Clinic visits – SABRE V3

Although we've had a pause while we've been moving to the new building, we have just resumed the third ‘wave’ of follow-up for our study participants, most of whom first took part back in the late 1980s. This time round we are also inviting partners to take part in the study and we are inviting some new participants of African and African Caribbean descent to take part in order to boost the numbers of women and ethnic minority groups in the study.

So far, nearly 800 people have attended our study clinics for a day of measurements either at 170 Tottenham Court road or in our temporary clinic at Stephenson House and more have completed questionnaires about their health and lifestyle.
Dropping in to SABRE

If you are already part of SABRE and haven’t yet been invited to take part in this follow-up visit (since 2014), we are working our way through our list, but do get in touch with us if you’re keen to take part soon and we’ll be happy to arrange this. The clinic visits are expected to finish in spring 2018.

If you come to clinic we will arrange taxi transport for you to arrive at about 8:30 a.m after a light breakfast at home. You would have a very detailed set of health checks – almost a ‘top-to toe’ investigation of heart, circulation and brain health – although there may be some tests that you choose not to have or which may not be suitable for you. A light lunch is provided and the day ends at about 3.30 pm when you would be taken home in a taxi. Apart from the blood tests, none of the tests are painful or invasive.

The health check includes:

- MRI scans of the brain
- 2D and 3D ultrasound (echocardiography) of the heart and an ECG.
- Ultrasound scans of the liver and the main artery in your neck
- Tests to assess the health of your blood vessels
- Breathing capacity
- Walking, balance and strength tests
- Blood pressure
- DEXA scan to measure bone density (for osteoporosis), the amount of calcium on your main large blood vessel (the aorta) and the amount of fat and lean tissue in the body
- Blood, urine and saliva tests
Recruiting new participants

We are currently recruiting new participants to SABRE as we would like to increase the numbers of African or African Caribbean descent who are taking part in the study. People of this ethnic origin are at an increased risk of having diabetes and strokes compared with people of European origin and we are working hard to understand why this is and what we can do to prevent or treat these disorders in people of all ethnicities.

You or a friend/family member may be suitable to participate as a NEW SABRE participant if you/they are:

- Aged 56 years or older
- West African or African Caribbean (4 grandparents born in West Africa or the Caribbean)
- Living in the London area.

If you believe you are eligible, have not taken part in SABRE before and are interested in participating in the SABRE research please contact the SABRE team on the contact details below and they can provide more information.

Dropping out (withdrawal from participation)

We would like to remind everyone that you are free to drop out of the study at any time. You don’t have to give a reason and dropping out won’t affect your medical care in any way. You may want to drop out completely and have all your information removed from the study database, or you might want to drop out from some parts of the study.

If you would like to drop out, just give us a call on 020 7679 9471 or email us: sabre@ucl.ac.uk or write to us at The Sabre Study, UCL Institute of Cardiovascular Science, Gower Street, London WC1E 6BT.

There are some frequently asked questions and answers about the SABRE study on page 6 and these include some more detail about how we access information from your health records and what we do with this information.
Other SABRE news

Congratulations to Professor Nish Chaturvedi! (left) Nish was recently appointed as Director of the UCL MRC Unit for Lifelong Health and Ageing (LHA). She still leads the SABRE study, as she has for many years, but also takes on the research programmes of the LHA, which include another well-known cohort study- the 1946 birth cohort (also known as the National Survey of Health and Development). Visit www.nshd.mrc.ac.uk/news-events/recent-news/mrc-lha-ucl-welcomes-new-director. We look forward to working closely with the team at the LHA and to developing some ‘cross-cohort’ ideas.

Congratulations too to Dr Sophie Eastwood (left), who is a GP and SABRE study researcher. Sophie has been has been awarded the Diabetes UK Sir George Alberti Research Training Fellowship. This award is aimed at supporting graduate healthcare professionals to achieve higher degrees and develop future careers in diabetes research. Sophie’s project involves using large, linked electronic health records databases (the Clinical Practice Research Datalink and UK Biobank) to study ethnic differences in prescribing and effectiveness of anti-diabetes medications, antihypertensives and statins in people with diabetes. She will focus on differences observed between the UK’s South Asian, African Caribbean and white populations.

Siana Jones and Sophie Eastwood were both delighted to have been selected to make presentations resulting from SABRE study research at this year’s Diabetes UK conference in Manchester. Siana reported on her analysis of the exercise data which shows that the 6 minute test can measure exercise capacity accurately in older adults, avoiding the need for exhausting tests to measure physical function. Sophie’s presentation examined management of diabetes and found that South Asians were receiving fewer anti-diabetes medicines and had poorer blood glucose control – partly explained by the smaller number of medicines that they were receiving- this highlights a topic for further research.

