

Prenatal Antidepressant Use and Risk of Adverse Neonatal Outcomes

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Introducción.

- Depresión mayor afecta al 8% de las embarazadas en EEUU.
- Durante el embarazo el 7 a 13% de las embarazadas usan antidepresivos en el embarazo.
- Trabajos pequeños han establecido outcome neonatales.
- Objetivo de este trabajo el riesgo neonatal con especificos patrones de antidepresivos.

Métodos

- Estudio retrospectivo que utiliza el Optumlabs Data Warehouse (200 millones de personas)
- Se seleccionaron entre Enero del 2012 y Diciembre del 2016, mujeres embarazadas entre 12 y 49 años.
- Debían estar enroladas en este sistema 3 meses antes de la FUR y 3 meses después del parto, y los RN también debían estar enrolados

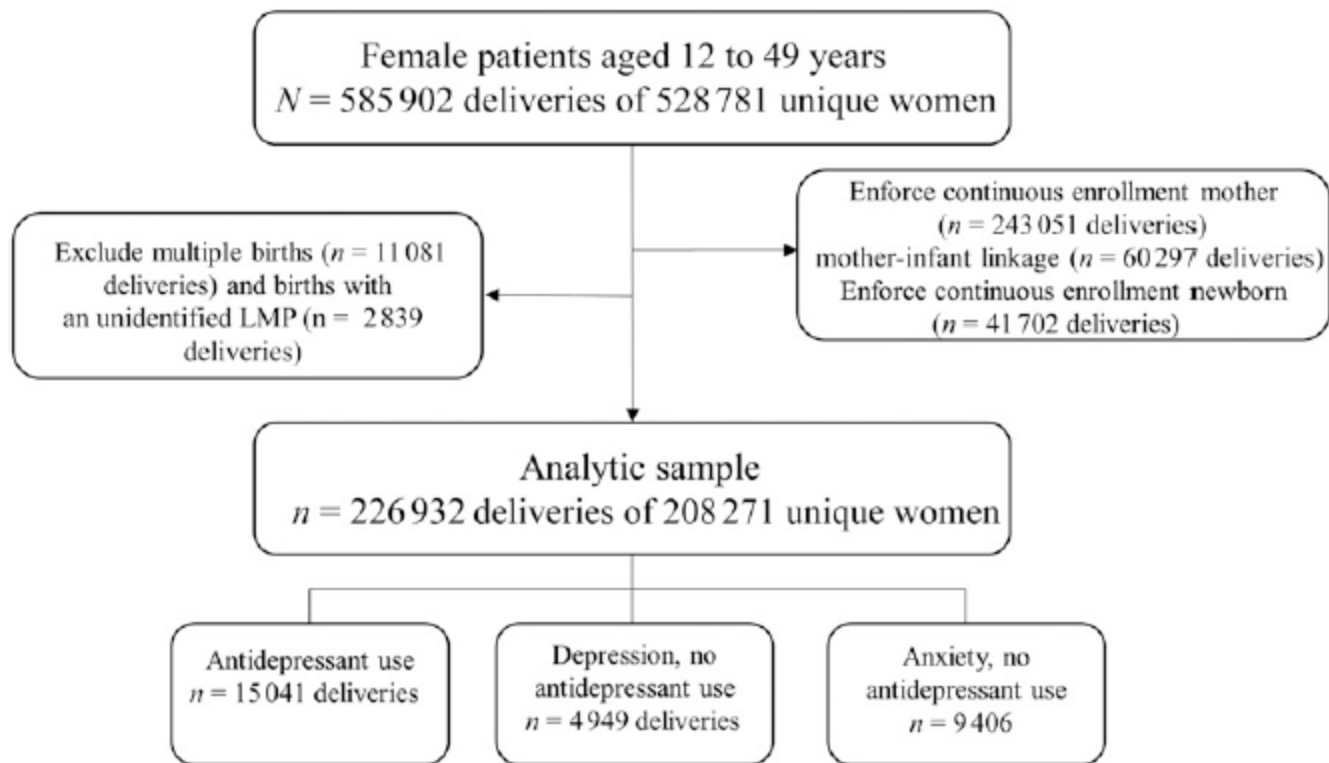


FIGURE 1

Cohort creation from live births between 2012 and 2016 from medical and pharmacy claims in the OLDW.

