

The GRACE project

Introducing the GRACE project – your community and genetics research

Sophie Roberts:

Do you know that there are more than 5 million people of South Asian heritage in the UK?

That's more than 8% of the population. But I'm not just throwing an abstract number at you. These are 5 million living, breathing people who are all around us in our society. And that matters.

Studies show that South Asians have a much higher risk of heart disease. And South Asian ethnic mothers have much higher rates of gestational diabetes during pregnancy, which leads to additional health risks.

We would like to know, why? Is it because of all the rice we love to eat? Or is it something unique to our genes?

It is important to figure out how our unique genetic make-up can influence our susceptibility to certain diseases, so that we can take action to improve our health. Scientists are continuously researching to uncover the answers.

Echo Dyer:

One excellent resource for this is the UK Biobank.

This database contains the genetic and health information of more than half a million volunteers from across the UK.

Scientists from all over the world can study this information and make exciting new discoveries.

Sophie Roberts:

But does the information we are researching represent our society?

For instance, what proportion of these volunteers are of South Asian origin?

Is it 8%, consistent with the make-up of our society? Can you guess?

Actually, South Asians make up just 2% of research volunteers. We are 4 times underrepresented.

Sas Amoah:

In short, ethnic minorities in the UK are underrepresented in every major genetics research database, in health research, and also as researchers. The same is true for disadvantaged socioeconomic groups.

This is a big problem because it means that our research cannot serve all the communities equally, leading to further inequalities in health and wellbeing.

For example, studies show that oxygen meters used on COVID-19 patients were not as accurate for darker-skinned participants, and misdiagnoses may have contributed to increased mortality.

So, despite major investments from the UK government into genetics and health research, and efforts to increase diversity, the lack of equality in representation impoverishes both our research and its applications.

Kaustubh Adhikari:

This is where our GRACE project comes in.

We aim to tackle this societal inequality by engaging directly with underrepresented communities and, in partnership with them, facilitate better representation, not just greater representation.