

Pregnant Women in the Exposure to COVID-19 Infection Outbreak: The Unseen Risk Factors and Preventive Healthcare Patterns

Monirsadat Mirzadeh¹ · Leila Khedmat²

Authors affiliations:

1. Metabolic Disease Research Center, Qazvin University of Medical Sciences, Qazvin, Iran
2. Health Management Research Center, Baqiyatallah University of Medical Sciences, Tehran, Iran

Abstract

These days, the most important health challenge in the world is the outbreak of novel coronavirus (COVID-19) infection. In December 2019, this viral disease originated as human-to-human transmission (HHT) in China's Wuhan city and then epidemically spread around the globe [1]. Based on the WHO data, HHT happens with close contact through sneezing and producing the respiratory droplets of infected individuals. There are two possible transmission routes for COVID-19: (i) settling these droplets in the mouth or nasal mucosa and lungs of people with inhaled air, and (ii) touching the disease-ridden surfaces or infected objects and subsequently touching hands to the mouth, nose, or eyes [2]. Due to the convenient ways to transmit viral infection, the aggressive prevalence of COVID-19 pneumonia, and its extensive social and economic impacts, there is an urgent need to explore health management tactics for slowing down the transmission of COVID-19 and decreasing the related-illness and death rate. It has been proven that this viral infection has a more pronounced effect on the elderly and patients with underlying diseases (e.g., hypertension, diabetes mellitus, cardiovascular diseases (CVDs), etc.) [3]. Pregnant women are one of the most critical population groups with a need to take additional precautions against the Covid-19 outbreak as a high risk of vertical transmission of COVID-19 in the late third trimester has been reported [4,5]. Besides, the presence of gestational diabetes mellitus (GDM) and preeclampsia in pregnancy may significantly weaken the immune system and increase the risk of COVID-19 infection. In the recent decade, there has been a profound demand for utilizing the in vitro fertilization (IVF) procedure among infertile couples. Studies have shown that the risk of developing GDM and preeclampsia in women treated with IVF is much greater than with women who conceived naturally [6,7]. Therefore, there is a higher risk of Accepted Manuscript COVID-19 infection in women undergoing IVF. The prenatal anxiety, depression, and stress are also considered as prevalent public health issues in pregnant women. These psychological reactions can result in adverse birth outcomes such as miscarriage, preterm birth, low birth weight, and fetal death. Under the COVID-19 outbreak, stressor anxiety-related concerns of mothers about their health and the health of their babies are growing exponentially. In nulliparous pregnant women, the adverse mood symptoms accompanied by childbirth fear may have irreversible effects on mother and child health. As a result, a set of health management practices in the event of COVID-19 outbreak must be adopted not only during late pregnancy but also during the first 3 months partum.