Exposición

- Al menos 1 prescripción de antidepresivos entre la fecha de última regla y las 35 semanas.
- Dosis de los antidepresivos fueron transformados a equivalentes de fluoxetina según la literatura existente.
- Agentes múltiples se sumaron
- Dosis fueron expresadas en mg/día por semanas.
- Se usaron clusters de uso según programa estadístico.

Outcome

- Malformaciones cardiacas mayores.
- Parto prematuro
- Distres respiratorio.

Covariables.

- Otros fármacos fueron explicitados.
- Hipertensión materna y otros factores.

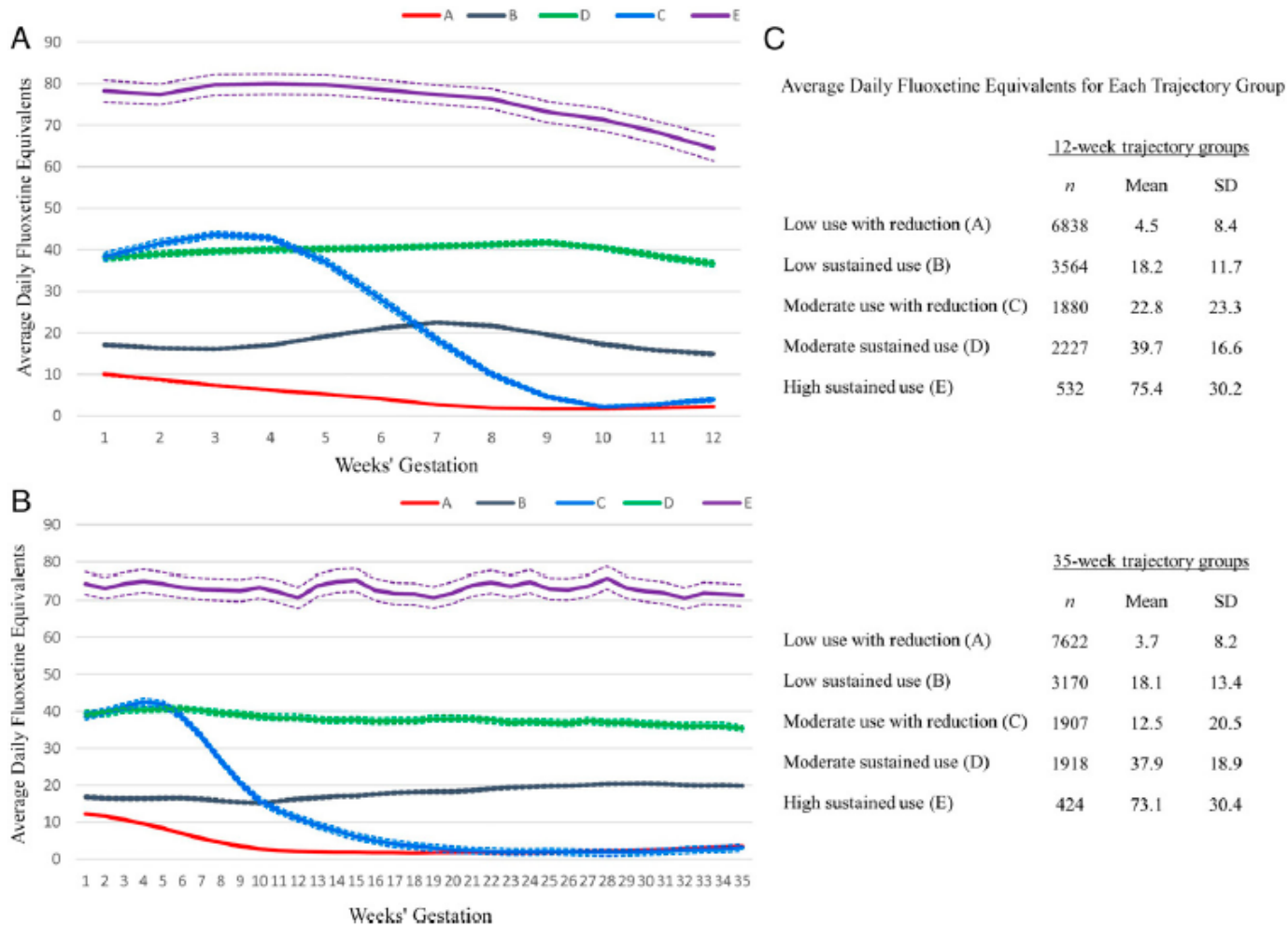


FIGURE 2

A and B, Mean trajectories (solid line) with 95% CIs (hashed lines) for 12- and 35-week antidepressant use among 15 041 deliveries with at least 1 antidepressant claim between the LMP and 35 weeks' gestation. C, The average daily fluoxetine equivalents and SD for each trajectory group.

TABLE 1 Maternal Characteristics From the Full Sample of 226 932 Pregnancies Between 2012 and 2016 From OLDW

	No Depression and No Antidepressant Use (<i>n</i> = 199 311)	Depression and No Antidepressant Use (<i>n</i> = 4949) ^a	Anxiety and No Antidepressant Use (<i>n</i> = 9406) ^a	Antidepressant Use (<i>n</i> = 15 041)
Maternal age, y				
<25	6333 (3.2)	162 (3.3)	254 (2.7)	404 (2.7)
25–34	135 108 (67.8)	3102 (62.7)	6023 (64.0)	9356 (62.2)
>34	57 870 (29.0)	1685 (34.0)	3129 (33.3)	5281 (35.1)
No. births in period				
