5.6. Obstetric trauma

Patient safety during childbirth can be assessed by looking at potentially avoidable tearing of the perineum during vaginal delivery. Such tears extend to the perineal muscles and bowel wall and require surgery. They are more likely to occur in the case of first vaginal delivery, high baby's birth weight, labour induction, occiput posterior baby position, prolonged second stage of labour and instrumental delivery. Possible complications include continued perineal pain and incontinence. A recent study found that around 10% of women who had such tears will suffer from faecal incontinence initially and almost 45% of women will have ongoing symptoms after four to eight years (Sundquist, 2012).

These types of tears are not possible to prevent in all cases, but can be reduced by employing appropriate labour management and high quality obstetric care. For example, findings from a recent study showed that enhanced midwifery skills in managing vaginal delivery reduce the risk of obstetric anal sphincter injuries (Hals et al., 2010). Hence, the proportion of deliveries involving higher degree lacerations is a useful indicator of the quality of obstetric care. Obstetric trauma indicators have been used by the US Joint Commission as well as by different international quality initiatives seeking to assess and improve obstetric care (AHRQ, 2006).

"Obstetric trauma with instrument" refers to deliveries using forceps or vacuum extraction. As the risk of a perineal laceration is significantly increased when instruments are used to assist the delivery, rates for this patient population are reported separately. Obstetric trauma indicators are considered as relatively reliable and comparable across countries. Nevertheless, differences in the consistency with which obstetric units report these complications may complicate international comparison. Fear of litigation, for example, may cause under-reporting; conversely, systems which facilitate recording of secondary diagnoses or rely on specially trained administrative staff to identify and code adverse events from patients' clinical records rather than clinicians to report procedures may produce more reliable data.

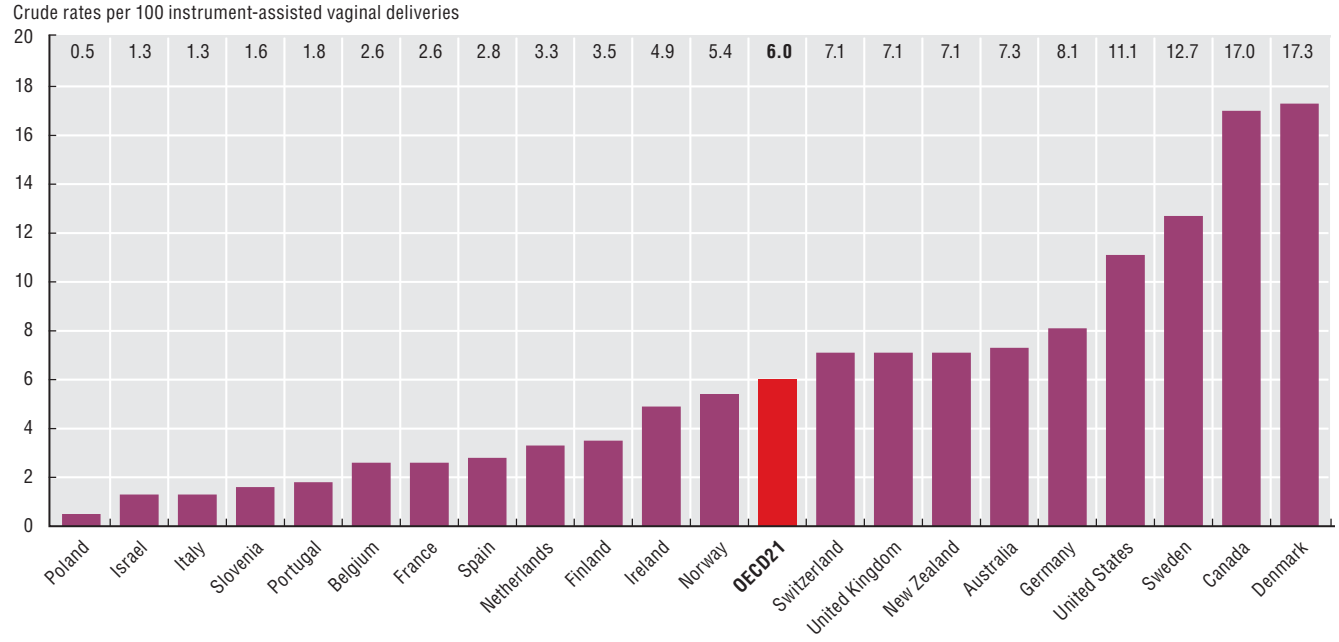
The rate of obstetric trauma after vaginal delivery *with* instrument (Figure 5.6.1) shows high variation across countries. Reported rates vary from below 2% in Poland, Israel, Italy, Slovenia and Portugal to more than 15% in Canada and Denmark. Rates of obstetric trauma after vaginal delivery *without* instrument (Figure 5.6.2) are considerably less but display equally large variation, from less than 0.5% in Poland, Israel, Italy and Slovenia to 3.5% or above in Sweden and Switzerland. There is a strong relationship between the two indicators: Poland, Israel, Italy, Slovenia, Portugal and Belgium report the lowest rates and Sweden, Canada and Denmark the highest rates for both indicators.

