

Factsheet on infertility – prevalence, treatment and fertility decline in Europe

April 2024

What is infertility

- Infertility is a "disease characterised by the failure to establish a clinical pregnancy after 12 months of regular, unprotected sexual intercourse or due to an impairment of a person's capacity to reproduce, either as an individual or with their partner".
- Infertility generates disability and therefore access to health care for people with infertility must be provided as per the provisions of the Convention on the Rights of Persons with Disability.

1 in 6 people worldwide is affected by infertility



Is fertility in the EU in decline?

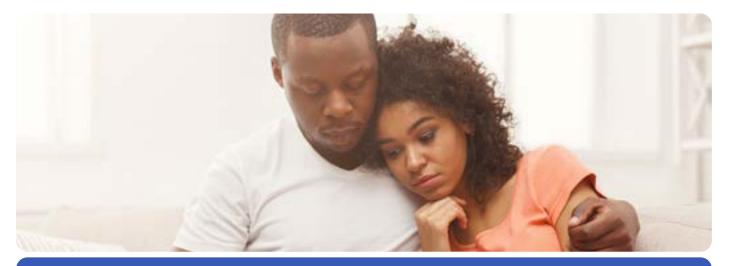
- In 2008, the European Parliament pointed out that infertility was on the increase, the occurring prevalence being of approximately 15% of the population at that time.
- From a demographic perspective, the European Union (EU) is in a phase of population decline. According to Eurostat reports, the total fertility rate has been decreasing in the recent decades. The total fertility rate in 2021 was 1.53 births per woman, which is significantly below the rate required to keep a stable population size (2.1 births per woman).

What are the causes for infertility?

- Female infertility can be linked to increasing age at conception, disorders of the genital organs and/or functions (with or without genetic background), endocrine disorders causing imbalances of reproductive hormones or a combination of these factors.
- Infertility in males may be due to abnormal sperm function and quality (with or without genetic background), hormonal disorders, or due to injuries, infections or congenital abnormalities of the genital tract.
- Lifestyle factors such as smoking or recreational drug consumption, excessive alcohol intake and obesity can affect fertility. Exposure to environmental pollutants and toxins can be directly toxic to gametes (eggs and sperm), leading to infertility.

What is the impact of infertility on a person's life?

- Unlike other diseases, infertility prevents a person from fulfilling one of many people's most important life goals, which is becoming a parent.
- The prolonged uncertainty of involuntary childlessness can affect every aspect of a person's life, from their sense of self-identity to their relationships with their partner, family members and friends. This can be reflected in higher rates of anxiety or depression, as well as troubles with social paticipation.



Is there treatment for infertility?

- Infertility treatments range in complexity from Intrauterine Insemination (IUI) and Assisted Reproductive Technologies (ART), such as In Vitro Fertilisation (IVF) to more complex interventions such as Preimplantation Genetic Testing (PGT), gamete and embryo donation and surrogacy.
- ART started more than 40 years ago, and it is estimated that more than 10 million children have been born from ART techniques so far.
- In Europe, ca. 3% of all births originated from ART in 2019. These numbers point to the importance of ART in contributing to the reduction of the rapid demographic decline on the continent.
- According to the European Atlas of Fertility Treatment Policies, there are large disparities between fertility treatment policies in Europe. Notably, Central and Eastern European countries score lower on regulation and funding of treatment, as well as fertility education. This highlights the need to tackle inequalities in access to ART.

Call to action

- EU health policies should stimulate raising awareness among women regarding fertility decline with age and as such, women should be encouraged not to postpone pregnancy.
- EU social policies should include measures that facilitate a balanced reconciliation between work life and family life.
- EU health policies as well as national policies should ensure the right of couples to universal access to infertility treatment, regardless of their country of origin.
- EU policy makers should support the development and roll-out of programmes to educate people about the effect of lifestyle factors on their fertility and chances to build a family.

Key references

The International Glossary on Infertility and Fertility Care; F. Zegers-Hochschild et al., Human Reproduction 2017

WHO Factsheet on Infertility, April 2023

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Survey on ART and IUI: legislation, regulation, funding and registries in European countries; C. Calhaz-Jorge et al., Human Reproduction Open, 2020

European Atlas of Fertility Treatment Policies

How many children were born in the EU in 2021?, 2023; Eurostat

National, Regional, and Global Trends in Infertility Prevalence Since 1990: A Systemic Analysis of 277 Health Surveys, Mascarenhas eet al., PLOS Medicine