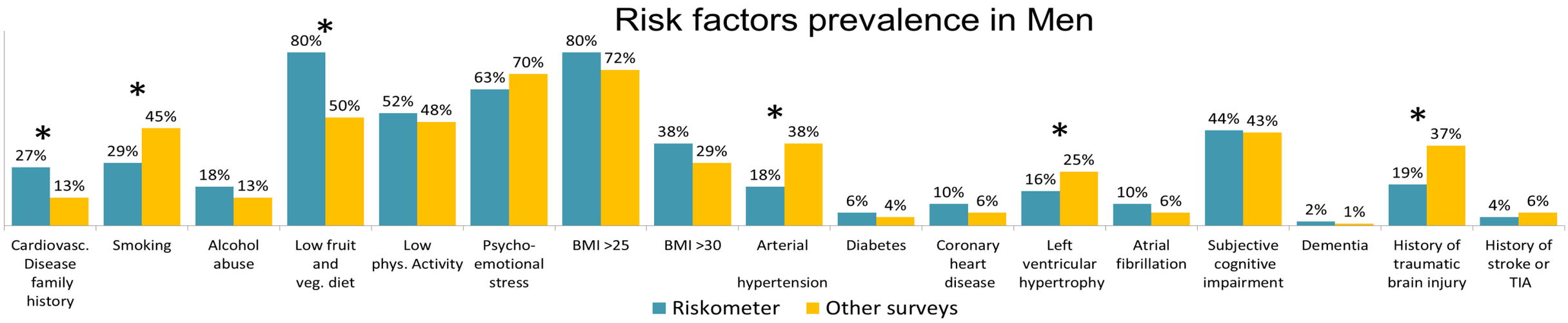
Get it on Google play

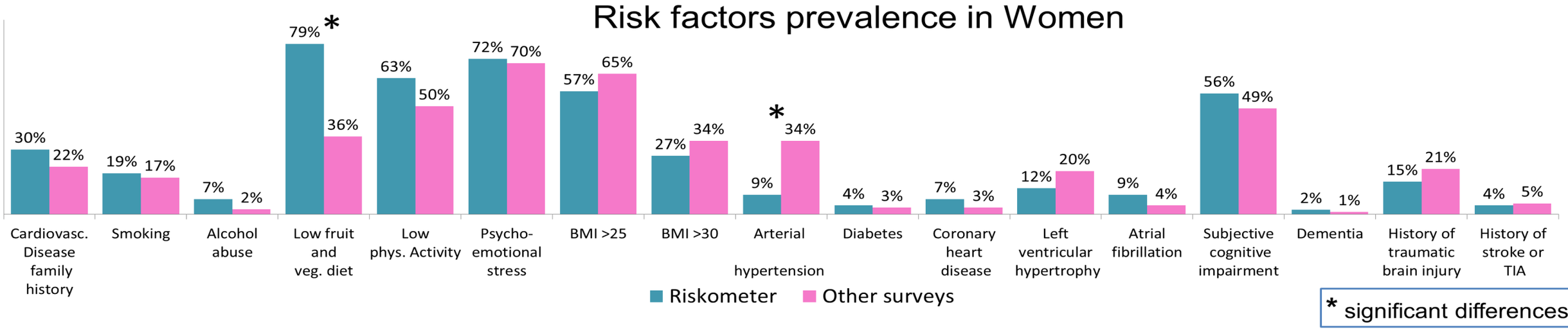


Results









Conclusions

- Prevalence of the majority of risk factors was similar to the other surveys data
- Some of the differences can be explained by the following biases: self report data, younger population
- Smartphone based technology is a new feasible method for epidemiological surveys
- Further studies based on the representative cohort are needed to evaluate this method's validity, limitations and benefits