



Supplemental Figure 1 The diagram of included and excluded participants

Supplemental Table 1 Characteristics of 7694 pregnant women before and during COVID-19 pandemic

Items	N / Mean (SD)	Pre COVID-19 (N,%; mean, SD)	COVID-19 (N,%; mean, SD)	χ^2/t	P
Maternal age (years)	30.20 (3.95)	30.01 (3.89)	30.45 (4.03)	-4.771	<0.0001
Maternal age (years)				8.301	0.016
≤24	487 (6.33)	297 (6.59)	190 (5.97)		
25-35	6112 (79.44)	3612 (80.11)	2500 (78.49)		
≥35	1095 (14.23)	600 (13.31)	495 (15.54)		
Ethnicity				0.024	0.876
Han	7222 (93.87)	4234 (93.90)	2988 (93.81)		
Other	472 (6.13)	275 (6.10)	197 (6.19)		
Occupation				0.13	0.677
Unemployed	910 (11.87)	528 (11.74)	382 (12.05)		
Employed	6758 (88.13)	3970 (88.26)	2788 (87.95)		
Education				7.683	0.053
Primary school or less	33 (0.43)	21 (0.47)	12 (0.38)		
Junior high school	578 (7.53)	355 (7.88)	223 (7.02)		
Senior high school	3772 (49.11)	2251 (49.97)	1521 (47.91)		
Undergraduate or above	3297 (42.93)	1878 (41.69)	1419 (44.69)		
Gravidity	2.01 (1.10)	2.01 (1.13)	2.01 (1.07)	0.165	0.869
Gravidity				1.988	0.370
1	3067 (39.86)	1809 (40.12)	1258 (39.50)		
2	2522 (32.78)	1450 (32.16)	1072 (33.66)		
≥3	2105 (27.36)	1250 (27.72)	855 (26.84)		
Parity	0.45 (0.53)	0.44 (0.53)	0.46 (0.54)	-1.178	0.239
Parity				1.370	0.504
1	3191 (41.47)	1847 (40.96)	1344 (42.20)		
2	119 (1.55)	68 (1.51)	51 (1.60)		
≥3	4384 (56.98)	2594 (57.53)	1790 (56.20)		
History of miscarriage	0.08 (0.32)	0.08 (0.31)	0.09 (0.32)	-0.955	0.339
History of miscarriage	579 (7.72)	328 (7.27)	251 (7.88)	0.986	0.321
History of induced abortion	0.47 (0.77)	0.48 (0.78)	0.45 (0.76)	1.334	0.182
History of induced abortion	2598 (33.78)	1558 (34.57)	1040 (32.65)	3.061	0.080
Family history of chronic disease	927 (12.14)	480 (10.72)	447 (14.16)	20.540	<0.001
Pre-pregnancy BMI, kg/m ²	22.24 (3.33)	22.22 (3.30)	22.27 (3.36)	-0.564	0.573
Pre-pregnancy BMI, kg/m ²				2.467	0.481
Underweight (18.5)	676 (8.79)	392 (8.69)	284 (8.92)		
Normal (18.5–24.9)	5714 (74.27)	3374 (74.83)	2340 (73.47)		
Overweight (25–29.9)	1077 (14.00)	609 (13.51)	468 (14.69)		
Obese (30)	227 (2.95)	134 (2.97)	93 (2.92)		
The rate of gestational weight gain (kg /week)	0.42 (0.09)	0.42 (0.09)	0.42 (0.09)	-1.044	0.297

Gestational weight gain				6.338	0.042
Insufficient	2112 (27.45)	1203 (26.68)	909 (28.54)		
Appropriate	3142 (40.84)	1893 (41.98)	1249 (39.22)		
Excessive	2440 (31.71)	1413 (31.34)	1027 (32.24)		
Prenatal visits	11.89 (3.37)	11.91 (3.43)	11.86 (3.27)	0.562	0.574
Prenatal visits				8.225	0.004
<8	822 (10.68)	520 (11.53)	302 (9.48)		
≥8	6872 (89.32)	3989 (88.47)	2883 (90.52)		
Total	7694 (100)	4509 (58.60)	3185 (41.40)		

Missing data: occupation 26 (0.34%), education 14 (0.18%) history of induced abortion 2 (0.03%), and family history of chronic disease 59 (0.77%).

Supplemental Table 2 The influence of COVID-19 pandemic on pregnancy outcome

Pregnancy outcomes	Model C (full model)	
	aRR (95%CI)	P
Maternal adverse outcomes		
Gestational diabetes ^b	0.93 (0.87, 1.01)	0.066
Gestational hypertension ^b	0.94 (0.77, 1.14)	0.52
Premature rupture of membranes ^b	1.10 (1.03, 1.20)	0.007
Caesarean section ^b	1.04 (0.98, 1.10)	0.189
Fetal adverse outcomes		
Stillbirth	1.00 (1.00, 1.00)	0.647
Fetal distress ^b	1.14 (1.01, 1.28)	0.033
Preterm birth ^b	0.75 (0.56, 1.02)	0.063
Low birth weight ^b	0.87 (0.61, 1.24)	0.441
Macrosomia ^b	1.05 (0.87, 1.26)	0.608

Note : aRR, adjusted risk ratio; b these pregnancy outcomes all based on 7694 live birth data. Model C: controlling maternal age, ethnicity, occupation, education, gravidity, parity, history of miscarriage, history of induced abortion, pregnancy BMI, the rate of gestational weight gain, family history of chronic disease, the number of prenatal visit.