

New tool to foretell heart attack / stroke risk

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Over the age of 40? Want to know your risk of suffering a fatal heart attack or stroke in the next 10 years? Read on.

A new instrument dubbed Globorisk, unveiled Thursday, will allow you to determine your risk simply by inputting your age, gender, blood pressure and cholesterol numbers, whether you have diabetes or smoke, and which country you live in, its developers say.

It is hoped such self-scrutiny can spark important lifestyle changes among those at risk, said Globorisk's creators, as well as identifying people who may benefit from preventive drug treatment.

"A risk of about four or five percent on the chart for fatal cardiovascular disease starts becoming high," lead author Goodarz Danaei of the Harvard School of Public Health in Boston, told AFP, and risks greater than 10 percent should "definitely be taken seriously."

The research was published in the medical journal *The Lancet Diabetes & Endocrinology*, with eight ready-made charts for people in China, Denmark, England, Japan, Mexico, South Korea, Spain and the United States to measure their risk.

For the first time, the method used to create the tables can be recalibrated for any country in the world using readily-available national health statistics, said Danaei.

Globorisk, which used data from eight other large, long-term studies

with over 50,000 participants in total, is meant to have charts for all the world's nations "in a few months".

It will ultimately have its own interactive webpage on which individuals from any country can look up their risk—what Danaei described as "the best guess of the likelihood" of a fatal cardiovascular event in the coming decade.

In the meantime, the eight charts already prepared can be studied at: [www.thelancet.com/journals/lan... \(15\)70007-0/abstract](http://www.thelancet.com/journals/lan... (15)70007-0/abstract)

Vast country differences

Previous tools for cardiovascular risk measurement were developed for particular target populations and could not be extrapolated more widely, the paper authors said.

Apart from a tool for individual analysis, Globorisk also allows for global comparisons.

"When we applied the risk score in national populations, we saw that, at any age and risk factor level, the estimated 10-year risk of fatal cardiovascular disease varied substantially between countries," the team wrote.

Risk was lowest in Japan, South Korea, Spain, Denmark and England, and highest in China and Mexico for men and women alike.

"For example, a non-smoking 65-year-old man with diabetes, a systolic blood pressure of 140 mmHg and a total cholesterol of 6 mmol/L (millimole per litre) would have an estimated 10-year risk of fatal cardiovascular disease of five percent in Japan, versus 24 percent in China," said the article.

If the man smoked, his risk in Japan would be nine percent, and in China 36 percent.

The World Health Organization advises medical intervention for people with a 30 percent-plus overall risk of developing cardiovascular disease—which translates roughly to a risk of 10-15 percent for a fatal event within 10 years, as measured by Globorisk.

The final online resource will include advice on reducing risk through interventions like quitting smoking, healthier eating and getting more exercise, said Danaei.

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