

Covid-19 and Pregnancy-Related Anxiety in Iranian Pregnant Women: a Web-Based Cross-Sectional Study

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Pregnancy-related anxiety (PRA) is defined as concerns, preoccupations, and fears related to pregnancy, delivery, neonatal health, and childrearing. Severe PRA can negatively affect women's physical and mental health and their children's cognitive, emotional, and behavioral development. A major source of PRA is affliction by infectious diseases, particularly during epidemics and pandemics. Pandemics affect people and communities at different levels and cause disturbances in communities. They challenge psychological resilience and are usually associated with horror, stress, anxiety, sleep disorders, and negative attitudes towards health. Coronavirus disease 2019 (COVID-19) is an international crisis. Pregnancy is a risk factor for COVID-19. In a systematic review study, a prevalence rate of anxiety was reported 3.8 to 17.5 % in Asian countries. This study aimed to assess PRA and its associated factors during the COVID-19 pandemic in Iranian women. This web-based cross-sectional study was conducted from April to March 2020 (in the first peak of corona disease) on 300 pregnant women purposively recruited from primary healthcare centers in Mazandaran, Iran. Data were collected using questionnaires (Pregnancy-Related Anxiety (PRA-Q), Edinburg, Knowledge, Attitude, and Practice (KAP) of COVID-19, Corona Disease Anxiety (CDA-Q), and Demographic questionnaire), which were provided to participants through social media. Data were analyzed with the linear regression and the logistic regression analysis, at the significance level of 0.05 using the SPSS software (v. 21). Around 21% of participants had PRA, 42.1% had depression, and 4.4% had COVID-19 anxiety. The significant predictors of PRA were number of pregnancies ($P = 0.008$), practice regarding COVID-19 ($P < 0.001$), COVID-19 anxiety ($P < 0.001$), depression ($P < 0.001$), and social support ($P = 0.025$) which explained 19% of the total variance. Depression and COVID-19 anxiety increased the odds of PRA by four times and 13%, while good practice regarding COVID-19 decreased PRA odds by 62%. The COVID-19 pandemic has reduced pregnant women's access to routine prenatal care services due to factors such as the rapid spread of the disease, lack of an effective treatment or vaccine, the necessity of quarantining and its subsequent loneliness during affliction, stigmatization, and despair, and concerns over contamination with the virus in

healthcare settings. Moreover, limited access to specialized care services for women with suspected COVID-19 and requests for pregnancy termination or elective Cesarean section surgery. Findings showed that pregnancy-related anxiety (PRA) in Iranian women was more than in other Asian countries. The significant predictors of PRA include gravida, practice regarding COVID-19, COVID-19 anxiety, depression, and social support. Implication: These findings can be used to accurately identify pregnant women at higher risk for PRA and develop appropriate strategies for managing mental health problems during pregnancy in the COVID-19 pandemic.

Keywords: *Coronavirus Disease 2019, Pandemic, Pregnancy-Related Anxiety*