

## **Methods of assisted reproductive technology and their use in selected European countries**

### **Abstract**

The objective of the presented study is to introduce methods of assisted reproductive technology (ART) and to evaluate the trends of their use in selected European countries between 2006 and 2012. The first part of the study is devoted to the theoretical introduction to the methods of assisted reproductive technology, factors influencing the effectiveness of the cycles ART and to give a comprehensive overview of law governing the conditions and availability of assisted reproductive technology. The second, analytical part of the study deals with the number of applied ART cycles, the number of embryos transferred and the proportion of live births after ART. Furthermore, the change of the age structure of women undergoing ART and the development of multiple births after ART. These selected indicators are first evaluated across the European region, using data from the reporting states of the European Society of Human Reproduction and Embryology (ESHRE). Finally, the results are compared to each of the five selected countries, specifically the Czech Republic, Denmark, Italy, Slovenia and the United Kingdom. A comparison of the results points to the increasing use of ART, whose success is however limited by the growing age of women.

**Keywords:** assisted reproductive technology, European countries, Czech Republic, Denmark, Italy, Slovenia, United Kingdom