

International Committee for Monitoring Assisted Reproductive Technology: world report on assisted reproductive technology, 2011

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Objective: To report the utilization, effectiveness, and safety of practices in assisted reproductive technology (ART) globally in 2011 and assess global trends over time.

Design: Retrospective, cross-sectional survey on the utilization, effectiveness, and safety of ART procedures performed globally during 2011.

Setting: Sixty-five countries and 2,560 ART clinics.

Patient(s): Women and men undergoing ART procedures.

Intervention(s): All ART.

Main Outcome Measure(s): The ART cycles and outcomes on country-by-country, regional, and global levels. Aggregate country data were processed and analyzed based on methods developed by the International Committee for Monitoring Assisted Reproductive Technology (ICMART).

Result(s): A total of 1,115,272 ART cycles were reported for the treatment year 2011. Imputing data for nonreporting clinics, 1,643,912 cycles resulted in >394,662 babies, excluding People's Republic of China. The best estimate of global utilization including People's Republic of China is approximately 2.0 million cycles and 0.5 million babies. From 2010 to 2011, the number of reported aspiration and frozen ET cycles increased 13.1% and 13.8%, respectively. The proportion of women aged ≥ 40 years undergoing nondonor ART increased from 23.2% in 2010 to 24.0% in 2011. As a percentage of nondonor aspiration cycles, intracytoplasmic sperm injection (ICSI) decreased slightly from 67.4% in 2010 to 66.5% in 2011. The IVF/ICSI combined delivery rates per fresh aspiration and frozen ET cycles were 19.8% and 21.4%, respectively. In fresh nondonor cycles, single ET increased from 30.0% in 2010 to 31.4% in 2011, whereas the average number of transferred embryos decreased from 1.95 in 2010 to 1.91 in 2011—again with wide country variation. The rates of twin deliveries after fresh nondonor transfers decreased from 20.4% in 2010 to 19.6% in 2011; the triplet rate decreased from 1.1%–0.9%. In frozen ET cycles performed in 2011, single ET was 51.6%, with an average of 1.59 embryos transferred and twin and triplet rates were 11.1% and 0.4%, respectively. The cumulative delivery rate per aspiration increased from 27.1% in 2010 to 28.0% in 2011. Fresh IVF/ICSI carried a perinatal mortality rate per 1,000 births of 21.0 in 2010 and 16.3 in 2011. This compared with a perinatal