

5.5. Obstetric trauma

Patient safety has recently become one of the most prominent issues in health policy, as increased evidence of a high rate of errors during the delivery of medical care has begun to undermine the trust that patients and policy makers have historically bestowed on the medical profession. As early as 1991, the landmark Harvard Medical Practice Study found that adverse events occur in 1 to 4% of all hospital admissions (Brennan *et al.*, 1991). The US Institute of Medicine integrated the available evidence on medical errors and estimated that more people die from medical errors than from traffic injuries or breast cancer (Kohn *et al.*, 2000). One recent Swedish study showed that over 12% of hospital admissions had adverse events, of which 70% were preventable, resulting in an increased length of stay of 6 days (Soop *et al.*, 2009). The Council of the European Union adopted in 2009 a Recommendation on patient safety, including the prevention and control of healthcare associated infections (European Union, 2009).

The obstetric trauma indicators are intended to flag cases of potentially preventable third- and fourth-degree perineal tears during vaginal delivery. Such tears extending to the perineal muscles, anal sphincter and bowel wall require surgical treatment after birth. Possible complications include continued perineal pain and anal incontinence. These types of tears are not possible to prevent, but can be reduced by employing appropriate labour management and care standards. A third- or fourth-degree trauma is more likely to occur in the case of first vaginal delivery, high baby's birth weight, labour induction, occiput posterior position, prolonged second stage of labour and instrumental delivery. The proportion of deliveries involving higher degree lacerations is a useful indicator of the quality of obstetrical care and can assist in reducing these adverse events. Obstetric trauma indicators have been used by the US Joint Commission as well as by different international quality initiatives analysing obstetric data. As the risk of a perineal laceration is significantly increased in instrument-assisted labour (vacuum, forceps), rates for this patient population are reported separately.

Figures 5.5.1 and 5.5.2 show the variation in reporting rates of obstetric trauma during vaginal delivery with and without instrument. Canada, the United States and Sweden have the highest rates of obstetric trauma with instrument. Switzerland, Sweden and Denmark stand out as having the highest reported rates for obstetric trauma without instrument. There are no marked differences in the position of countries in relation to the OECD average between the two indicators. Belgium, Finland, France, Ireland, Israel, Italy, Portugal, Slovenia and Spain have

consistently low reported obstetric trauma rates for both indicators. The difference in the incidence of anal sphincter tears between Finland and the other Nordic countries (Denmark, Norway, Sweden) may be explained by the variation in delivery method and episiotomy practice (Laine *et al.*, 2009). 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). Differences in indicator values between the countries may not only reflect safety of care, but also differences in recording and reporting practices. For example, Canada has very stringent rules for the coding of obstetric trauma. This may partly explain why the Canadian rates appear to be high in comparison with other countries.

Definition and comparability

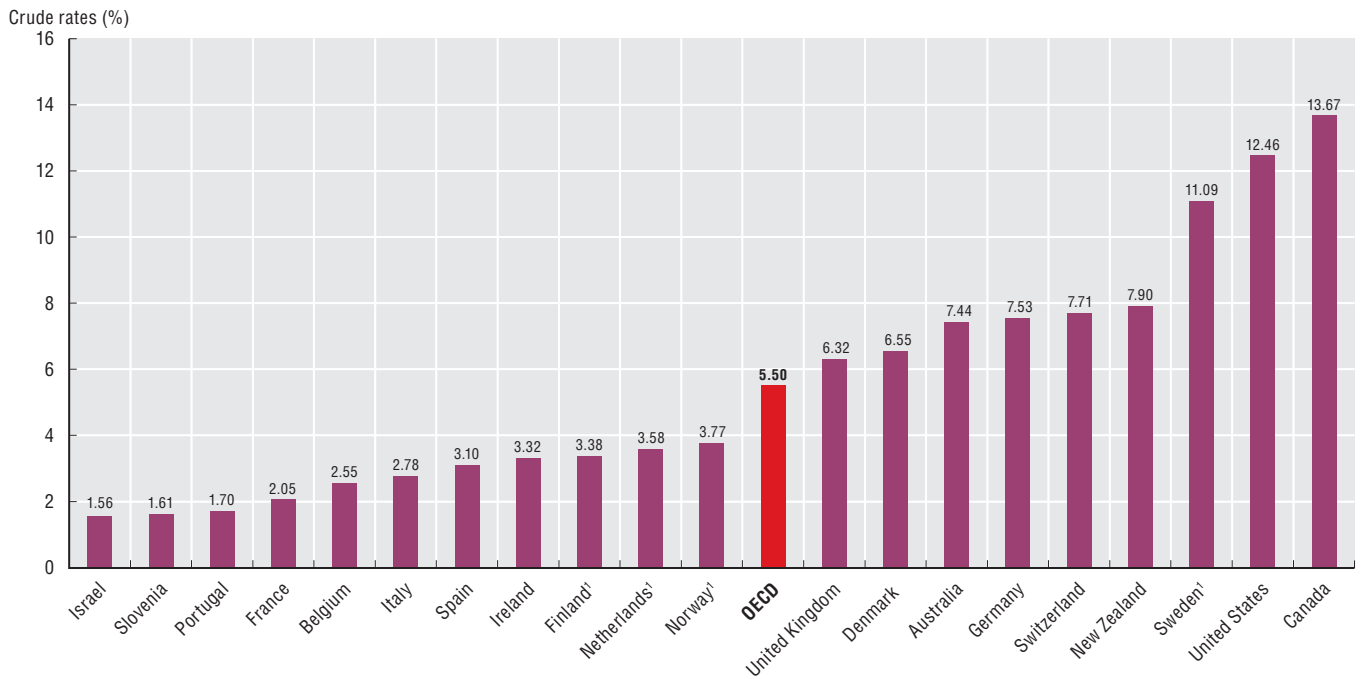
Patient safety indicators are derived from the Quality Indicators developed by the US Agency for Healthcare Research and Quality (AHRQ). AHRQ's Patient Safety Indicators (PSIs) are a set of indicators that provide information on hospital complications and adverse events following surgeries, procedures, and childbirth. The PSIs were developed after a comprehensive literature review, analysis of ICD-9-CM codes, clinician panel review, implementation of risk adjustment, and empirical analyses (AHRQ, 2006).

