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# **Conflit of interest**

Nothing to declare.



- ART activity report, 2014
- Survey on ART: legislation, regulation, reimbursement and registers
  - Preliminary results-



#### European IVF Monitoring (EIM) a consortium of the representatives from national registers



European countries that never participated in EIM project:

> Andorra Armenia Azerbaijan Georgia Kosovo Luxembourg Liechtenstein Monaco San Marino Vatican City



#### **EIM results 1997-2014**

| year  | countries | clinics | cycles    | cycle-increase (%) | ART infants | - |
|-------|-----------|---------|-----------|--------------------|-------------|---|
| 1997  | 18        | 482     | 203 225   |                    | 35 314 *    |   |
| 1998  | 18        | 521     | 232 225   | + 14.3             | 21 433 *    |   |
| 1999  | 21        | 537     | 249 624   | + 7.5              | 26 212 *    |   |
| 2000  | 22        | 569     | 275 187   | + 10.2             | 17 887 *    |   |
| 2001  | 23        | 579     | 289 690   | + 5.3              | 24 963 *    |   |
| 2002  | 25        | 631     | 324 238   | + 11.9             | 24 283      |   |
| 2003  | 28        | 725     | 365 103   | + 12.6             | 68 931      |   |
| 2004  | 29        | 785     | 367 056   | + 0.5              | 67 973      |   |
| 2005  | 30        | 923     | 419 037   | + 14.2             | 72 184      |   |
| 2006  | 32        | 998     | 458 759   | + 9.5              | 87 705      |   |
| 2007  | 33        | 1029    | 493 420   | + 7.6              | 96 690      |   |
| 2008  | 36        | 1051    | 532 260   | + 7.9              | 107 383     |   |
| 2009  | 34        | 1005    | 537 463   | + 1.0              | 109 239     |   |
| 2010  | 31        | 991     | 550 296   | + 2.4              | 120 676     |   |
| 2011  | 33        | 1034    | 609 973   | + 11.0             | 134 054     |   |
| 2012  | 34        | 1093    | 640 144   | + 4.9              | 143 844     |   |
| 2013  | 38        | 1169    | 686 261   | + 7.2              | 149 466     |   |
| 2014  | 36        | 1184    | 707 171   | + 3.0              | 146 232     |   |
| total |           |         | 7 941 142 |                    | 1 454 521   |   |

- ART activity report, 2014
  - Availability
  - Technical aspects (IVF vs ICSI; No. of embryos transferred)
  - "Success rates"



# **Availability**

#### Number of cycles per 1 mill inhabitants

(countries with 100% participation)



Human Reproduction Update, Vol.8, No.3 pp. 265-277, 2002

#### An international survey of the health economics of IVF and ICSI

#### John A.Collins

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The global need for ART is estimated to be at least 1,500 cycles/ million population per year.











#### Percentage 3+ embryo transfers. IVF and ICSI, 2014

| LOW < 5%       | %   |
|----------------|-----|
| Denmark        | 3.8 |
| Portugal       | 2.9 |
| Croatia        | 2.7 |
| Latvia         | 2.1 |
| Czech Republic | 1.8 |
| Slovenia       | 1.2 |
| Poland         | 1.1 |
| Austria        | 0.5 |
| Finland        | 0.0 |
| Iceland        | 0.0 |
| Malta          | 0.0 |
| Sweden         | 0.0 |

| HIGH > 40% | %    |
|------------|------|
| Lithuania  | 43.0 |
| Greece     | 42.1 |
| Serbia     | 41.8 |





#### Pregnancy rates per aspiration <u>IVF</u> - 2014

| Macedonia  | 53.1 | Russia      | 32.2 | Spain       | 28.8 |
|------------|------|-------------|------|-------------|------|
| Moldova    | 40.7 | Portugal    | 32.0 | Estonia     | 26.9 |
| Ukraine    | 40.4 | Greece      | 31.5 | Belgium     | 26.6 |
| Romania    | 39.0 | Poland      | 30.9 | Latvia      | 25.8 |
| Belarus    | 37.2 | Serbia      | 30.2 | Switzerland | 25.5 |
| Slovenia   | 36.2 | Iceland     | 30.2 | Bulgaria    | 24.4 |
| Cyprus     | 36.0 | Netherlands | 30.0 | France      | 23.8 |
| Kazakhstan | 36.0 | Sweden      | 29.8 | Italy       | 23.2 |
| Lithuania  | 35.5 | Finland     | 29.2 | Denmark     | 22.5 |
| Norway     | 33.6 | Germany     | 28.8 | Croatia     | 18.7 |
| Austria    | 32.8 | Hungary     | 28.8 |             |      |
|            |      |             |      |             |      |