Definition and comparability

The two obstetric trauma indicators are defined as the proportion of instrument assisted/non-assisted vaginal deliveries with third- and fourth-degree obstetric trauma codes in any diagnosis and procedure field. Any differences in the definition of principal and secondary diagnoses have no influence on the calculated rates.

Differences in data reporting across countries may influence the calculated rates of obstetric patient safety indicators. These relate primarily to differences in coding practice and data sources. Some countries report obstetric trauma rates based on administrative hospital data and others based on obstetric register. There is some evidence that registries produce higher quality data and report a greater number of obstetric trauma events compared to administrative datasets (Baghestan et al., 2007).

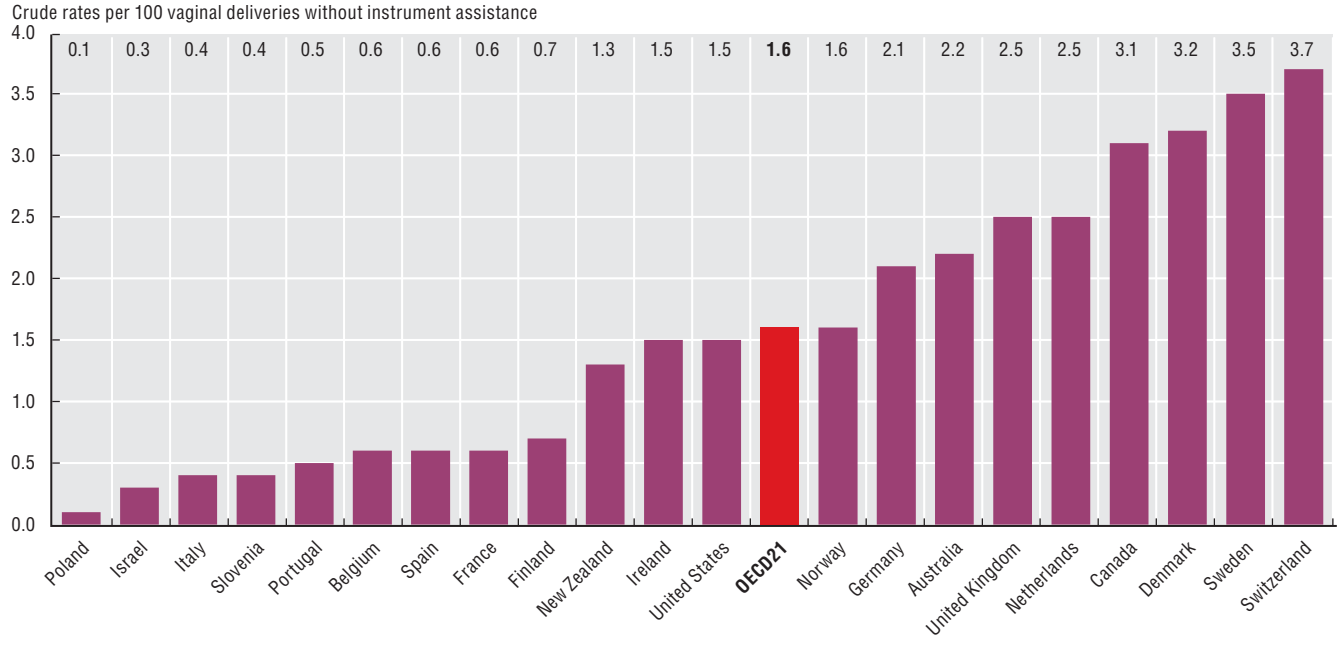
5.6.1. Obstetric trauma, vaginal delivery with instrument, 2011 (or nearest year)



Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

StatLink http://dx.doi.org/10.1787/888932918035

5.6.2. Obstetric trauma, vaginal delivery without instrument, 2011 (or nearest year)



Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

StatLink http://dx.doi.org/10.1787/888932918054