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Editorial

The European perinatal health report: Delivering comparable data for examining differences in maternal and infant health

Pregnant women and babies in Europe enjoy a level of health that is markedly better than in previous decades and by comparison with that of their counterparts in the developing world. Nonetheless, the perinatal period is still a time of risk. More than 50,000 babies are either stillborn or do not survive to see their first birthday, and hundreds of thousands of additional babies are born before term, at low birth weight, or with congenital anomalies – events which can carry long-term and costly consequences for individuals and society [1]. Maternal deaths remain rare but tragic events, particularly because a significant proportion of them are associated with substandard care [2].

European member states have long maintained systems to monitor such perinatal health outcomes over time. However, comparisons with outcomes in neighbouring countries had been difficult because data were not available in international databases or were insufficiently comparable [3]. International comparisons are important because they can motivate action, prompting countries – especially those who are not performing well – to investigate and improve their health care systems [4]. Standardisation of definitions and documentation of collection methods was needed to make these data useful for health research and policy [5].

The EURO-PERISTAT project was funded by the EU Directorate General for Health and Consumer Protection to harmonise indicators and document methods of data collection between member states, and to collect, publish and disseminate perinatal health data [6]. To accomplish these aims, EURO-PERISTAT started by organizing a network of clinicians and epidemiologists from each of the fifteen (at that time) member states, achieved consensus on a list of perinatal health indicators with precise definitions, and tested the feasibility of collecting those indicators using data from the year 2000. The results of this feasibility study were published in a special issue of the European Journal for Obstetrics & Gynecology and Reproductive Biology [7–9].

1. The first European report on perinatal health

Following this work to harmonise indicator definitions and methods, EURO-PERISTAT conducted a second collection of data for the year 2004, expanding its activities to include each of the 25 member states in 2006 and Norway. It published its indicators in the first-ever European Perinatal Health Report (EPHR) [10]. The report also contains data from three other European projects: Surveillance of Cerebral Palsy in Europe (SCPE), European

Surveillance of Congenital Anomalies (EUROCAT), and the European Information System to Monitor Short and Long-Term Morbidity to Improve Quality of Care and Patient Safety for Very-Low-Birth-Weight Infants (EURONEOSTAT).

The EPHR, published in December 2008, is the most comprehensive European report on perinatal health to date and takes a new approach to health reporting. Instead of comparing countries on single indicators like infant mortality or low birthweight births, the report paints a fuller picture by presenting these indicators alongside data about health care and other factors that can affect the outcome of pregnancy. The report also illustrates differences in the ways that data are collected, and explains how these can affect comparisons between countries. The full report, including an appendix with detailed data tables, is available for free download at <http://www.europeristat.com>.

2. Key findings from the EPHR

There are important differences in perinatal health outcome between EU member states. The rate of neonatal mortality, for example, was lowest in Cyprus, Sweden and Norway at about 2.0 per 1000 live births, and more than two times higher in Lithuania (4.6) and Latvia (5.7). The rate of fetal mortality, excluding fetal deaths below 28 completed weeks of gestation, varied from around 2.0 per 1000 births in the Slovak Republic and Finland to more than double that rate in Latvia and France (4.9). The proportion of preterm births varied from around 5.5% in Ireland, Finland, Lithuania and Latvia, to 8.9% in Germany and 11.4% in Austria. The rate of low birthweight (below 2500 g) among live births ranged from 4.2% to 8.5% and showed a North to South increasing trend, raising questions about the appropriateness of applying a single birthweight standard in different populations. Overall, country rankings varied by indicator and no single country consistently occupied the best position.

Even more variable than these outcomes were the health care practices around Europe. The lowest rate of episiotomy in Denmark (10%) was exceeded by more than five times in Slovenia (51%), Italy (52%), Czech Republic (60%), Flanders, Belgium (63%) and Valencia, Spain (82%). Rates of caesarean section also varied widely from 14% in Slovenia to 33% in Portugal and 38% in Italy. Labour was induced in fewer than 9% of all deliveries in Lithuania and Estonia, but more than 30% in Northern Ireland (UK) and Malta. This kind of variability raises questions about what level of obstetric intervention is the most appropriate for pregnant women in Europe.

