

Biobank Qatar to analyse 100,000 volunteers' medical data

Researchers will compare data, including genetic information and data on environmental exposures and lifestyles

Manama: Biobank Qatar will collect medical data from 100,000 volunteers and store samples of their blood and urine in a high-tech storage facility over many years, according to Imperial College London, a key partner in the initiative.

The move will allow scientists to look at diseases already present in the population as well as follow up the participants to see who develops disease in the future.

Researchers will compare data, including genetic information and data on environmental exposures and lifestyles, from participants who develop illnesses with data from those who remain healthy, Qatari daily *Gulf Times* reported on Wednesday.

The aim is to identify early markers that can indicate when someone is likely to develop a particular disease, so that people will be able to receive early treatment or take measures to prevent a disease developing.

Biobank Qatar will be the first very large population-based study involving the collection of biological samples in an Arab country.

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It will provide scientists with an invaluable resource for improving the prevention, diagnosis and treatment of a wide range of chronic diseases, such as diabetes and heart disease, which are placing increasing demands on Qatar's public health service.

Biobank Qatar, being established by Qatar Foundation (QF) and Supreme Council of Health, with assistance of experts from Imperial College London, was announced in October last year. The initiative builds on other large national and international biobanking projects such as the UK Biobank, set up in 2006.

Public health experts from Imperial College London are playing a crucial role in the design and implementation of the project, the daily said.

"At the very beginning of the study, healthy participants will be examined using top-level technology, such as MRI scans, so that later we can pick out aspects of the imaging data that may look today normal but might actually be predictive of diseases," said Professor Elio Riboli, director of the School of Public Health at Imperial College London.

"Qatar is an extremely interesting population from a medical point of view. It's a population in rapid transition towards more Western lifestyles. Qatar is home to residents from different regions of the world, which means we can look at disease risk factors in multi-ethnic populations in detail and on a very large scale."

According to Professor Paul Elliott, head of the department of Epidemiology and Biostatistics at Imperial College London, the team "will be using state-of-the-art technology to collect and analyse samples from an extremely large set of participants."

"We also plan to carry out imaging of the whole body with MRI - this has never been done before on such a huge scale," he said.

Professor Riboli is the co-ordinator of the European Prospective Investigation of Chronic Diseases, which has collected data from over 500,000 people over 15 years while Professor Elliott is part of the steering committee of UK Biobank.