#### Pregnancy rates per aspiration <u>ICSI</u> - 2014

| Moldova     | 43.5 | Poland         | 30.5 | Belgium     | 25.6 |
|-------------|------|----------------|------|-------------|------|
| Macedonia   | 41.2 | Greece         | 30.0 | Montenegro  | 25.6 |
| Kazakhstan  | 41.0 | Norway         | 29.4 | Slovenia    | 25.1 |
| Belarus     | 40.4 | Malta          | 28.8 | France      | 25.0 |
| Albania     | 39.6 | Germany        | 28.1 | Hungary     | 25.0 |
| Serbia      | 37.5 | Portugal       | 27.7 | Estonia     | 24.9 |
| Cyprus      | 37.2 | Czech Republic | 27.5 | Finland     | 23.9 |
| Romania     | 36.3 | Russia         | 27.5 | Switzerland | 22.7 |
| Ukraine     | 35.6 | lceland        | 27.1 | Croatia     | 22.4 |
| Netherlands | 31.7 | Sweden         | 27.1 | Italy       | 21.0 |
| Lithuania   | 31.6 | Spain          | 26.9 | Bulgaria    | 20.8 |
| Austria     | 31.5 | Denmark        | 26.5 | Latvia      | 19.8 |
|             |      |                |      |             |      |



• Survey on ART:

legislation, regulation, reimbursement and registers

- Preliminary results-



#### **Survey on ART - Main topics**

- Availability (ART legislation)
- Accessibility criteria
- Accessibility funding/reimbursement
- Non-partner donation
- Registers



8 1 C 0 C2 EIM European survey (preliminary data)

#### 40 countries participated

**Countries** with specific ART legislation





Countries where single women can have access to ART



**Countries** where female couples can have access to ART



Countries where male couples can have access to ART



EIM European survey (preliminary data)

|                         | Infertile<br>heterosex<br>ual<br>couples | Non-<br>infertile<br>heterosexu<br>al couples | Single<br>women | Female<br>couples | Male<br>couples |
|-------------------------|--|---|-----------------|-------------------|-----------------|
| Own gametes             | 39                                       | 22  | 25              | 17                | 5               |
| Sperm<br>donation       | 36                                       | 18  | 24              | 17                | 4               |
| Egg donation            | 32                                       | 15  | 21              | 13                | 4               |
| Sperm + egg<br>donation | 27                                       | 14  | 20              | 13                | 4               |
| Embryo<br>donation      | 26                                       | 11  | 14              | 8                 | 3               |



|                         | Infertile<br>heterosse<br>xual<br>couples | Non-<br>infertile<br>heterossex<br>ual couples | Single<br>women | Female<br>couples | Male<br>couples          |
|-------------------------|---|--|-----------------|-------------------|--------------------------|
| Own gametes             | 39  | 22   | 25              | 17                | 5                        |
| Sperm donation          | 36  | 18   | 24              | 17                | 4                        |
| Egg donation            | 32  | 15   | 19              | 13                | 4                        |
| Sperm + egg<br>donation | 27  | 14   | 20              | 13                | 4                        |
| Embryo<br>donation      | 26  | 11   | 15              | 9                 | 3                        |
| PGD                     | 33  | 19   | 19              | 13                | 4                        |
| PGS                     | 27  | 18   | 16              | 11                | 4                        |
| Surrogacy               | 13  | 5  | 6               | 4                 | SCIENCE MOVING<br>PEOPLE |

**Countries** where surrogacy is permitted



#### **Specific situations**

|  | Permitted | Performed under<br>specific<br>legislation |
|--|-----------|--|
| Gametes cryopreservation (medical reason)        | 39        | 28   |
| Embryo cryopreservation (medical reason)         | 37        | 29   |
| Gonadal tissue cryopreservation (medical reason) | 37        | 26   |
| Nonmedical oocyte cryopreservation               | 30        | 19   |
| Gender reassignment                              | 20        | Not asked                                  |
| Previous gamete cryop/ use in ART                | 17/14     | Not asked                                  |