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. Therefore, any differences in the definition of principal and secondary diagnoses have no influence on the calculated rates.

Several 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 the obstetric trauma rates based on administrative hospital data and others based on obstetric register, which may influence the results.

Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

5.5.1 Obstetric trauma, vaginal delivery with instrument, 2009 (or nearest year)

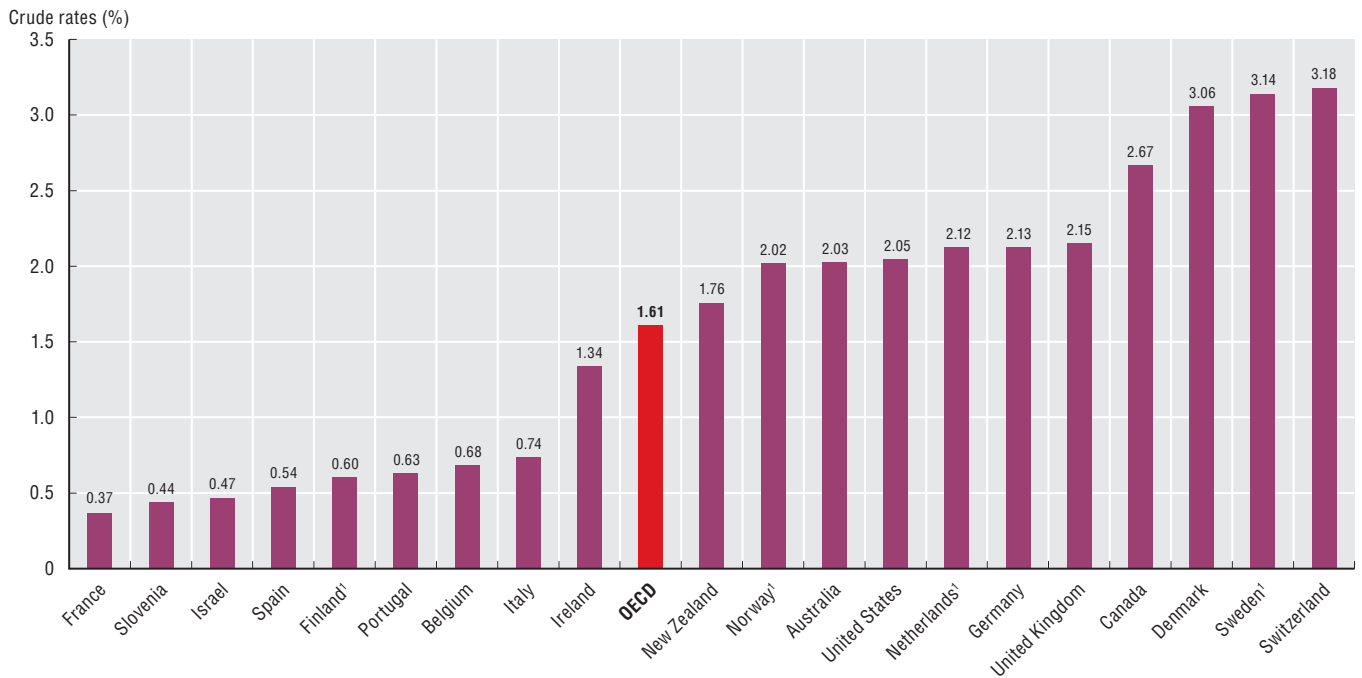


1. Obstetric register data.

Source: OECD Health Data 2011.

StatLink <http://dx.doi.org/10.1787/888932525210>

5.5.2 Obstetric trauma, vaginal delivery without instrument, 2009 (or nearest year)



1. Obstetric register data.

Source: OECD Health Data 2011.

StatLink <http://dx.doi.org/10.1787/888932525229>



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