



Newsletter

Winter 2011/2012

Hello again from the Hertfordshire Cohort Study Team!

In this year's edition of the newsletter we are celebrating! Amazingly, 2011 marks 100 years since the Hertfordshire records were started by Margaret Burnside and her team of health visitors. Earlier this year we also had the great privilege of the Hertfordshire Cohort Study being featured on the BBC science programme 'Horizon'. Along with reports on these two triumphs, there is also an update on the osteoarthritis study that some of you have been taking part in, as well as results from the wellbeing interviews that took place last year. We hope you enjoy reading all of our news, and we wish you a Merry Christmas and a happy 2012.



A hundred years since it all began

Margaret Burnside was appointed Lady Inspector of Midwives for Hertfordshire County Council in 1906. During her first few years she implemented new laws which replaced uncertified midwives with a properly trained and registered workforce, set up a County Nursing Association and was appointed a Queens Nurse.

Her role was expanded to County Health Visitor in 1911, and the Health Visitors records on which our research is based began that year. In her first annual report she expressed regret that she could not compile figures on the number of infants who had reached average weight by 1 year of age because most of the health visitors did not possess the necessary scales:

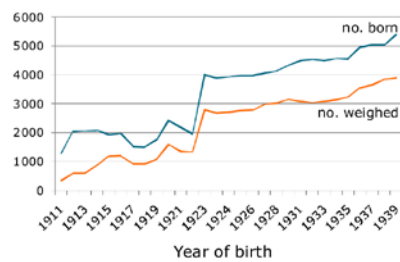
"a most necessary equipment for the routine work of health-visiting, as an infant's weight is the surest guide to its health"

The following year she reported that the council had recently provided the required spring balances costing 5 shillings each. The impact of the scales is evident in the Health Visitor's records. Only a quarter of babies born in 1911 were weighed at one year. By 1915 this reached 60%, and was consistently over two-thirds from 1920 onwards. Because we are interested in growth before birth and during infancy, we exclude from our studies anyone who does

not have both birthweight and weight at one recorded. Therefore not many babies born in the early years have been followed-up. We believe, however, that our oldest living study members have recently celebrated 100th birthdays!

The county council's support of Miss Burnside's work did not stop at spring balances: her annual salary was £52, and in 1913, she was provided with a 9.5hp Standard motorcar bought from the Pytchley Autocar Company.

Number of births recorded by health visitors, and number who were weighed at age one



Hertfordshire Cohort Study featured in BBC's Horizon programme

The Hertfordshire Cohort Study was recently featured on the BBC's flagship science programme, Horizon. The programme entitled 'The Nine Months That Made You' was shown in August on BBC2. It described how Professor David Barker, who preceded our current MRC LEU Director, Professor Cyrus Cooper, discovered the health visitor records in Hertfordshire, and used these to develop his theories on how the nine months spent in the womb can have a life-long influence on a person's health.

It went on to describe Professor Barker's struggle to convince other scientists of his ideas, but how, as time has gone on and evidence has emerged to support his hypotheses, the theory has become more accepted and is now inspiring new studies all around the world.

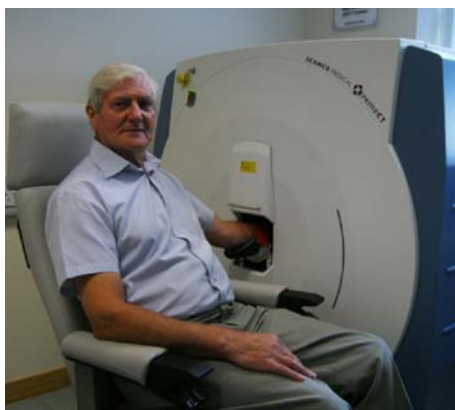
Here at the MRC LEU, we are most excited to have the study featured on a national television programme; we hope all of our participants are as proud as we are.



Scans of the Future!

Doctors and scientists can assess the strength of bone using various scans. The most commonly used is the DXA scan which measures the density of a bone. Using this technique with the "Herts Babies" has allowed us to discover how a person's growth in the womb, and in early infancy, influences the strength of their bones in later life. We have also been able to confirm that several lifestyle choices, including smoking, alcohol consumption and diet, play a role in this too.

When bones become thinner and weaker we refer to this condition as osteoporosis. Having osteoporosis increases a person's risk of breaking a bone, although many other factors are also important. Women are more at risk of osteoporosis than men and it also becomes more common in later years. The bones that break most often due to osteoporosis are at the hip, wrist and spine.



Recently, new and exciting scanning techniques have been developed to provide more detailed information about bone structure. Special CT scans of the forearm and lower leg have already been performed on some of the Hertfordshire group. We now have access to a more detailed scanner which provides us with pictures of bones at the microscopic level!

During 2011, around 450 people, who we had previously x-rayed around 10 years ago, agreed to take part in our study on osteoarthritis – a condition caused by wear and tear of joint cartilage. Visits took place at the participants' homes and consisted of a questionnaire, physical function tests, and a blood test. We have had a very enthusiastic response to this study and we thank you for your continued support.

Over the last few months we have started to contact people in this group again, to invite them to take part in our next project. Using all of the above scans we hope to build a better understanding of how different influences throughout life affect the quality of our bones. If you are in this group and have not been contacted to date, look out for a letter from us soon!

What are the advantages and disadvantages of being the age you are?

In 2010, 30 Hertfordshire Cohort Study members and 30 members of the 1946 British Birth Cohort took part in a 'qualitative study' into wellbeing. This study was carried out as part of a large research project called Healthy Ageing across the LifeCourse (HALCyon). The study involved an in-depth interview that enabled cohort members to tell us, in their own words, about their health, wellbeing and social participation over the course of their lives. For example, we wanted to hear about experiences, interests and social activities that have mattered, about people who have played an important role, and about key events that have shaped their lives. We also wanted to know what they thought were the main advantages and disadvantages of being the age they were.

The advantages that were mentioned most often were financial security, life experience and being wiser with age, freedom to do what you want when you want, enjoying grandchildren and family, having a bus pass, not working, more leisure time, feeling more confident in who you are and feeling less need to do things that you do not really want to do, and feeling respected by others. Women tended to speak about the advantages of having greater freedom to do what they



want, whereas men were more likely to mention the advantages of being retired and of being treated with more respect because of their older age.

The main disadvantage that most people mentioned was a feeling of slowing up and being less able to do things than they were before. Other disadvantages mentioned were feeling tired, fear of the future in terms of unknown health problems, being left behind as friends and family die, and a poor memory. Men were more likely than women to comment on the changes that had

occurred in their physical capability. Many people felt much younger inside than their actual age: *'I mean, I'm 64 but inside I'm 46'*. However, very few people expressed a desire to be young.

Although all the people who took part in the study acknowledged that there were disadvantages to growing older, the majority thought there were advantages to being the age they were. With the help of these cohort members, we have been able to collect valuable information about how older people view ageing.

www.mrc.soton.ac.uk/herts



Visit the Hertfordshire Cohort Study website to read more about the study's findings-to-date, see staff profiles and download copies of past newsletters and booklets.

If you have any questions or comments we would love to hear from you, and if you are moving house or changing your telephone number, please let us know so we can keep in touch!

Email: hcs@mrc.soton.ac.uk
www.mrc.soton.ac.uk/herts

MRC Lifecourse Epidemiology Unit
University of Southampton
Southampton General Hospital
Southampton SO16 6YD

Tel: 023 8077 7624