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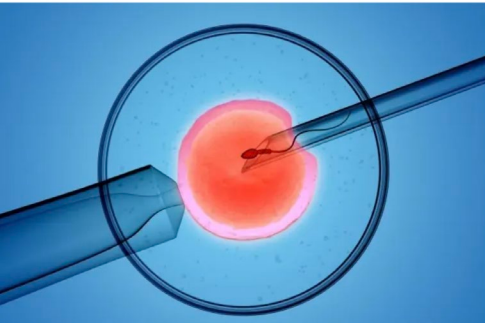
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Impact of COVID-19 pandemic on the pregnancy outcomes of women undergoing assisted reproductive techniques (ARTs): a systematic review and meta-analysis

Key words: Systematic review; COVID-19; Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2); Assisted reproductive techniques (ART); Pregnancy outcomes; Meta-analysis.

Research Summary

The objective of this review is to determine whether the COVID-19 pandemic had any adverse effects on the female fertility and pregnancy outcomes of women undergoing ART, and summarized the key results in the following aspects:



- **Clinical outcomes**
 - Clinical pregnancy rate
 - Miscarriage rate
- **Laboratory outcomes**
 - Embryo cryopreservation rate
 - Oocyte cryopreservation rate
 - AMH levels
 - Antral follicle count



Strengths

- **Summary** of the most updated research progress about the effect of COVID-19 pandemic on female fertility and pregnancy outcomes undergoing assisted reproductive techniques (ART).

- **Help** the gynecologists to guide the management of women undergoing ART treatment during the COVID-19 pandemic timeframe.

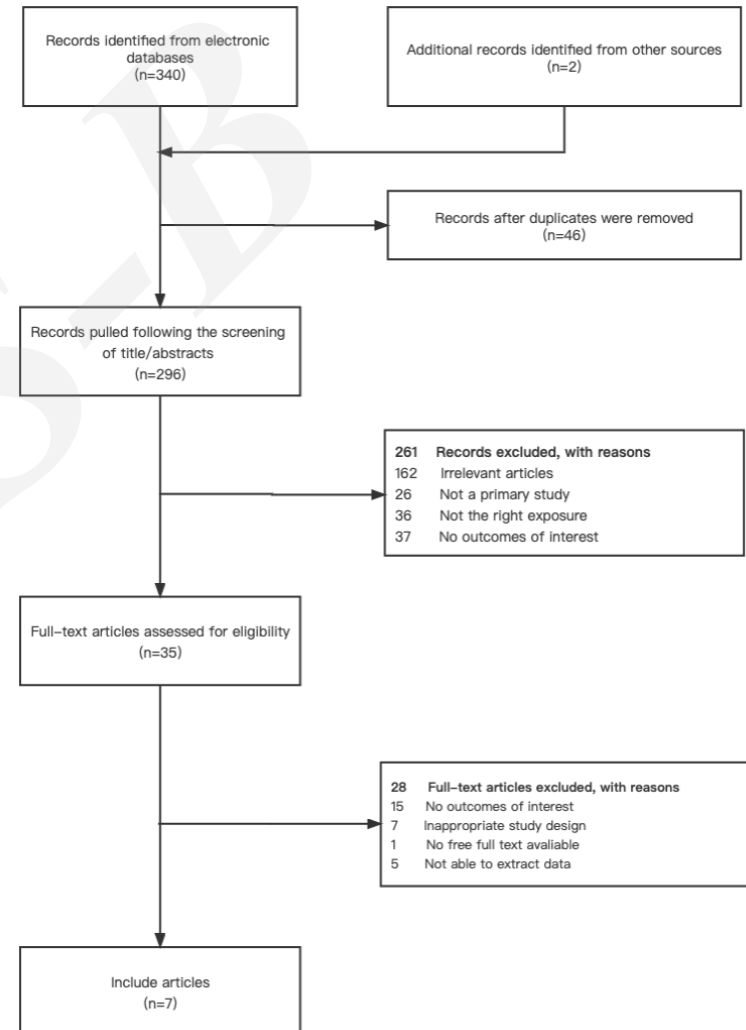


Figure 1

Strengths

A series of comprehensive tables were generated to summarize the quality of included studies and interested results.

Table 1 | Risk of bias of the included studies

Table 2 | Laboratory outcomes in pregnant women undergoing ART before and after COVID-19 pandemic

Table 3 | Female fertility outcomes in women undergoing ART before and after the COVID-19 pandemic