

Table 2 Logistic regression of the effects of demographic, socioeconomic, institutional and spatial variables on C-section, MICS Punjab 2014

Variables	Model 1		Model 2		Model 3				
	Odds ratio (95% confidence interval)								
Maternal age at birth (yr)									
< 20	Ref	—	—	—	—	—			
20–29	1.17	(0.75,1.82)	1.12	(0.71,1.77)	1.14	(0.72,1.81)			
30–39	0.97	(0.61,1.54)	0.93	(0.58,1.50)	0.98	(0.61–1.57)			
≥ 40	0.73	(0.41–1.31)	0.70	(0.38–1.27)	0.80	(0.44–1.46)			
Maternal age at first marriage (yr)									
15–19	Ref	—	—	—	—	—			
20–25	1.26**	(1.08–1.47)	1.27**	(1.08–1.48)	1.18*	(1.00–1.38)			
26–30	1.80***	(1.41–2.30)	1.82***	(1.42–2.34)	1.62***	(1.26–2.10)			
31–35	2.59***	(1.51–4.42)	2.72***	(1.58–4.68)	2.56***	(1.49–4.39)			
Birth order of child									
1	Ref	—	—	—	—	—			
2–4	0.84*	(0.73–0.96)	0.83**	(0.72–0.95)	0.83*	(0.72–0.96)			
≥ 5	0.89	(0.68–1.18)	0.88	(0.67–1.17)	0.89	(0.67–1.17)			
Place of delivery									
Public	Ref	—	—	—	—	—			
Private	1.40***	(1.19–1.64)	1.36***	(1.16–1.60)	1.34***	(1.14–1.58)			
No. of antenatal care visits									
1–5	Ref	—	—	—	—	—			
6–12	1.57***	(1.37–1.81)	1.62***	(1.40–1.88)	1.49***	(1.28–1.73)			
13–18	2.76***	(1.61–4.73)	3.01***	(1.76–5.14)	2.73***	(1.60–4.64)			
≥ 18	1.82	(0.71–4.63)	1.81	(0.69–4.74)	1.60	(0.59–4.31)			
Area									
Urban	Ref	—	—	—	—	—			
Rural			0.92	(0.80–1.06)	0.89	(0.76–1.04)			
Division									
Bahawalpur	Ref	—	—	—	—	—			
DG Khan			0.36***	(0.25–0.51)	0.38***	(0.26–0.55)			
Faisalabad			0.44***	(0.32–0.60)	0.42***	(0.31–0.57)			
Gujranwala			0.57***	(0.43–0.76)	0.49***	(0.37–0.65)			
Lahore			0.70*	(0.57–1.05)	0.62**	(0.46–0.84)			
Multan			0.77	(0.57–1.05)	0.76	(0.55–1.03)			
Rawalpindi			0.41***	(0.29–0.56)	0.35***	(0.25–0.49)			
Sahiwal			1.03	(0.76–1.41)	1.01	(0.74–1.39)			
Sargodha			0.46***	(0.33–0.64)	0.47***	(0.34–0.65)			
Maternal education									
None/preschool	Ref	—	—	—	—	—			
Primary					0.95	(0.77–1.17)			
Middle					1.11	(0.87–1.43)			
Secondary					1.15	(0.91–1.45)			
Higher					1.21	(0.94–1.56)			
Wealth index									
Lowest	Ref	—	—	—	—	—			
Second					1.02	(0.77–1.35)			
Middle					1.35*	(1.02–1.79)			
Fourth					1.60**	(1.18–2.17)			
Highest					1.65**	(1.17–2.31)			
Constant	2.74***	(1.76–4.27)	1.51	(0.89–2.56)	2.20**	(1.23–3.93)			
Observations	5211		5211		5209				
χ^2	217.39		1323.04		3816.1				
Probability > χ^2	0.0020		0.0090		0.0363				
Hosmer-Lemeshow χ^2	18.38		9.52		6.69				
(Significance)	0.0186		0.3007		0.5702				

*P < 0.05, **P < 0.01, ***P < 0.001. MICS, Multiple Indicator Cluster Survey.