



Prevalence and characteristics of children with cerebral palsy in Europe.

Surveillance of Cerebral Palsy in Europe (SCPE). Developmental medicine and child neurology **2002 Sep**;44(9):633-40)

Background

SCPE was set up in 1998 with members from 14 centres in 8 countries to look at the prevalence of Cerebral Palsy (CP). Prevalence is the total number of cases of CP in a population at a specific time. The first task of the group was to make sure that all the centres involved were using the same definition of CP and were classifying cases in the same way e.g. spastic bilateral, dyskinetic etc. They also decided what information should be collected.

What was the aim?

This paper set out to answer questions about:

1. What the rate of CP is across Europe and whether it is different in different areas
2. Whether the numbers of children with CP has changed from the 1970s to the 1980s.
3. How the rate of CP differs depending on the weight of a baby at birth.
4. How severely the children are affected by CP.

How was the work carried out?

The SCPE database was used to obtain information from 13 CP registers across Europe. This gave information on a total of 6502 children born between 1976 and 1990. This included details of their birth such as birthweight and the type and level of their impairment.

What were the findings?

The overall rate of CP for the period 1980 to 1990 was 2.08 per 1000 live births. This means for every 1000 children born 2 are likely to have CP. There were differences between the centres with rates ranging from 1.49 per 1000 to 2.63 per thousand. One explanation of these differences is that those centres with lower rates may not be including children with very mild forms of CP.

The overall rate of CP for each year from 1976 to 1989 was worked out and this showed that the rate of CP was going up over the 1970s, however in the 1980s the rate stabilised and stayed roughly the same from about 1983.

The results confirmed previous findings that, children born with a very low birthweight, less than 1500grams, had a much higher chance (70 times more likely) of having CP than those born with

weights of 2500 grams or more. Also for every 1000 children with birthweight between 1500 and 2499 grams, approximately 11 were likely to have CP compared to just 1 child per 1000 for birthweight over 2500 grams

The most common type of CP was bilateral spastic, followed by unilateral spastic. Overall 85.7% of the children had some form of spastic CP, 6.5% were classified as dyskinetic and 4.3% as ataxic. The remainder, 3.7%, were classified as unknown CP type.

The most severely affected children are those who have some degree of intellectual impairment (problems with thinking, talking, and/or writing) and are not be able to walk. One in five children with CP were in this group. It was also found that over 1 in 10 of the children had severe visual impairment and 1 in 5 suffered from seizures.

What does this tell us?

From this work we now know that for every 1000 children born 2 are likely to have CP and that of these 1 in 5 will be very severely affected. This information can be used by those who are planning what services will be needed to care for these children in the future.

We also know that children who are born with low birthweights are more likely to have CP than those children born at 2500grams or over. This means that children at risk of having CP can be identified at an early stage.

Further work

In the 1980s numbers of children born with CP has stabilised after an increase in the rate in the 1970s. This gives a baseline to compare rates in the 1990s and beyond to. By doing this it can be seen if changes that have taken place in obstetric and neonatal care have had an effect on the prevalence of Cerebral Palsy.

This work will act as a basis for future work into CP; it can be used to establish if and how the rates and types of CP across Europe change in the future.

Future work looking at planning services, such as education and care, can use this work as a basis to estimate demand for services.

Paper The full results of this study can be found in *Developmental Medicine and Child Neurology*, 2002 44: 633-640. <http://onlinelibrary.wiley.com/doi/10.1111/j.1469-8749.2002.tb00848.x/pdf>

Authors Surveillance of Cerebral Palsy in Europe (SCPE)

Pubmed abstract The summary of this study can be found in Pubmed, a database of citations from biomedical journals. <http://www.ncbi.nlm.nih.gov/pubmed/12227618>