1	183 447 (92.0)	4343 (87.8)	8334 (88.6)	13 922 (92.6)
2+	15 914 (8.0)	606 (12.2)	1072 (11.4)	1119 (7.4)
Maternal race				
White	135 734 (68.1)	3741 (75.6)	7161 (76.1)	12 512 (83.2)
African American	14 474 (7.3)	378 (7.6)	598 (6.4)	870 (5.8)
Hispanic	21 515 (10.8)	454 (9.2)	936 (10.0)	1034 (6.9)
Other or unknown	27 588 (13.8)	376 (7.6)	711 (7.6)	625 (4.2)
Education				
Less than or equal to high school or unknown	21 361 (10.7)	725 (14.6)	1233 (13.1)	2467 (16.4)
Less than bachelor's degree	108 118 (54.2)	2756 (55.7)	4939 (52.5)	8623 (57.3)
Bachelor's degree or higher	59 932 (30.1)	1468 (29.7)	3234 (34.4)	3951 (26.3)
Comorbidities and coexposures ^b				
Depression diagnosis	0 (0.0)	4949 (100.0)	1775 (18.9)	5575 (37.1)
Anxiety diagnosis	0 (0.0)	1775 (35.9)	9406 (100.0)	6293 (41.8)
Other mental health diagnosis	3584 (1.8)	1334 (27.0)	1909 (20.3)	3206 (21.3)
Pain diagnosis	15 631 (7.8)	855 (17.3)	1825 (19.4)	2667 (17.7)
Sleep disorder diagnosis	1109 (0.6)	220 (4.5)	499 (5.3)	847 (5.6)
Hypertension	2120 (1.1)	128 (2.6)	268 (2.8)	421 (2.8)
Antipsychotics	50 (0.0)	50 (1.0)	52 (0.6)	265 (1.8)
Benzodiazepines	1522 (0.8)	220 (4.4)	731 (7.8)	1610 (10.7)

All data are presented as *n* (%). Cell sizes <11 are suppressed per requirements of OptumLabs.

^a A total of 1775 pregnancies included depression and anxiety diagnoses and are in both strata.

^b Comorbidities and coexposures with claims between the LMP and 35 wk gestation.

