



### Short Communication

# Corona virus affects fertility: A concern

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## Abstract

Nowadays, world suffer from the outbreak of CORONAVIRUS pandemic. New Case of corona infection increases daily. No satisfied treatment or vaccine is available. Another a new concern is thriving in community is that CORONAVIRUS will affect their fertility.

CORONAVIRUS is spherical or pleomorphic, single stranded, enveloped RNA and covered with club shaped glycoprotein. CORONAVIRUSES are four sub types such as alpha, beta, gamma and delta CORONAVIRUS. First case of CORONAVIRUS was notified as cold in 1960. According to the Canadian study 2001, approximately 500 patients were identified as Flu-like system. COVID-19 was first identified and isolated from pneumonia patient belongs to Wuhan, china [1]. Now it is announced as pandemic by WHO. More than 10 lacks corona case and fifth thousands of deaths are confirmed worldwide [2]. Infertility is “a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse [3]. Infertility affects an estimated one sixth of couples worldwide amounting 50 millions couple. Male are found more responsible for 20-30% of infertility cases of contributed around 50% of overall cases. CORONAVIRUS added another factors for infertility [4]. The cause of infertility may difficult to determine but may includes many inadequate level of sex hormone in both women and man or problem with ovulation in women. Problem with the production and maturation of sperm are common causes of man fertility. Immature or abnormal sperm (terotospermia), unable to move properly (asthenospermia), low sperm count (oligospermia) and seemingly not at all (azoospermia) may common causes in mens due to different condition and infections. CORONAVIRUS may one of them [5]. According to male fertility expert Prof. Allan Pacey from University of Sheffield U.K., CORONAVIRUS possibly impact on male fertility.

He has emphasized in a discussion that CoVID-19 will definitely affect the male fertility. While an another expert in fertility from MRC centre for reproduction health, University of Edinbargh U.K., report that CORONAVIRUS affect the human fertility but no direct evidence was recorded by scientist till. Many doctors from china advised and urged that CORONAVIRUS patient must test their fertility as soon as possible because doctors feel that CORONAVIRUS may damage the function of testicles. While no study has proved that CORONAVIRUS reduce sexual potency and mans fertility. But many researchers also suggested that CORONAVIRUS infection may affect the production of sperm and formation of male sex hormone [6]. According to the Prof. Li Yufeng from centre for reproduction medicine china, CORONAVIRUS mainly targets lungs and immune system of patient so there is a possibility to impair a men’s ability to reproduce or production of sperm count. He also added that CORONAVIRUS enters in human cells and causes tissue damage by binding spike protein via angiotensin-converting enzyme-2. Angiotensin-converting enzyme-2 is present in lungs and abundant in men’s testes. It can be concentrated in many cells related to male reproduction ability including germ cells, supporting cells and leydig cells. He also added the theory of SARS outbreak in 2002-03 that medics observed the serious immune system damage in testicles of many male patients. Many patients of SARS were found with inflammation in their sexual organ. While CoVID-19 is much similar to SARS so possibility of infertility in man increased [7]. CORONAVIRUS infected patient have various common symptoms like



pneumonia, dry cough, sneezing, and fever. Doctors advised do not take medicine (such as ibuprofen, aspirin) without doctor's consultation. These make difficulty to conceive. Those patient get depression and psychosis, don't take neuroleptic medicine himself. These can cause missed period or infertility [8]. Depression and stress in peoples due to CORONAVIRUS was observed by doctors. So it is clear that human infertility may not affected by CORONAVIRUS but it will reduced due to depression and stress of patient due to treatment or isolation of corona infected patient. Finally author advised that peoples should not hesitate to consult with their doctor if they feel any problem with their fertility or symptoms.

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