

Digital adoption — Dire need of Indian fertility market

01 December 2021 | Views

It is anticipated that over the next decade, technological advancements might open up avenues for the IVF services market



Despite fertility being a relatively new branch of medical science, the segment has evolved significantly over the years at the global level. The Indian market is also growing exponentially and it is anticipated that India will emerge to be a key IVF market in the times to come. However, the sector faces various challenges ranging from bearing the brunt of the social taboos, opposition to acceptance, lack of societal and technological support, etc.

Technological challenges: Obstructing the growth of the Indian fertility market

It is anticipated that over the next decade, technological advancements might open up avenues for the IVF services market. However, what is indeed undeniable is the fact that the segment faces various technological challenges primarily in the genetic testing and embryo selection processes. These issues are enormous and eventually hinder the segment's growth in the country.

Genetic testing

The process of genetic testing helps to identify changes in the genes and chromosomes of an embryo. This process is conducted to identify genetic defects in the embryos both in the pre-implantation and post-implantation stages. It helps detect the defects and provides information about any inherited conditions in the baby as well.

As of now, the test that is done does not deliver accurate results. This implies that not every embryo is genetically healthy. It might have defects and the baby may exhibit some symptoms of the disorders that run in the family.

This happens majorly due to the lack of the required technological assistance. The genetic testing process is unable to provide information if the embryo will show the symptoms of a disorder, how severe the symptoms will be, whether the disorder will progress with time, etc. Another challenge is the lack of treatment strategies for the genetic disorders once diagnosed. Backing up this segment with technology would eventually pave the way for responsible decision-making for both

the parents as well as the IVF centres.

Embryo selection

This process encompasses identifying the right embryo that possesses the implantation potential. This stage is usually carried out manually by embryologists that might reduce the chances of the embryo developing into a foetus due to human errors.

The fact is that in the present times, technologies are not advanced enough to be implemented to successfully identify the embryo that carries higher chances of implantation. However, the power of Artificial Intelligence tech solutions can be used for effective embryo screening. Integrating this process with AI would help analyse the images of the right embryos that would be appropriate for implantation.

Summing up!

With rapid digital disruption, medical professionals, embryologists, IVF specialists and doctors can produce simple and effective results in the fertility segment. The ability and agility of IVF centres to adopt these technologies will indeed give them a competitive edge in the market.

However, in the lack of digital support, the presence of errors is highly likely which further impacts the success rate of the IVF process. The technological challenges do exist in the segment and restrict its growth. What needs to be understood and accepted is the fact that digital adoption is no more option but has become the dire need of the hour to not only upscale the Indian fertility market but also increase the IVF success rates as well!

Dr Aastha Gupta, Consultant - Reproductive Medicine, Milann Fertility Centre, Delhi