

Experimental contraceptive drug for male

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In news- Researchers from Weill Cornell Medicine, US, have created an experimental contraceptive drug candidate for male.

Key findings-

- **It temporarily stops sperm in their tracks and prevents pregnancies** in preclinical models.
- This means that a new kind of contraceptive for men, currently available through physical barriers (condoms) and surgical options (vasectomy), could be developed, similar to how a pill exists for women.
- Basically, this study was an attempt to show a proof-of-concept, and whether the idea of such a pill could practically work.
- The aim here was to **work on slowing the mobility or movement of sperms or the male gamete**, which fertilises the female gamete or egg during human reproduction.
- As per the study, soluble adenylyl cyclase (sAC) inhibition was seen as a possible safe contraceptive option as another team's report stated men who lacked the gene encoding sAC were infertile but otherwise healthy.

Why has the male contraceptive pill been difficult to develop?

- **Contraception, in general, has been focused on women. In 1960, the oral contraceptive pill was approved for release.**
- Although the pill has also not been completely uncontroversial, often resulting in side-effects such as the risk of blood clots developing and even a risk of cancer according to some studies, there was also a great benefit.

- It allowed women to have more agency in child-bearing.
- How the pill worked was through regulation of the hormones progesterin and estrogen, preventing fertilization of the egg by the sperm.
- Biology may be at play for why the same has not happened for men. Women produce one egg per month while men produce sperm in much larger numbers. Hence, developing a method is more challenging.
- At times, studies have been abandoned after finding even slightly mild side effects, such as acne or mood swings in a 2016 study, even as women have dealt with these over the years.
- But that also has to do with changing norms on what is now acceptable in such trials, as compared to when women's contraception was being developed in Western countries in the middle of the 20th century.