4.8. Caesarean sections

Rates of caesarean delivery (as a percentage of all live births) have increased in all OECD countries in recent decades. Reasons for the increase include reductions in the risk of caesarean delivery, malpractice liability concerns, scheduling convenience for both physicians and patients, and changes in the physician-patient relationship, among others. Nonetheless, caesarean delivery continues to result in increased maternal mortality, maternal and infant morbidity, and increased complications for subsequent deliveries (Minkoff and Chervenak, 2003; Bewley and Cockburn, 2002; Villar *et al.*, 2006). These concerns, combined with the greater financial cost, raise the question of whether the costs of caesarean delivery may exceed the benefits.

In 2007, the caesarean section rate varied significantly across OECD countries (Figure 4.8.1), ranging from lows of 14% in the Netherlands to highs of nearly 40% in Italy and Mexico. The rates were also high (30% or more) in Australia, Hungary, Korea, Portugal, Switzerland, Turkey and the United States. The average across OECD countries was 26%. In the Netherlands, where home births are a usual option for women with low-risk pregnancies, 30% of all births occurred at home in 2004 (Euro-Peristat, 2008).

The increase in caesarean section rates slowed or even reversed in some OECD countries during the 1990s, as a result of changes in obstetrical practice including trial of labor (*i.e.* when a woman attempts labor and normal delivery after having a caesarean) to reduce the number of repeat caesareans (Lagrew and Adashek, 1998). But caesarean rates soon resumed their upward trend, due in part to reports of complications from trial of labor and continued changes in patient preferences (Sachs *et al.*, 1999). Other trends, such as increases in first births among older women and the rise in multiple births resulting from assisted reproduction, also contributed to the global rise in caesarean deliveries.

The increase in caesarean rates since 1997 has been rapid in most OECD countries (Figures 4.8.2 and 4.8.3). Average annual growth rates of 4% or more were recorded in 12 OECD countries, with the highest growth rates in Austria, the Slovak Republic, Luxembourg, Denmark, Ireland and the Czech Republic. Caesarean section rates have grown at an annual rate of 3.9% across OECD countries from 1997 to 2007. Finland and Iceland have had the lowest growth rates and are among the countries with the lowest caesarean rates in 2007.

The continued rise in caesarean deliveries is only partly related to changes in medical indications. A study of caesarean delivery trends in the United States found that the proportion of "no indicated risk" caesareans rose from 3.7% of all births in 1996 to 5.5% in 2001 (Declercq *et al.*, 2005). In France, a 2008 study by the French Hospital Federation found higher caesarean rates in private for-profit facilities than in public facilities, even though the latter are designed to deal with more complicated pregnancies (FHF, 2008). A review of caesarean delivery practice in Latin American countries in the late 1990s similarly found higher caesarean rates in private hospitals than in public or social security hospitals (Belizan *et al.*, 1999).

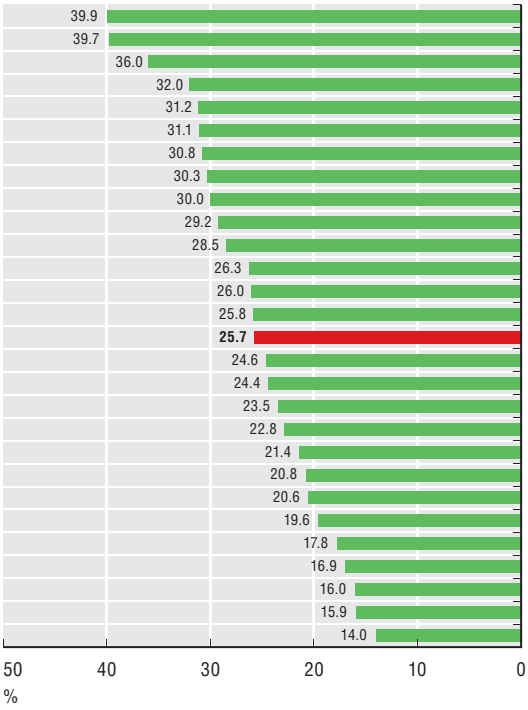
While caesarean delivery is clearly required in some circumstances, the benefits of caesarean *versus* vaginal delivery for normal uncomplicated deliveries continue to be debated. Professional associations of obstetricians and gynaecologists in countries such as Canada now encourage the promotion of normal childbirth without interventions such as caesarean sections (Society of Obstetricians and Gynaecologists of Canada *et al.*, 2008).

