With current advances in medical technology and treatment and under general pressure to deliver a “perfect” baby under all circumstances we, as health care providers, are ready to intervene during labour and delivery very promptly, sometimes putting the threshold for decision below the “necessary” level. This development has led to the overuse of obstetrical interventions in some cases and, concurrently, to an effort to avoid interventions that are not medically necessary. Certainly, evidence based approaches should be used for balancing how much is needed and how much is too much - but it is frequently difficult to have an evidence based medicine solution for every obstetrical situation. However, do we really know what and how much we are doing? We are in need of relevant population-based data in this respect to be able to describe the current situation and possibly to target the weaker components of clinical practice.

Monitoring of perinatal health is a very important part of any health care system and a necessary tool to measure quality of care. To be able to evaluate and monitor perinatal health we are in need of proper measurable indicators to quantify changes in time, differences among different settings and to make international comparisons. The European Union (EU) is interested in the development of European health information systems and that intention has led to the EUROPERISTAT Project for developing high quality indicators, establishing networks and producing reports on perinatal health in Europe.

One important part of the EUROPERISTAT interest is the question of the best use of healthcare interventions with respect to quality of care. Based on the consensus of participating parties, 10 core and 20 recommended indicators of perinatal health were selected. Several of the chosen indicators related to healthcare services are relevant to obstetrical interventions such as:

- Core indicator 10 – Mode of delivery,
- Recommended indicator 15 – Distribution of births by mode of onset of labour,
- Recommended indicator 18 – Episotomy rate, and
- Recommended indicator 19 – Births without obstetric intervention.

Births without obstetric interventions are defined as births with spontaneous onset of labour, spontaneous progress of labour without medication and with spontaneous birth of the baby. Therefore women with induction of labour, use of drugs during labour, including anaesthetic, operative vaginal or abdominal birth and episiotomy should be excluded.

The Czech Republic has a long standing history of collecting individual perinatal data on all births in the country since 1994. The former individual data collection instrument was developed based on experience and along the lines of the WHO Project Obstetrical Quality Indicators Development (OBSQID) and since then it has been subjected to minor changes. Using the database mentioned above, we are able to produce some of the indicators related to medical interventions during labour, as selected by EUROPERISTAT, using routinely collected data in the Czech Republic during the period 2000-2012. These results are shared below.

**RESULTS**

Mode of delivery: Caesarean section delivery and operative vaginal delivery

During 2000-2012 we observed steadily increasing trends of caesarean delivery, increasing from 13.1% in 2000 to 25% in 2012 (Figure 1). The figures from recent years are close to the EU median of this mode of delivery (25.2% in 2010) (1). Comparatively, the Czech Republic has traditionally had a low incidence of vaginal operative deliveries (forceps and vacuum). They represent just about 2% of all births. However, there is notable change in favour of vacuum extraction during recent years (Figure 2).
vaginal extractions are ranging from 1.3% to 16.4% according to the EUROPERISTAT data from 2010 (1).

**Induction of labour**
Routine data shows a mild increase in induction of labour in the Czech Republic from 7.6% in 2000 to 10.1% in 2012 (Figure 3). The data reported by the EUROPERISTAT were ranging from approximately 7% to 27% in the EU in 2010 (1).

**Episiotomy**
Episiotomy was almost routinely used in the Czech Republic in the past. The data show that frequency of deliveries with episiotomy decreased substantially from 63.2% in 2000 to 33.9% in 2012 (Figure 4). This trend is promising because routine use of episiotomy is not recommended. The European Perinatal Health Report 2010 reports wide variation of episiotomy use among participating countries in Europe (1).

**Conclusion**
Although the Czech Republic has a nationwide system of collecting individual perinatal data, we are still unable to evaluate medical interventions in reasonable detail. As can be seen from the results shown above, in order to promote clinical practice where obstetrical interventions are used only in cases that require them, we need to link our data to not only the outcome in terms of maternal and newborn health, but also the indications.

While participating on the EUROPERISTAT Project, the Czech Republic decided to incorporate changes to the national individual perinatal data collection to meet the requirements and recommendation of the Project. This should enable us to produce all core and recommended indicators of EUROPERISTAT. For that purpose we used an opportunity that arose when the Czech Republic decided to put all the national reproductive health databases on a common electronic platform in 2014 to make the changes to the databases to comply with suggested European standards. The Czech Republic is currently piloting the updated system, which should be in practice in 2016. We believe that the analysis of the updated databases will help us to tackle the issue of obstetrical intervention during labour and delivery to promote natural birth when possible and to intervene in a timely manner only when necessary. It will also allow us to utilize common selected indicators to monitor and evaluate our progress not only within our country, but also across other European countries, to ensure that the quality of the obstetrical and perinatal care we provide is of the highest standard.

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