A new cohort every 11 years

Systematic astronomic observations have shown that the Sun displays an interesting cyclical phenomenon: solar magnetic activity varies in a uniformly periodic way, usually described as the "11-year cycles". This periodic phenomenon produces variations in the number of sunspots, which can be measured with a method developed in 1848 called the "Wolf number". The 11-year cycles also produce important alterations in the amount of electromagnetic irradiation reaching Earth's surface, leading in turn to climate changes throughout the planet.

It would be fascinating to claim that the decision to conduct birth cohort studies every 11 years in Pelotas, Rio Grande do Sul, Brazil, was for a special reason like the above-mentioned solar cycles. But the story is slightly different, far more earthly as it were.

At some moment during the first visits to the 1982 Pelotas birth cohort we decided to design a new birth cohort study. The main objective was to allow comparison of time trends in the characteristics of the maternal and child population and the principal health indicators, and a decade's interval between the perinatal studies appeared to be the most interesting option. We thus began preparations for launching a new cohort study in 1992.

However, a delay in the grant applications process with the European Economic Community ended up postponing the initial fieldwork, which had to be transferred to 1993. And since the interval between the two birth cohorts ended up being 11 years, we decided to maintain this same periodicity, scheduling the third cohort for 2004. This time there was no delay in the funding, and the new cohort study was actually launched in 2004. The 11-year tradition was thus maintained.

The methodology used in the follow-up visits to the 1993 cohort was quite different from that used in the 1982 cohort, although insofar as possible we kept the same structure in the questionnaires and the same anthropometric measurements, in order to allow comparison of the results. In the 1982 cohort the first follow-up visit was at 12 months of age, with subsequent visits at approximately 20 and 43 months, while in the 1993 cohort we decided to focus greater attention on the events in the first year of life, conducting home visits at 3 and 6 months of life, in addition to the visit at 12 months and later at 48 months.

It was only possible to conduct such intensive fieldwork because in 1993 we already had a well-consolidated research structure in place, with a new Epidemiological Research Center and a growing and enthusiastic group of young researchers who contributed new ideas and hypotheses that were added to the new project. The launching of our Graduate Studies Program in Epidemiology in 1991 allowed us to incorporate various Master's students into the new cohort's early phases.

This thematic issue tells part of the story, with articles referring to the visit at 11 years of age (that number again...).

And to maintain the 11-year tradition, we are already counting on all the Earth's electromagnetic energy to start a new birth cohort in Pelotas in 2015.

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