The clinical audits have focussed attention on the gap between agreed clinical standards and practice, recommending that targets are set to improve outcomes and that performance is evaluated. The results of this study are available on the web (Leitch and Walker, 1998). In addition, many more births were repeat CS (0.3% - 2.9% of all births) and as a result of breech and other ‘mal-presentations’ (0.7% vs. 2.9% of all births). In England and Wales the CSR varies considerably between countries (from about 5% to over 25% of all births). In 1985, the World Health Organisation recommended that women should have the benefit of one-to-one midwifery care in labour (dystocia), foetal distress, breech and repeat CS, which in combination account for over 70% of all CS (Leitch and Walker, 1998). These have been described in an earlier edition of New Digest (Robson, 2000).

In order to understand what causes or contributes to the rising CSR, various methods have been used to make valid comparisons between different populations or groups of women using services. Robson and colleagues devised a system of classification which involved dividing all pregnant women using a maternity service into just one of 10 groups, based on six relevant clinical characteristics: parity, previous CS, multiple pregnancy, presentation, gestation and labour onset (Robson et al, 1996). These have been described in an earlier edition of New Digest (Robson, 2000).

One of the Robson groups is large and some very small. Robson group 1, for instance, included 25% of all births in England and Wales in 2001. It is made up of all first-time mothers going into spontaneous labour after 37 or more weeks of pregnancy, having a single baby who is presenting head-first. All other first-time mothers are assigned to other Robson’s groups. The largest group is the largest. It is made up of women who have had at least one baby before and have no obstetric risk; who go into spontaneous labour after 37 or more weeks of pregnancy, with one baby coming head-first. By comparing women in specific Robson groups, it is possible to compare the CSR for similar women in different hospitals and in different countries.

AudiT Of Caesarean SectIon In scOTLaNd

In Scotland, one of the first audits capturing information about all CS in a defined geographical area was carried out in 1994/5 (McIntyre et al, 1996). Data has been routinely collected about all births in Scotland since 1970. The overall CSR in for the year to March 2001 was provisionally 21.9%. These have been described in an earlier edition of New Digest (Robson et al, 1996). A review of the 48,602 CS undertaken in Scotland during the five-year period from 1996-7 was undertaken using the four largest Robson groups, which account for 60% of CS. Consistent variation was found between maternity units. For example, the overall CSR in Robson group 1 was 10% (range between units 6.2% -12.8%) (Johanson et al, 2002).

The national sentinel caesarean section audit

The Department of Health commissioned a three-month audit of all CS in England and Wales, which took place May-July 2000. The audit was then extended to Northern Ireland, the Channel Islands and the Isle of Man for the period December 2000-February 2001 (Paranjothy and Thomas 2001). It determined the frequency of CS in all maternity units, evaluated demographic, clinical and organisational factors associated with variations in the CSR and assessed performance against agreed clinical standards. Two surveys, one of women’s views and one of obstetricians’ views about Caesarean section were also carried out.}

The audit shows the CSR varies by region, ranging from 13.9% in North Eastern Region to 24.2% in London and Wales. For Robson group 1 (first time mothers, spontaneous labour, one baby, head down at term) the overall CSR was 12.2% in England and Wales, ranging from 9.9% in North Eastern Region to 14.3% in London and Wales. In contrast, in Stonnington, one of the largest unit in the South of Norway, the CSR rate for Robson group 1 was 5.1% in 2001, with a rate of 0.7% for the whole unit (www.sie.ee/kb/results).

The survey of women found that only 3.3% of those expecting their first baby expressed a preference for a Caesarean birth. The rate was 5.3% for all women, with the highest rate among those who had already had a CS (19.9%). The survey of obstetricians found that 61% felt the CSR in their unit was too high. The average CSR in their units was 23.6%. The average CSR in units of obstetricians who did not think their unit’s rate was too high was 10.9%. In the clinical audit, obstetricians attributed 7% of CS as having been performed primarily for maternal request.

What Makes a Difference?

The Department of Health commissioned a three-month audit of all CS in England and Wales, which took place May-July 2000 (Paranjothy and Thomas 2001). The CSR differs by region, ranging from 13.9% in North Eastern Region to 24.2% in London and Wales. For Robson group 1 (first time mothers, spontaneous labour, one baby, head down at term) the overall CSR was 12.2% in England and Wales, ranging from 9.9% in North Eastern Region to 14.3% in London and Wales. In contrast, in Stonnington, one of the largest unit in the South of Norway, the CSR rate for Robson group 1 was 5.1% in 2001, with a rate of 0.7% for the whole unit (www.sie.ee/kb/results).

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preferences. There is evidence that the overall CSR is reduced when the primary CSR is low. The culture within the maternity service seems to be important, affecting the way labour is managed. The extent to which agreed clinical guidelines are implemented also makes a significant difference. Evidence-based CS guidelines are being developed by the National Institute for Clinical Excellence (NICE), and are due for publication in mid 2003.

In the next edition of *New Digest*, Caesarean Section - Part 2 will present data on the known risks and benefits of Caesarean section for women and babies.

**References:**


See also Research Roundup (page 30) for latest research on VBAC.