TABLE 2 Maternal Characteristics of 15 041 Pregnancies With an Antidepressant Claim in the First 35 Weeks' Gestation Between 2012 and 2016 in OLDW

	35-wk Trajectory Group				
	Low Use With Reduction (A), n = 7622	Low Sustained Use (B), n = 3170	Moderate Use With Reduction (C), n = 1907	Moderate Sustained Use (D), n = 1918	High Sustained Use (E), n = 424
Maternal age, y					
<25 y	269 (3.5)	69 (2.2)	44 (2.3)	18 (0.9)	< 11 (<2.6)
25–34 y	4942 (64.8)	1936 (61.1)	1146 (60.1)	1101 (57.4)	>224 (>52.8)
>34 y	2411 (31.6)	1165 (36.8)	717 (37.6)	799 (41.7)	189 (44.6)
No. births in study period					
1	7065 (92.7)	2915 (92.0)	1797 (94.2)	1761 (91.8)	384 (90.6)
2+	557 (7.3)	255 (8.0)	110 (5.8)	157 (8.2)	40 (9.4)
Maternal race					
White	6148 (80.7)	2738 (86.4)	1585 (83.1)	1676 (87.4)	365 (86.1)
African American	503 (6.6)	140 (4.4)	124 (6.5)	80 (4.2)	23 (5.4)
Hispanic	643 (8.4)	155 (4.9)	119 (6.2)	93 (4.9)	24 (5.7)
Other or unknown	328 (4.3)	137 (4.3)	79 (4.1)	69 (3.6)	12 (2.8)
Education					
Less than or equal to high school degree or unknown	1400 (18.4)	427 (13.5)	358 (18.8)	236 (12.2)	46 (10.9)
Less than bachelor's degree	4401 (57.7)	1825 (57.6)	1062 (55.7)	1091 (56.9)	244 (57.6)
Bachelor's degree or higher	1821 (23.9)	918 (29.0)	487 (25.5)	591 (30.8)	134 (31.6)
Comorbidities and coexposures ^a					
Depression diagnosis	2270 (29.8)	1279 (40.4)	812 (42.6)	932 (48.6)	282 (66.5)
Anxiety diagnosis	2838 (37.2)	1406 (44.4)	867 (45.5)	924 (48.2)	258 (60.8)
Other mental health diagnosis	1360 (17.8)	754 (23.8)	429 (22.5)	506 (26.4)	157 (37.0)
Pain diagnosis	1349 (17.7)	514 (16.2)	355 (18.6)	345 (18.0)	104 (24.5)
Sleep disorder diagnosis	427 (5.6)	145 (4.6)	133 (7.0)	109 (5.7)	33 (7.8)
Hypertension	210 (2.8)	73 (2.3)	62 (3.3)	63 (3.3)	13 (3.1)
Antipsychotics	55 (0.7)	44 (1.4)	52 (2.7)	74 (3.9)	40 (9.4)
Benzodiazepines	657 (8.6)	292 (9.2)	280 (14.7)	269 (14.0)	112 (26.4)

All data are presented as n (%). Cell sizes <11 are suppressed per requirements of OptumLabs.

^a Prescription fills through 35 wk gestation.

