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Editorial

How perinatal health in France compared with other European countries in 2015: some progress but also some concerns about newborn health☆

Following two previous assessments based on births in 2004 and 2010, the new Euro-Peristat report presents perinatal health data from 2015 for the current 28 member states of the European Union, as well as Iceland, Norway, and Switzerland, and it is available at http://www.europeristat.com [1]. This report describes the characteristics of pregnant women, caesarean practices, and the health of the babies and their mothers. It makes it possible to compare France with other member states on several indicators and to assess our strengths and weaknesses, in terms of both information systems and health indicators.

Concern about newborn health, particularly stillbirth and neonatal death rates

Preterm births

Children born at 36 weeks or less were 7.1% of live births in France in 2015. In Europe, this percentage ranged from less than 6% in Estonia, Finland, Latvia, Lithuania, and Sweden, to 11 and 12% respectively in Greece and Cyprus; France is ranked 14th out of 33 countries (33 because, in the UK, the constituent countries of England & Wales, Northern Ireland and Scotland are reported separately). Using data from the national perinatal surveys (NPS), the preterm birth rate has increased slightly between 2010 and 2016 [2] and in hospital discharge statistics (Programme de Médicalisation des Systèmes d'information (PMSI)), the rate has been stable since 2012, the first year that annual figures were routinely produced in France [3]. Divergent patterns were observed in the other countries, with significantly lower percentages in 2015 compared with 2010 in 6 countries and significantly higher percentages in 8. It would be useful to investigate in more detail the situations in countries reporting lower preterm birth rates, including any preventive policy initiatives.

Stillbirths

In 2015, the stillbirth rate was 3.0 per 1000 in France, placing us 22nd among 33 countries. We excluded births before 28 weeks of gestational age as recommended by the World Health Organization for international comparisons, due to differences between countries in the recording of stillbirths at very early gestational ages [4]. Euro-Peristat also excludes medical terminations of pregnancy, when possible, because both the practice of terminations and their inclusion in the statistics are even more heterogeneous. Terminations can affect rates strongly, at early gestations, but also later [5]; for instance, terminations accounted for 32% of the stillbirths from 28 weeks in France in 2015 [3]. As in many, but not all, countries, stillbirth rates in France in 2015 were not significantly lower than in 2010.

Neonatal deaths (0–27 days)

The neonatal mortality rate among all live born children was 2.4 per 1000 in 2015, with France ranked 22nd among 33 countries. Because of the international variations in recording and care of extremely preterm births and the high number of participating countries, Fig. 1 displays rates only for newborns at 24 weeks of gestation or later in countries bordering France as well as some Scandinavian countries. Neonatal mortality remained stable in France between 2010 and 2015, as was already observed in the previous Euro-Peristat report comparing 2003 and 2010 [6]. This contrasts with decreases in rates for Europe as a whole, with a pooled ratio for 2015/2010 of 0.85 (95% CI 0.80-0.91) for births at 24 weeks or later.

These data on fetal and neonatal deaths raise concerns about perinatal health policies and care in France. Nonetheless the interpretation of these statistics is challenging. For instance, very early deaths, especially for extremely preterm infants, are sometimes recorded as stillbirths and this attitude varies between countries [7]. However, these variations in registration would not affect late neonatal mortality (7–27 days), and France is ranked 25th for this indicator, in a position even less favourable than for overall neonatal mortality. To limit the influence of recording differences, this report also presents comparisons for babies born

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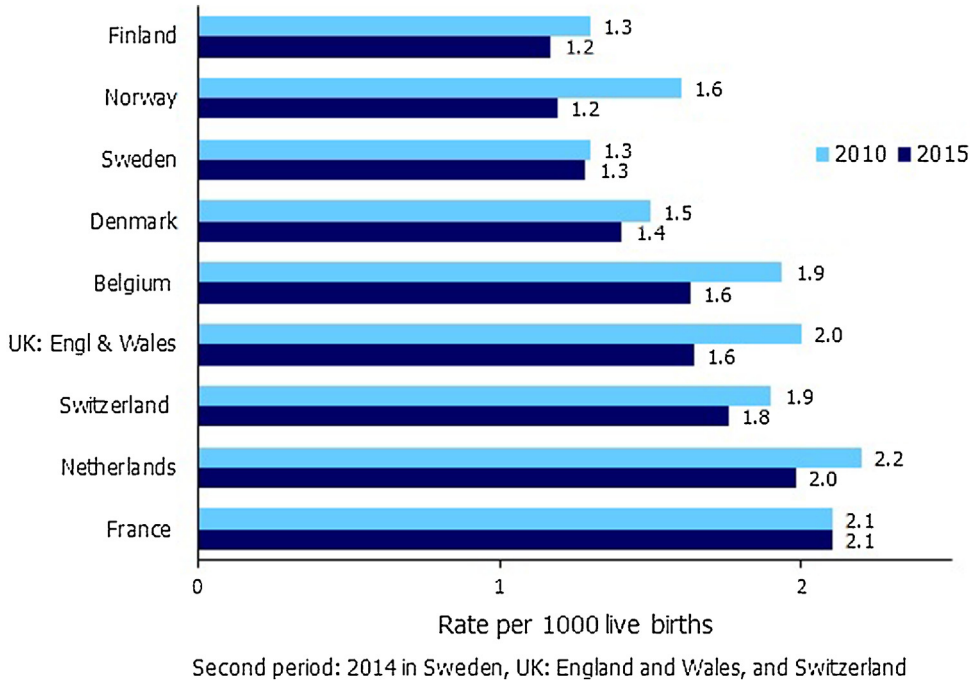