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# **ACCESSIBILITY – legal limiting criteria**

| Criteria    | Female<br>(n)   | Male<br>(n)   |
|-------------|-----------------|---------------|
| Minimum age | 20<br>(18-25y)* | 17<br>(18y)   |
| Maximum age | 21<br>(42-51y)* | 5<br>(55-60y) |

\* France – "âge de procréer"



# **ACCESSIBILITY - public funding/reimbursement**

| Limiting criteria          | Female<br>(n)  | Male<br>(n)    |
|----------------------------|----------------|----------------|
| Minimum age (28 countries) | 16<br>(18-25y) | 12<br>(18-25y) |
| Maximum age                | 23<br>(40-50y) | 5<br>(49-60y)  |
| BMI                        | 4<br>(30-35)   |                |
| Previous children          | 7              | 7              |

No public funding at all -3 countries



### **ACCESSIBILITY - public funding/reimbursement**

Public funding combined with a clinical policy? – 8 countries (mainly eSET) Public funding combined with success rate? – 5 countries

| Public funding                | Medication<br>costs<br>(n) | Doctors/me<br>dical costs<br>(n) | Lab costs<br>(n) |
|-------------------------------|----------------------------|----------------------------------|------------------|
| Only in public centres        | 6                          | 11                               | 10               |
| In public and private centres | 26                         | 22                               | 22               |
| Not at all                    | 7                          | 5                                | 6                |

| Do patients need to pay a %? | Medication<br>costs<br>(n) | Doctors/me<br>dical costs<br>(n) | Lab costs<br>(n) |
|------------------------------|----------------------------|----------------------------------|------------------|
| Yes                          | 27                         | 21                               | 19               |



# **ACCESSIBILITY - public funding/reimbursement**

#### Is there a limited no. of funded cycles?

Yes, in 29 countries: 1 (2 countries) up to 5 for first child + 4 for the second one (1 country) 3 cycles (13 countries) – most frequent

#### Are all ART techniques publicly funded?

Yes, in 17 countries

# Are ART techniques publicly funded in a consistent manner across the country?

No, in 16 countries

#### Is it possible to claim tax deductions for ART expenses?

Yes, in 11 countries



# **NON-PARTNER DONATION**

- Not permitted: 3
- Anonymity: 21
- Non-anonymity: 5
- Mixed: 10

Child ≠ recipient(s)

Many different situations:

- Hungary – sperm donation must be anonymous

- egg donation must be a relative of the recipients



# **NON-PARTNER DONATION**

#### **Donor eligibility**

| Criteria                                      | Sperm<br>(n)                          | Eggs<br>(n)                           |
|---|---------------------------------------|---------------------------------------|
| Minimum age                                   | 21<br>(18y)                           | 26<br>(18-20y)                        |
| Maximum age                                   | 18<br>(35-55y)                        | 25<br>(34-38y)                        |
| Marital/parental status                       | 0/1                                   | 1/1                                   |
| Maximum number of donations                   | 0                                     | 5<br>(1 - 8)                          |
| Maximum number of infants from the same donor | 26<br>(1 – 25<br>or<br>1-13 families) | 17<br>(1 – 10<br>or<br>1–10 families) |
|   |                                       | 5                                     |

# REGISTERS

|                               | CA                      | НМ | Other<br>governmental<br>body | Professional association | Individual |  |  |
|-------------------------------|-------------------------|----|-------------------------------|--------------------------|------------|--|--|
| ART national registers (n=27) | 11                      | 9  | 1                             | 6                        | 0          |  |  |
| Mandatory                     | 21 countries            |    |                               |                          |            |  |  |
| 100% coverage                 | 12 countries (EIM 2013) |    |                               |                          |            |  |  |
|                               |                         |    |                               |                          |            |  |  |
| Donors register<br>(n=13)     | 7                       | 5  | 1                             |                          |            |  |  |
| Mandatory                     | 12 countries            |    |                               |                          |            |  |  |
|                               |                         |    |                               |                          | Cochro     |  |  |



# **Conclusions (final remarks/comments)**

- Diversity is the European paradigm
- "Classical population" needs are still not answered
- Funding/reimbursement is extremely variable
- Non-partner donation is very culturally dependent
- Better and more robust registers are needed