…and congratulations to Dr Hakim Dehbi–Moulay who was recently awarded his PhD for his study of air pollution and death from cardiovascular disease over 25 years of follow-up. For this study Hakim analysed data from the start of the SABRE study and from the 1946 birth cohort (looking at where they lived in 1989). This study was published in the journal ‘Environment International’ in February this year.
Team news

Goodbyes (and good luck!): We were sad to say goodbye to Emma Coady who has been our research co-ordinator for more years than she cares to remember. Emma has moved on to manage an international trial of a new blood pressure lowering device.

Dr Emily Williams, whose research looked at social and psychological predictors of ill health, has moved to a new job in the School of Health Sciences at the University of Surrey. Emily is planning a new research study about how well people with diabetes are able to manage their disorder and what difficulties they encounter. She is hoping to include some SABRE study participants in her research and she may ask us to get in touch with some of you about this during the next year or two.

Hassina Furreed has also moved to a new job at Barts Hospital and is working on a fertility research study.

In the last newsletter we were sad to tell you that Innocent was leaving... the good news is that he has come back! April, Innocent, Livia, Suzanne, Siana, Lorna, Chloe, Therese, Sophie, Daniel, Tom, Alicja, Hannah, Alun and Nish are all part of the team and we welcome Dr Anish Bhuva (below) who has a British Heart Foundation Clinical Training Fellowship and is working to develop some new methods of analysing echocardiogram images of the heart taken at the previous clinical follow-up of SABRE between 2008 and 2011.

Recent SABRE study research

There’s a lot still going on with analyses from the baseline and 20 year follow-up studies, for example studying associations between diabetes and cognitive health in older age in Europeans, South Asians and African Caribbeans. We are also getting ready for the end of the current third wave of clinic visits and getting the new data into shape for the next stage of analysis.

Drs Chloe Park (top) and Emily Williams (middle) have recently had their paper on heart function and brain structure published in the Journal of the American Heart Association. Their work brings together the cognitive function tests and ultrasound studies of the heart which we carried out in SABRE during the second wave of follow up between 2008 and 2011. They showed that even small changes in the way that your heart works are associated with a decline in memory and the brain’s processing speed.

Siana (bottom) has recently had her paper on exercise testing (Assessment of exercise capacity and oxygen consumption using a six minute stepper test in older adults ) published in ‘Frontiers in Physiology’. 
The information leaflets says ‘We would like to access information from your medical and health-related records’. What does this mean, why do you need this information, where do you get it from and what do you do with it?

A. We would like to receive details about your hospital usage. The organisation providing this information is now called ‘NHS Digital’, but it used to be called the ‘Health and Social Care Information Centre’ (HSCIC). The information we will obtain, for people who take part in SABRE, relates to hospitalisations for any reason and includes the number of hospital visits or admissions, reason for admissions, length of stays and treatments received. NHS Digital will also provide us with information about study participants who develop cancer or who may have passed away since the start of our study, including dates, type of cancer or cause of death. The data we obtain will be stored securely at UCL, and used only for the purposes of the study by researchers employed by UCL.

We can access all of this by securely sharing some of your personal details, specifically your name, sex, date of birth, address and NHS number (if we know this), with NHS Digital who then provide us with the information described above. Importantly, no other information that might identify participants will be shared with the SABRE team and no identifiable patient data will be used in any publication or presentation. If you would like to discuss this or have any questions, please contact us. We intend to share your data with NHS Digital in late 2017 in the first instance.

If you prefer us not to access your information in this way, please let us know either by e-mail, letter or telephone using the contact details on this newsletter. We will not share your information if you have already opted out. If you choose to opt-out after we share your information, we will destroy your data received from NHS Digital.

We use the information about your hospital usage to help us understand how many people have developed certain types of disorders during the course of the study, for example heart attacks, strokes or cancer. We can analyse the measurements that we have made in our clinics and the information that you have given us when you fill in our questionnaires to see which measurements or lifestyle factors are associated with the hospital events – this is part of the research and may help towards understanding not only the causes of certain types of ill-health in different groups of people, but also why some people enjoy good health into older age.

What do we do with the information that we receive from NHS Digital?