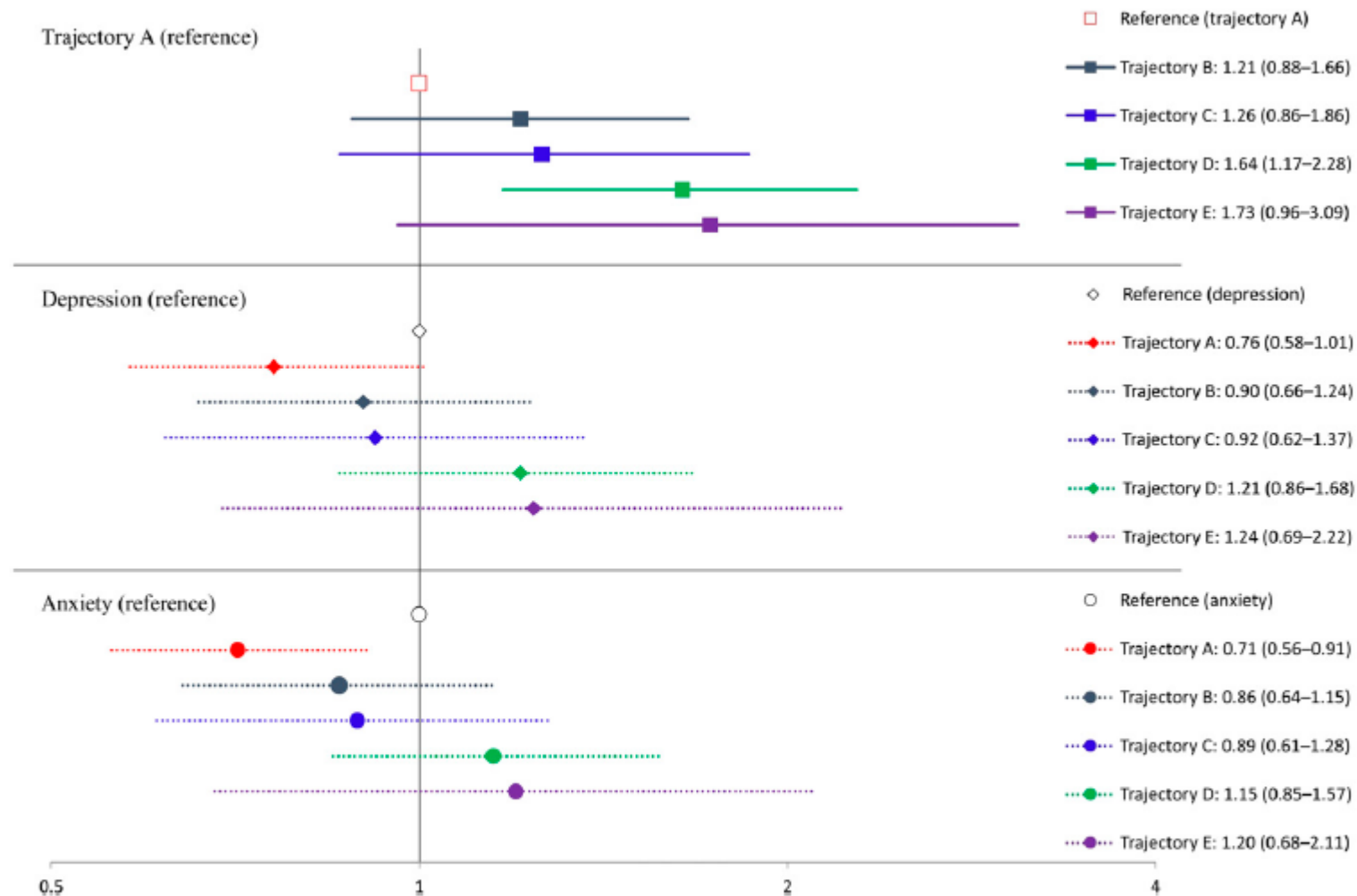


FIGURE 3

Adjusted RRs for antidepressant trajectories and major cardiac malformations. Twelve-week trajectory descriptions are as follows: trajectory A: low use with reduction or discontinuation; trajectory B: low sustained use; trajectory C: moderate use with reduction or discontinuation; trajectory D: moderate sustained use; and trajectory E: high sustained use. Solid lines indicate the trajectory mean; hashed lines indicate the 95% CI of the mean.

