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Poster Presentations

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COVID-19 and male fertility

Momenimovahed Z¹, Salehiniya H².

1. Qom University of Medical Sciences, Qom, Iran.

2. Social Determinants of Health Research Center, Birjand University of Medical Sciences, Birjand, Iran.

Email: momeni.z@gmail.com

Background: The effect of viral infection on male reproductive system is one of the major concern. Recent studies have demonstrated that COVID-19 can damage the male reproductive system by inflammatory cycle caused by a cytokine storm. However, how COVID-19 can affect the male fertility is still controversial.

Objective: This review study was conducted to investigate the effects of COVID-19 on male fertility.

Materials and Methods: To identify the effect of COVID-19 on male fertility, a comprehensive systematic search was carried out in databases such as; PubMed, Web of Science Core Collection, and Scopus

using keywords including fertility, male fertility, male reproduction, covid-19, coronavirus, and spermatogenesis. Full-texted, English language and original articles were included in this study.

Results: In total, 9 articles were entered into the study. Basically, febrile diseases have significant effect on spermatogenesis, sperm concentration, sperm morphology, sperm motility and thus sperm quality. Occurrence of oxidative stress in case of infection with COVID-19, can increase sperm DNA fragmentation and sperm motility is significantly reduced. According to the researches, mild and moderate disease has no effect on spermatogenesis and male fertility.

Conclusion: Although COVID-19 can induce male reproduction system damage, but a significant effect in male fertility awaits more evidence; therefore, it is recommended that men with COVID-19 be evaluated for reproductive function during and after the course of the disease.

Key words: Male reproduction, Spermatogenesis, COVID-19.