

Table S1 Univariate logistic regression analysis the association between maternal age and spontaneous abortion.

Variables	Statistics	OR (95% CI)
Maternal age*	29.85 ± 4.15	1.18 (1.15, 1.22)
Maternal BMI*	21.61 ± 3.40	1.13 (1.10, 1.17)
Maternal ethnicity*		
Han	1636 (96.80%)	Ref
Minority	54 (3.20%)	1.88 (1.05, 3.39)
Maternal education*		
College	688 (40.71%)	Ref
Below college	875 (51.78%)	0.83 (0.64, 1.06)
College graduate	127 (7.51%)	1.69 (1.11, 2.57)
Maternal occupation		
Manual	810 (47.93%)	Ref
Non-manual	447 (26.45%)	0.80 (0.60, 1.07)
Unemployed	433 (25.62%)	0.66 (0.49, 0.90)
Secondhand smoking		
No	1479 (87.51%)	Ref
Yes	205 (12.13%)	1.07 (0.75, 1.54)
Missing	6 (0.36%)	2.02 (0.37, 11.10)
Maternal drinking		
No	1610 (95.27%)	Ref
Yes	79 (4.67%)	1.10 (0.64, 1.91)
Missing	1 (0.06%)	0.00 (0.00, inf.)
Maternal income*		
50000-100000	713 (42.19%)	Ref
>100000	491 (29.05%)	1.76 (1.33, 2.33)
<50000	486 (28.76%)	1.11 (0.82, 1.50)
Parity*		
Primipara	825 (48.82%)	Ref
Multipara	865 (51.18%)	1.59 (1.25, 2.03)
Conception method		
Natural conception	1608 (95.15%)	Ref
Assisted reproduction	82 (4.85%)	1.22 (0.72, 2.07)
Folic acid supplementation*		
First trimester of pregnancy	991 (58.64%)	Ref
Before pregnancy	584 (34.56%)	1.22 (0.94, 1.57)
No	115 (6.80%)	1.73 (1.11, 2.68)
Multivitamin supplementation*		
First trimester of pregnancy	680 (40.24%)	Ref
No	736 (43.55%)	0.68 (0.51, 0.89)
Before pregnancy	274 (16.21%)	1.82 (1.33, 2.50)
Medicine use*		
No	1015 (60.06%)	Ref
Yes	675 (39.94%)	1.33 (1.05, 1.70)

Abbreviations: BMI, body mass index; OR, odds ratios; CI, confidence intervals;

* Represent significant results of univariate analysis are adjusted as confounding factors.

Table S2 Multivariate logistic analysis the association of maternal age with spontaneous abortion.

Variables	Model 1 OR (95% CI)	Model 2 aOR (95% CI)	Model 3 aOR (95% CI)
Maternal age (continuous), years	1.18 (1.15, 1.22)	1.18 (1.14, 1.22)	1.16 (1.12, 1.20)
Maternal age (tertile), years			
Low (18.73-28.01)	Reference	Reference	Reference
Middle (28.02-31.29)	1.66 (1.17, 2.35)	1.50 (1.05, 2.15)	1.23 (0.85, 1.79)
High (31.30-44.92)	4.09 (2.97, 5.64)	3.71 (2.68, 5.15)	2.96 (2.06, 4.26)
<i>P</i> for trend	<0.001	<0.001	<0.001

Abbreviations: OR, odds ratios; CI, confidence intervals; aOR, adjusted odds ratios;

Model 1 adjusts for: none

Model 2 adjusts for: maternal ethnicity, maternal education, maternity occupation, maternal income

Model 3 adjusts for: maternal ethnicity, maternal education, maternity occupation, maternal income, maternal BMI, secondhand smoking, maternal drinking, parity, conception method, folic acid supplementation, multivitamins supplementation, medication use.

Table S3 Threshold effect analysis of maternal age on spontaneous abortion.

Variables	aOR (95% CI)	<i>p</i> value
Maternal age (continuous), years	1.16 (1.12, 1.20)	<0.001
Turning point	29.78	
Maternal age (two-piece-wise linear regression), years		
≤30	0.98 (0.91, 1.07)	0.658
>30	1.25 (1.19, 1.32)	<0.001
<i>P</i> for trend		0.001

Abbreviations: CI, confidence intervals; OR, odds ratios; aOR, adjusted odds ratios;

Adjusts for: adjust for: maternal ethnicity, maternal education, maternity occupation, maternal income, maternal BMI, secondhand smoking, maternal drinking, parity, conception method, folic acid supplementation, multivitamins supplementation, medication use.