A. When we receive linked data, we remove all identifiers except for year of birth, year of death and your 5 or 6 digit study id number. All subsequent analyses use only subsets of the de-identified data. The data will be held only at the Institute of Cardiovascular Science at UCL. No data is released or shared in any form that would enable individual participants to be identified.

Q. Will I or my GP get to know my study results and what happens if you find something wrong with me?

A. We will send both you and your GP the results of routine tests (for example blood, urine, blood pressure) if you have given consent for this. Some of the measurements and tests that we carry out are not routine and there are no ‘normal’ levels for these tests - for example the MRI scans of the brain and some ultrasound measurements of the heart and blood vessels. All the MRI scans are reviewed by a senior radiologist and the heart and blood vessel scans and ECGs (electrocardiograms) are reviewed by a cardiac physiologist, who will refer any scans to a senior cardiologist if needed. If something is found which is thought to need some more investigation, we will let your GP know as soon as possible. If you haven’t given consent for us to contact your GP, then we would get in touch with you directly.
Helen Pearson has written an excellent book about the British birth cohorts (including the 1946 birth cohort)- called ‘The Life Project: The Extraordinary Story of our Ordinary Lives’ (Penguin books, 2017). It’s a fascinating story and written in an easy style. Although SABRE is a cohort that started in participants’ middle years, there are lots of parallels that you may recognise.

www.penguin.co.uk/books/195897/the-life-project

‘In March 1946, scientists began to track thousands of children born in one cold week. No one imagined that this would become the longest-running study of human development in the world, growing to encompass five generations of children. Today, they are some of the best-studied people on the planet, and the simple act of observing human life has changed the way we are born, schooled, parent and die. This is the tale of these studies and the remarkable discoveries that have come from them. Touching almost every person in Britain today, they are one of our best-kept secrets.’

Lastly and most importantly, we thank you all for your support of the study, for filling in all those questionnaires and for taking part in our clinics. We couldn’t do the research without you – your help is invaluable and we hope that you can see some of the ways in which you and we are contributing to the scientific understanding of important diseases as well as good health in older age.

Do get in touch if you have any questions about the SABRE study.
We also have a website www.sabrestudy.org

Email: sabre@ucl.ac.uk
Telephone: 020 7679 9471
Address: SABRE Study, UCL Institute of Cardiovascular Science, Gower Street, London WC1E 6BT
1991: Visit 1 Results

**What did they find at Visit 1?**

- **Diabetes:** South Asians and African Caribbeans had more diabetes and ‘pre-diabetes’.
- **High blood pressure:** was more common in African Caribbeans.
- **Coronary heart disease:** was more common in South Asians, but less common in African Caribbeans.
- **Stroke:** South Asians and African Caribbeans were more likely to suffer from strokes, also kidney and eye problems.

**Why?**

- For South Asians, heart disease and strokes may be linked with higher levels of sugar, fats and insulin in the blood.
- African Caribbeans’ higher blood pressure may be linked with strokes, especially in women, but blood pressure was not the whole story.
- People of African Caribbeans origin may be more prone to coronary heart disease because they have lower levels of ‘good’ cholesterol and higher levels of ‘bad’ fats in their blood.
- But more research was needed to confirm these findings and to explain why there were differences between people of different ethnic origins.

**What happened at Visit 2?**

- We reviewed people’s GP medical records (STB31 format).
- There was a health and lifestyle questionnaire (2011 people).

**What next?**

- **The 20 year follow-up (Visit 2: 2008-2011)**
  - This follow-up study (Visit 2) was led by Professor Nish Chaturvedi and was funded by the British Heart Foundation and The Wellcome Trust.

2014: Visit 3

**What factors determine healthy aging?**

- The SABRE study participants and their partners had to be 65 upwards and free of diabetes and cardiovascular disease.
- ‘Healthy aging’ refers to good health and how we can prevent diabetes and cardiovascular disease and its complications in people of all ethnicities.

**What will happen at Visit 3?**

- Visit was led by Professor Nish Chaturvedi and is funded by the British Heart Foundation.
- This time we will ask people to participate in an additional index to identify people who are healthy aging.
- We will also measure participants’ partners to take part and will tell them if they should focus on their physical activity and their lifestyle in diabetes and cardiovascular disease and physical function in older age.

2008: Visit 2

**What happened at Visit 1?**

There were several study clinic centres including the old Wembley Stadium and Ealing Hospital.
- Participants had blood tests and measurements of blood fats and body fat distribution.
- Some people had blood tests after a Lucozade drink, some were a blood pressure monitor for 24 hours and some had ultrasound measurements of heart rates.
- There was a questionnaire about health and lifestyle too.