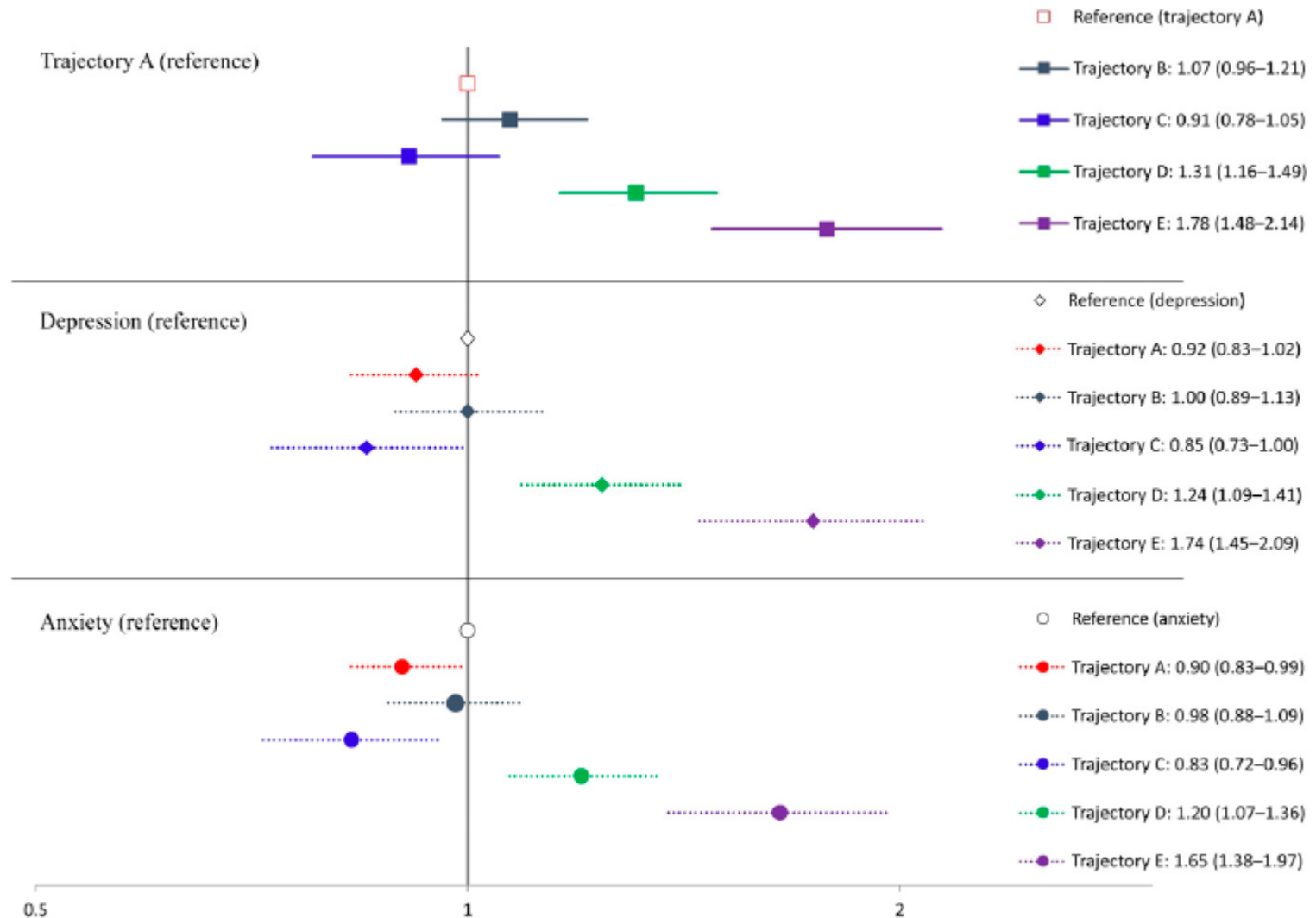


FIGURE 4

Adjusted RRs for antidepressant trajectories and preterm birth. Thirty-five-week trajectory descriptions are as follows: trajectory A: low use with reduction or discontinuation; trajectory B: low sustained use; trajectory C: moderate use with reduction or discontinuation; trajectory D: moderate sustained use; and trajectory E: high sustained use.