Definition and deviations

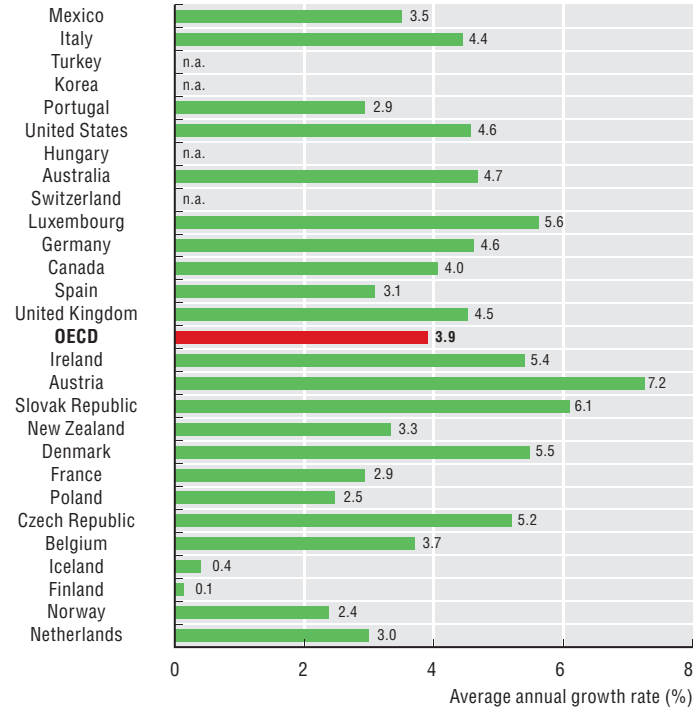
Caesarean section rate is the number of caesareans per 100 live births.

In Portugal, the denominator is only the number of live births which took place in National Health Service Hospitals on the mainland (resulting in an over-estimation of caesarean rates). In Mexico, the number of caesarean sections is estimated based on public hospital reports and data obtained from National Health Surveys. Estimation is required to correct for under-reporting of caesarean deliveries in private facilities. The combined number of caesarean deliveries is then divided by the total number of live births as estimated by the National Population Council.

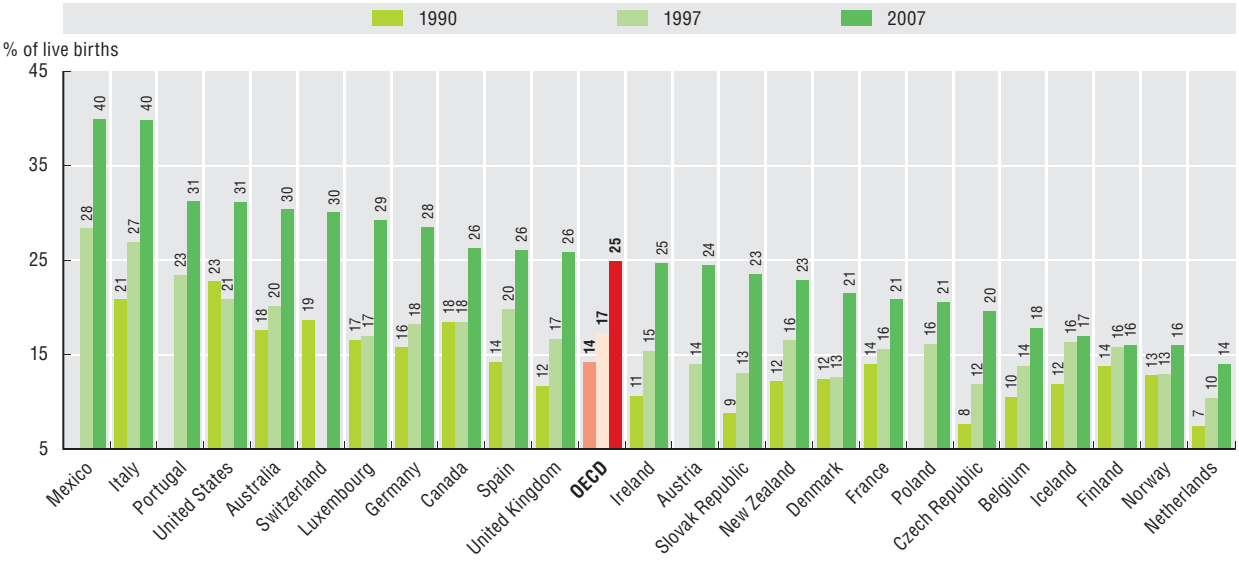
4.8.1 Caesarean sections per 100 live births, 2007 (or latest year available)



4.8.2 Rise in caesarean sections per 100 live births, 1997-2007 (or nearest year)



4.8.3 Caesarean sections per 100 live births, 1990-2007 (or nearest year)



Source: OECD Health Data 2009.

StatLink http://dx.doi.org/10.1787/718547335063