

ART must be accessible and sustainable



Governments need to invest in making assisted reproductive technology more accessible and equitable to counter staggering birth rate declines globally.

On 15 October 2023, [The American Society for Reproductive Medicine \(ASRM\)](#) issued a statement that implies that people, regardless of marital status, sexual orientation or gender identity, warrant equal access to reproductive medicine. This inclusive definition and change in reform are much-needed steps for the achievement of equitable access to assisted reproductive technology (ART), especially as many insurance plans rely on the ASRM guidelines for infertility. The updated guidance might also facilitate broadening of the inclusion criteria for clinical trials experimenting with various ART approaches. Furthermore, the new guidelines are a welcome change in a time in which demand is higher than the actual number of procedures performed. This imbalance between demand and supply can be ascribed to multiple factors that span age, gender and lack of financial assistance.

Declines in fertility, recurrent pregnancy losses and undiagnosed medical issues have led to increased consideration of ART for people seeking to conceive. Since the birth of the first baby using in vitro fertilization (IVF) techniques in July 1978, this technique has received wide implementation. According to data from the [US Centers for Disease Control and Prevention](#), the use of ART almost doubled over the past decade, accounting for almost 2.3% of all infants born in the USA. However, a major impediment in the adoption of ART relates to the invariably high cost of the technique worldwide, most often not covered by standard insurance or social care. In instances in which ART does fall within the remit of a universal healthcare framework, it might entail terms and conditions of its own. For example, the provision of IVF treatment

provided by [UK National Health Service \(NHS\) trusts varies across England and Wales](#) and is dependent on several factors, including age and area of residence. Also, the number of [NHS-funded IVF cycles dropped by 17% and 36% in England and Wales](#), respectively, between 2019 and 2021, partly owing to long waiting times. Accessibility is also limited by other individual factors, with many countries, for instance, providing limited options to single people, transgender people and same-sex couples. This feature, however, is poised for change in several countries, including the USA, with the latter implementing radical changes to the definition of infertility, as mentioned above.

Owing to the emotional and physical discomfort associated with ART procedures, the need for societal and employer support is key. [A bill introduced in the UK parliament](#) in November 2022 requires employers to allow employees to take time off from work to attend fertility treatment appointments and for related purposes. If this bill takes the form of law, it will alleviate the misery of many who might otherwise suffer in silence. Beyond changes in public health policy, many ongoing clinical trials are testing means to make ART more cost-effective and less arduous for its participants. A nationwide non-inferiority trial conducted in the Netherlands reported home-based monitoring of ovulation as non-inferior to hospital-controlled monitoring of ovulation for the timing of frozen embryo transfer¹. These findings not only affect the cost of the technique but can also contribute to overall environmental sustainability and relieve the burden on hospital staff. Other clinical trials have been investigating the necessity for costly procedures associated with ART. Kieslinger et al. evaluated the effects of uninterrupted embryo cultures and time-lapse monitoring often offered to prospective parents as expensive add-ons to IVF. They found no real clinical benefit of these costly procedures in terms of birth rates or pregnancy outcomes, thus offering a way to curtail some of the costs incurred as part of the technique².

Although it is commonly considered a medical intervention that benefits only people trying to conceive, investment in ART technologies by governments also has potential for vast societal benefit. Reversing the [sharp decline in birth rates](#) for countries around the world can be counted a major one. Some countries have proven to be trailblazers of sorts in this context. [Greece](#) has been successful in subsidizing the costs of IVF to such an extent that it has become a medical tourism hub for those who find the treatment options very cost-effective compared with what is on offer in their respective home countries. In July 2023, [the local municipal government in Beijing](#) pledged financial support for 16 types of ART under the city's health care system in an attempt to reverse a decline in births after reporting its first population drop in six decades. However, a point to note is that the financial incentives offered by some countries are applicable only to heterosexual or married couples and thus pose continued challenges in achieving equity.

No technique or advance is without flaws. ART is associated, for instance, with higher chances of multiple births, which in turn can result in higher rates of prematurity than the rates for singleton births³. These risks, along with others, need to be clearly communicated to people who seek to opt for such approaches. In parallel, it is pertinent that all regional and national IVF registries remain vigilant and transparent in their reporting of all pregnancy outcomes. This will aid the design of meaningful clinical trials whose results can further improve the effectiveness of procedures and possibly lower the overall costs. A continued dialog among policymakers, medical community and the public that clearly spells out the advances and pitfalls of ART is much needed to ensure equitable access.

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References

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