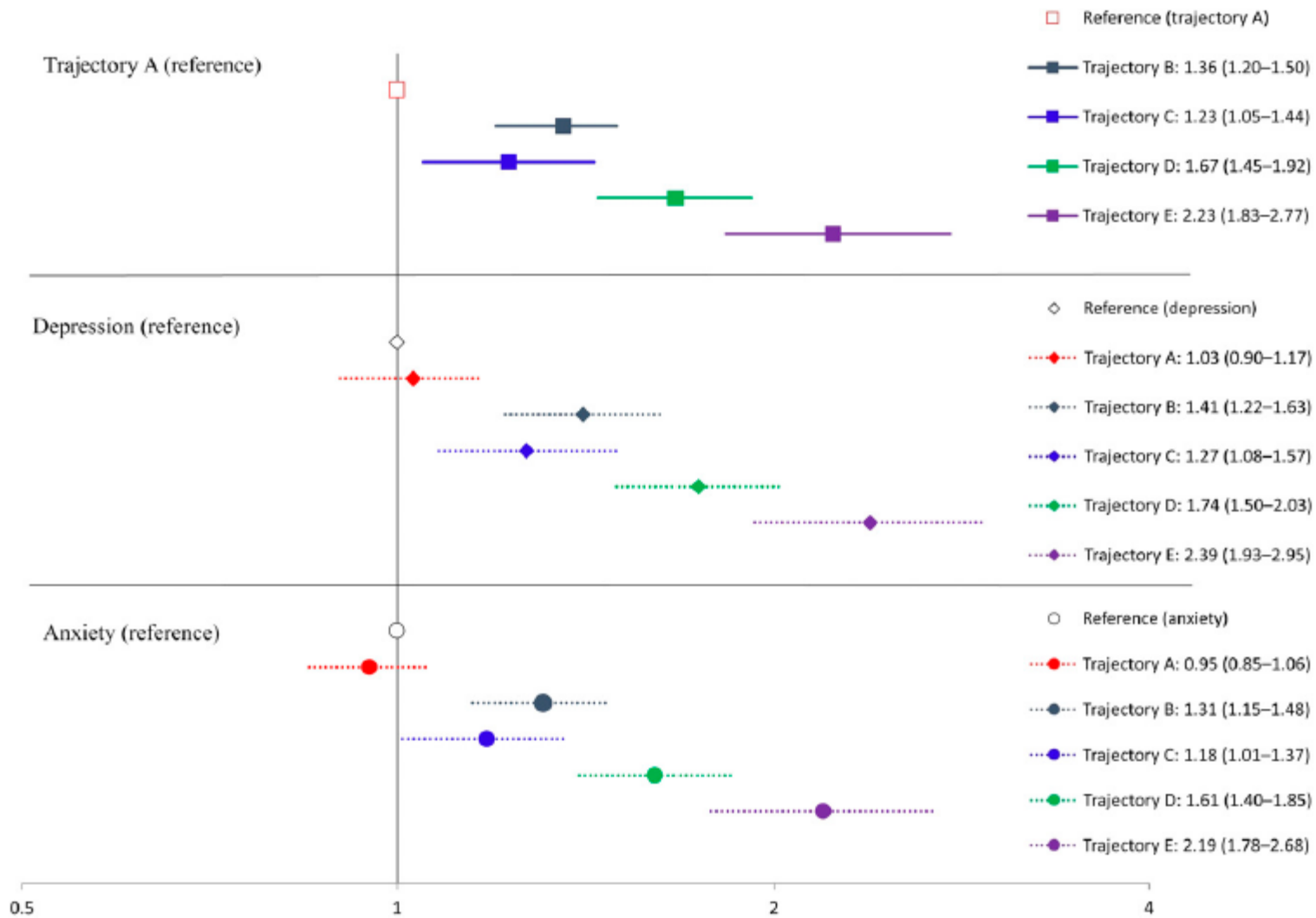


FIGURE 5

Adjusted RRs for antidepressant trajectories and newborn respiratory distress. Thirty-five-week trajectory descriptions are as follows: trajectory A: low use with reduction or discontinuation; trajectory B: low sustained use; trajectory C: moderate use with reduction or discontinuation; trajectory D: moderate sustained use; and trajectory E: high sustained use.

Conclusiones