

Appendix 2. Association between obstetric conditions and pre-existing maternal medical conditions with cardiac arrest

	Cardiac Arrest N (%)	No Cardiac Arrest N (%)	Crude Odds ratio (95% CI)	Adjusted Odds ratio ^a (95% CI)
Obstetric conditions				
Stillbirth	28 (9.8)	21492 (0.6)	17.91 (12.12-26.46)	6.87 (4.09-11.52)
Cesarean delivery	215 (75.2)	979613 (27.5)	8.00 (6.12-10.47)	5.72 (3.79-8.62)
Morbidly adherent placenta	9 (3.1)	2458 (0.1)	47.1 (24.24-91.66)	3.66 (1.63-8.20)
Placental abruption	30 (10.4)	42217 (1.2)	9.79 (6.70-14.29)	2.48 (0.99-6.25)
Polyhydramnios	8 (2.8)	19857 (0.6)	5.14 (2.55-10.39)	2.13 (0.97-3.67)
Placenta previa	21(7.3)	21757 (0.6)	12.92 (8.29-20.15)	1.96 (0.93-4.13)
Chorioamnionitis	14 (4.9)	38641 (1.1)	4.70 (2.47-8.04)	1.59 (0.87-2.91)
Multiple gestation	13 (4.5)	54183 (1.5)	3.09 (1.77-5.39)	0.46 (0.23-0.94)
Pregnancy related medical conditions				
Hypertensive disorders of pregnancy ^b	63 (22.0)	189861 (5.3)	5.03 (3.80-6.65)	2.18 (1.57-3.05)
Gestational diabetes	44 (15.4)	204506 (5.7)	2.99 (2.17-4.12)	1.82 (1.26-2.63)
Non-pregnancy related medical conditions				
Malignancy	4 (1.4)	1174 (0.03)	43.18 (16.08-115.94)	8.94 (2.17-36.75)
Diseases of the nervous system	24 (8.4)	12521 (0.4)	26.02 (17.12-39.53)	3.48 (1.99-6.09)
Lower respiratory tract diseases	36 (12.6)	12596 (0.4)	34.32 (23.63-49.84)	2.16 (1.24-3.76)
Venous thromboembolism	4 (1.4)	1471 (0.04)	34.41 (12.81-92.42)	2.58 (0.59-11.22)
Obesity	15 (5.2)	43151 (1.2)	4.53 (2.69-7.61)	1.25 (0.68-2.27)
Diseases of the intestine	12 (4.2)	14834 (0.4)	10.49 (5.88-18.71)	1.42 (0.68-2.97)
Anemia	58 (20.0)	80072 (2.2)	10.79 (8.07-14.42)	1.29 (0.89-1.88)
Chronic renal disease and renal failure	5 (1.7)	3340 (0.1)	18.95 (7.82-45.91)	1.10 (0.28-2.95)
Liver and biliary tract disorders	6 (2.1)	10293 (0.3)	3.90 (0.97-15.68)	1.09 (0.21-5.76)
Cardiovascular diseases ^c	25 (8.7)	31768 (0.9)	10.66 (7.07-16.08)	0.91 (0.53-1.54)

Other infectious and parasitic diseases	19 (6.6)	25856 (0.8)	6.14 (3.80-9.89)	0.63 (0.33-1.21)
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N=number of patients; CI=Confidence interval

Odds ratios in bold font indicate statistically significant associations.

^aAdjustment done for maternal age, gestational age, parity, all obstetric and medical conditions. Model includes cesarean deliveries and stillbirths as additional variables

^bHypertensive disorders of pregnancy include gestational hypertension, mild preeclampsia, HELLP (Hemolysis, elevated liver enzymes, low platelets) syndrome

^cCardiovascular diseases include congenital heart disease, cardiomyopathy, valvular heart disease, ischemic heart disease, pre-existing hypertension and pulmonary hypertension

Appendix 3. Potential precipitating causes with their relative proportion among the cases, adjusted odds ratios of the strength of their association with cardiac arrest and percent survival

Condition	Cardiac Arrest N (%)	No Cardiac Arrest N (%)	Crude Odds ratio (95% CI)	Adjusted Odds ratio^a (95% CI)	Survived to discharge N (%)	Rate per 1000 women with each condition
Amniotic fluid embolism	36 (12.6)	184 (0.01)	>999.99 (∞ -- ∞)	161.38 (93.74-277.83)	24 (66.7)	163.6
Heart failure	90 (31.5)	12,015(0.3)	135.90 (105.80-174.60)	27.85 (19.49-39.79)	67 (74.4)	7.4
Aortic aneurysm and dissection	4 (1.4)	54 (0.001)	>999.99 (492.37-- ∞)	17.74 (5.18-60.79)	1 (25.0)	68.9
Eclampsia	20 (6.9)	2,497 (0.1)	107.40 (68.10-169.50)	17.53 (9.68-31.73)	17 (85.0)	7.9
Complications of anesthesia	36 (12.6)	12,369 (0.3)	41.40 (29.18-58.74)	16.89 (10.88-26.21)	36 (100.0)	2.9
Trauma	9 (3.1)	1,197 (0.03)	99.80 (51.70-176.50)	15.96 (7.19-35.43)	5 (55.6)	7.5
Obstetric embolism ^b	17 (5.9)	269 (0.02)	392.70 (250.30-615.90)	12.35 (6.26-24.38)	9 (52.9)	59.4
Postpartum hemorrhage	112 (39.2)	210,015 (5.9)	10.30 (8.12-13.06)	6.59 (4.93-8.83)	78 (69.6)	0.5
Intrapartum hemorrhage	14 (4.9)	8,577 (0.2)	21.40 (12.5-36.60)	5.08 (2.67-9.63)	6 (42.9)	1.6
Sepsis	25 (8.7)	4,530 (0.1)	75.40 (49.90-113.70)	4.58 (2.61-8.02)	15 (60.0)	5.5
Obstetric trauma	35 (12.2)	42,190 (1.2)	96.83 (49.73-188.51)	2.90 (1.87-4.50)	25 (71.4)	0.8
Pulmonary edema	13 (4.6)	751 (0.02)	226.20 (129.10-396.40)	2.65 (1.25-5.66)	10 (76.9)	17.0
Stroke	13 (4.6)	377 (0.01)	385.26 (219.15-677.27)	1.46 (0.65-3.28)	6 (46.2)	33.3
Acute myocardial infarction and complications	3 (1.0)	40 (0.001)	948.20 (292.00 -- ∞)	1.43 (0.24-8.58)	1 (33.3)	69.8

Antepartum hemorrhage	44 (15.4)	6,6329 (1.9)	9.60 (6.96-13.24)	0.75 (0.31-1.80)	32 (72.7)	0.7
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N=number of patients; CI=Confidence interval

Odds ratios in bold font indicate statistically significant associations

^aAdjustment done for maternal age, gestational age, parity, all obstetric and medical conditions

^bIncludes air embolism, blot-clot embolism and septic embolism, excludes amniotic fluid embolism

Some patients had more than one possible etiology