Fig. 1. Neonatal mortality rates at and after 24 weeks of gestation in 2010 and 2015 (source EURO-PERISTAT) [1].

from 24 weeks. Using this limit, France has a neonatal mortality rate of 2.1 per 1000 births and is ranked 18th among the 26 countries which can provide these rates, whereas the rate in the Scandinavian countries is less than 1.5 per 1000. The level of neonatal mortality also depends on the attitudes of healthcare professionals in situations where the prognosis is poor, especially for infants born before 26 weeks. Health professionals in France may be less likely to undertake active management in these situations than in other European countries, leading to higher mortality [8]. In contrast, the active policy of screening for congenital anomalies and the high number of late terminations in France [5] should limit the number of neonatal deaths from severe congenital anomalies. Finally, stable rates could be related to changes in maternal characteristics; however, a previous analysis of infant mortality between 2004 and 2009 did not find support for this hypothesis [9]. Unfortunately, the data we currently have do not allow us to understand the contribution of these different factors to the situation in France in comparison with the other European countries. In order to better understand why mortality rates are not declining, the situation in France should be examined in depth, as done in the Netherlands [10], (P Achterberg, personal communication) and the UK [11]. For instance, UK analyses existing statistics and implements audits annually, looking successively at different categories of deaths (congenital diaphragmatic hernia, stillbirths before labour, etc.).

A caesarean rate under control

With a caesarean rate of 20.2%, France is in 7th place among the 33 countries. These rates ranged from 16% in Iceland, Finland, and Norway to 47% in Romania and 57% in Cyprus. Since 2010, the rate has remained stable in France, although it has increased significantly in 17 countries. Moreover, in some high risk circumstances for which no or inadequate evidence supports the routine practice of caesareans, France has a fairly low caesarean rate: 59% for women with a previous caesarean, placing us 3rd after Finland (45%) and Norway (52%); 75% for breech presentations, ranked 4th after Finland (64%), Norway (66%), and Lithuania (73%); and 54% for multiple pregnancies, in 5th place after the Netherlands (43%), Iceland (44%), Norway (46%), and Finland (49%). We have also observed a reduction in caesarean rates in France for women with a previous caesarean [12]. Because of the potential health effects of caesareans for women and children [13], professionals in France have been working together to promote evidence-based guidelines [14] that appear to be having a positive impact on practices. It is important to note that countries with low caesarean delivery rates (Finland and Norway, for example) are also those with the lowest fetal and neonatal mortality rates. This observation argues against concerns that the level of mortality in France may be explained in part by the lower caesarean section rates.

Unfavourable trends in risk factors

Maternal age

Women aged 35 years and older, a group at risk of complications for delivery and pregnancy outcome, accounted for 20.6% of women who had a child in France in 2015, which places us 14th. The proportion of this age group increased in France, as in almost all participating countries between 2010 and 2015.

Smoking

In France, the percentage of women who smoked during their pregnancy was 16.3% and we ranked 20th among the 22 countries or regions with data, ahead only of Wales (17.3%) and Spain (Valencia) (18.3%). This rate did not change significantly, although a decrease, often quite substantial, was found in almost all other countries. In France the stability of the proportion of women who smoked before pregnancy as well as those who smoked during the third trimester [12] raises questions about the effectiveness of measures and guidelines targeting women of childbearing age and pregnant women.

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Improvement of the information system

For this report, statistics on stillbirth, preterm delivery and low birthweight were compiled from the PMSI based on all births in 2015, whereas previously these indicators came from the NPS [2]. We are thus moving closer to other countries in our capacity to provide data for all births. However, the PMSI does not have all of the variables needed for Euro-Peristat, illustrating the importance of the NPS for health monitoring and the need for other data sources for mortality, including cause-of-death certificates for neonatal deaths, and death certificates for those after 27 days of life. The use of multiple sources for mortality prevents a homogeneous, consistent analysis because these sources record cases according to different procedures and collect different data. Finally, France is one of the seven countries with an enhanced system for ascertaining maternal deaths which makes it possible to have high quality statistics on this indicator [15].

Conclusion

While efforts made to limit caesareans have borne fruit, the persistent high levels of smoking among pregnant women as well as the health status of newborns are causes for concern. Prevention policies should be implemented to target smoking, but effective interventions to reduce fetal and neonatal deaths require more analysis about associated factors and circumstances. Maternal deaths in France provide a good example of this approach as recommendations emerging from maternal mortality reviews have contributed to a decrease in mortality from haemorrhage [15].

Contributions

All authors have made substantial contributions to the conception and design of the study, analysis and interpretation of data, revising the editorial critically for important intellectual content. B Blondel wrote the 1st draft. All authors approved the version to be submitted.

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Disclosure of interest

The authors declare that they have no competing interest.

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