While this report brings immediate improvement to our knowledge about the health of mothers and newborns in Europe, it also reveals serious gaps in reporting capacity in many countries. Maternal deaths are underreported in many countries, and very few reliable data are available on severe maternal morbidity. Our ability to monitor extremely preterm and low birthweight births continues to be undermined by differences in birth and death registration criteria. Finally, key perinatal indicators, such as maternal smoking or use of subfertility procedures, are available in only about half of countries and do not always confirm to EURO-PERISTAT definitions.

3. Translating better health data into better health outcomes

Comparable health data have the power to motivate improvements in health care, but they must first reach and be understood by people who have the power to make change. These interested parties, who are often referred to as “stakeholders,” can include policymakers, health professionals, the media and the general public [11].

EURO-PERISTAT was conscious from the beginning of the need to identify and reach these stakeholders in perinatal health. This task proved to be complicated by the number of participating countries and variations within these countries in the way that policy decisions are made. We conducted a literature review and a series of semi-structured interviews to better understand the terrain of decision-making, and then a questionnaire among our network of experts to identify actual contacts within countries.

When the time came to disseminate the EPHR, our partners had selected 490 stakeholders to receive a paper copy of the report, accompanied by a letter of introduction that was specifically adapted (and often translated) for each country. Hundreds of additional stakeholders received email notification of the report, including a link to our website where a PDF copy was available. We also assisted our project partners in organising media outreach within their countries. Press releases and data summaries were created and disseminated in ten countries, and press conferences were organized in England, Italy and the Netherlands.

Within the first four months following the report's release in December 2008, more than 110 items had been published about the EPHR in newspapers, magazines, radio, television and websites around Europe. The most extensive press coverage occurred in France, the Netherlands and Italy. Press attention differed by country: in the Netherlands, there was widespread concern about the high rates of perinatal mortality; in Portugal, the press called attention to the high rates of cesarean section, while in Slovenia, the low rates of intervention made headlines. The high proportion of mothers over 35 years of age made headlines in Italy, with less attention paid to caesarean section despite that country's position as the most interventionist in Europe. One effect of this publicity was increased traffic to our website at <http://www.euoperistat.com>, which in the first four months received more than 4750 unique visitors, more than 1725 of whom downloaded an electronic copy of the report.

Measuring the number of articles published and reports disseminated is one way to assess the impact of this landmark report. While they are indicative of the significant interest in perinatal health issues, these measures likely underestimate the real and long-term impact of the report [12]. They also fail to assess whether (and how) stakeholders are actually using the report to change policy and practices in perinatal health care. To investigate the latter, EURO-PERISTAT will ask its stakeholders to evaluate the usefulness of this first European Perinatal Health Report. The

EURO-PERISTAT network will also continue to call attention to the questions raised by this report, through editorials and articles that communicate our findings to the scientific community [13,14], and by carrying out further analyses of the data to understand the causes and consequences of the wide variations in perinatal health outcomes and practices.

Condensation

The first-ever European Perinatal Health Report, released by the EURO-PERISTAT project, compares indicators of perinatal health and care derived from routine statistical data in 25 EU Member States and Norway.

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Appendix A. Report Writing Committee

Sophie Alexander, Henrique Barros, Béatrice Blondel, Marie-Hélène Bouvier-Colle, Simone Buitendijk, Christine Cans, Sophia Correia, Mika Gissler, Alison Macfarlane, Ashna Mohangoo, Živa Novak-Antolic, Jennifer Zeitlin, Wei Hong Zhang, Meagan Zimbeck. A full list of EURO-PERISTAT scientific committee members and data providers are listed in Appendix A of the European Perinatal Health Report.

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¹See Appendix.