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Supplementary Material

Article Title: Sibling Psychiatric Diagnoses and Risk of Postpartum Psychosis: A Nationwide Cohort Study

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Supplementary Tables

Supplementary Table 1. ICD-8, ICD-9 (Swedish), and ICD-10 Codes Used to Define Psychiatric Diagnostic Categories

Disorder	ICD-10	ICD-9 (Swedish)	ICD-8
Schizophrenia	F20	295A, 295B, 295C, 295D, 295E, 295F, 295G, 295H, 295W, 295X	29500, 29510, 29520, 29530, 29540, 29550, 29560, 29570, 29580, 29599
Schizoaffective disorder	F25	295H	29570
Delusional disorder	F22	297B, 297C, 297D, 297W, 297X	29700, 29710, 29798
Brief psychotic disorder	F23	298B, 298C, 298E, 298W, 298X	29800, 29810, 29820, 29830, 29899
Bipolar disorder	F30, F31	296A, 296C, 296D, 296E, 296W, 298B	29610, 29620, 29630, 29688, 29810
Major depressive disorder	F32, F33, F341	296B, 298A, 300E, 300F, 311	29600, 29620, 29800, 30040
Cyclothymia	F340	296W	29630
Anxiety disorders	F40, F41	300A, 300C	30000, 30020
Obsessive–compulsive disorder	F42	300D	30030
Post-traumatic stress disorder	F431	309B	—
Stress reaction / Adjustment disorders	F430, F432	308, 309A, 309X	30799
ADHD	F90	314J, 314W, 314X	30899
Autism spectrum disorders	F840, F841, F845, F849	299A, 299W, 299X	29999
Intellectual disability	F70–F79	317, 318A, 318B, 318C, 319	310–315
Tic disorders	F95	307C	30620
Learning disorders	F81	315A, 315B, 315D, 315E, 315W, 315X	30610
Eating disorders	F50	307B, 307F	30650
Substance use disorders	F10–F19	291A–291X, 292A–292X, 303, 304, 305	29100, 29110, 29120, 29130, 29198, 29199, 29430, 303, 304
Personality disorders	F60, F61	301A, 301B, 301C, 301D, 301E, 301F, 301G, 301H, 301J, 301W, 301X	30100, 30110, 30120, 30130, 30140, 30150, 30160, 30170, 30180, 30188, 30199
Sleep disorders	F51	307E	30640
Dissociative disorders	F44	300B	30010
Childhood behavioural disorders	F91, F93	312, 313A, 313B, 313C, 313D, 313W, 313X	30899

Supplementary Table 2. Sister-Sister Psychiatric Associations with Postpartum Psychosis

Psychiatric Disorder	N Exposed	Cases	OR (95% CI)	p-value	FDR
Schizoaffective disorder	1,476	16	10.44 (5.87–18.59)	<0.001	<0.001
Cyclothymia	939	8	7.44 (3.17–17.46)	<0.001	<0.001
Brief psychotic disorder	3,898	25	5.74 (3.75–8.80)	<0.001	<0.001
Schizophrenia	1,771	10	5.44 (2.74–10.77)	<0.001	<0.001
Bipolar disorder	12,181	72	4.79 (3.68–6.24)	<0.001	<0.001
Delusional disorder	1,537	6	3.77 (1.69–8.41)	0.001	0.002
Learning disorders	500	3	3.32 (1.06–10.38)	0.039	0.061
Sleep disorders	4,909	16	2.48 (1.48–4.16)	<0.001	0.001
Personality disorders	12,260	38	2.32 (1.65–3.26)	<0.001	<0.001
Dissociative disorders	1,977	6	2.26 (1.01–5.03)	0.046	0.069
Major depressive disorder	68,512	180	2.13 (1.80–2.51)	<0.001	<0.001
ADHD	10,485	32	2.02 (1.41–2.89)	<0.001	<0.001
Anxiety disorders	61,948	161	2.01 (1.67–2.41)	<0.001	<0.001
Intellectual disability	1,711	5	1.97 (0.82–4.76)	0.130	0.161
Stress/adjustment disorders	32,311	71	1.69 (1.31–2.18)	<0.001	<0.001
Obsessive-compulsive disorder	4,995	12	1.57 (0.89–2.78)	0.118	0.155
Childhood behavioral disorders	1,658	4	1.50 (0.56–3.98)	0.419	0.440
Eating disorders	7,370	18	1.40 (0.88–2.23)	0.160	0.192
Substance use disorders	37,653	62	1.30 (0.99–1.70)	0.055	0.077
Post-traumatic stress disorder	6,715	12	1.27 (0.69–2.32)	0.442	0.453
Autism spectrum disorder	1,994	3	0.96 (0.31–2.98)	0.944	0.944

Note: Odds ratios adjusted for maternal age at first birth and year of first birth, with cluster-robust standard errors to account for family clustering.

Supplementary Table 3. Brother-Sister Psychiatric Associations with Postpartum Psychosis

Psychiatric Disorder	N Exposed	Cases	OR (95% CI)	p-value	FDR
Cyclothymia	441	7	12.67 (5.93–27.10)	<0.001	<0.001
Bipolar disorder	8,462	59	5.08 (3.92–6.57)	<0.001	<0.001
Tic disorders	1,181	11	4.42 (2.43–8.04)	<0.001	<0.001
Schizoaffective disorder	910	5	3.96 (1.64–9.55)	0.002	0.003
Schizophrenia	2,218	12	3.77 (2.14–6.66)	<0.001	<0.001
Delusional disorder	1,794	8	3.59 (1.79–7.20)	<0.001	<0.001
Sleep disorders	5,009	25	3.22 (2.14–4.84)	<0.001	<0.001
ADHD	18,911	88	2.57 (2.04–3.22)	<0.001	<0.001
Obsessive-compulsive disorder	3,786	18	2.43 (1.52–3.87)	<0.001	<0.001
Brief psychotic disorder	3,619	13	2.42 (1.40–4.19)	0.002	0.002

Eating disorders	950	5	2.36 (0.97–5.73)	0.057	0.065
Personality disorders	8,777	27	2.27 (1.55–3.31)	<0.001	<0.001
Major depressive disorder	50,681	142	2.01 (1.69–2.39)	<0.001	<0.001
Childhood behavioral disorders	2,055	8	1.95 (0.97–3.90)	0.060	0.065
Anxiety disorders	45,858	126	1.83 (1.52–2.20)	<0.001	<0.001
Substance use disorders	68,618	152	1.76 (1.48–2.10)	<0.001	<0.001
Intellectual disability	4,036	14	1.72 (1.02–2.92)	0.043	0.051
Autism spectrum disorder	5,956	22	1.70 (1.12–2.58)	0.013	0.017
Stress/adjustment disorders	23,553	52	1.67 (1.24–2.24)	<0.001	0.001
Learning disorders	1,821	4	0.97 (0.36–2.58)	0.944	0.944
Post-traumatic stress disorder	2,933	3	0.67 (0.22–2.10)	0.495	0.521
Dissociative disorders	—	—	—	—	—

Note: Odds ratios adjusted for maternal age at first birth and year of first birth, with cluster-robust standard errors to account for family clustering.

Supplementary Table 4. Impact of Maternal Birth Year Adjustment on Sibling Associations

Psychiatric Disorder	N Exposed	Cases	OR Without Birth Year Adjustment (95% CI)	OR With Birth Year Adjustment (95% CI)	% Change
Schizoaffective disorder	2,534	24	6.32 (4.22–9.47)	7.90 (5.27–11.85)	+24.99%
Schizophrenia	4,209	23	3.69 (2.45–5.57)	4.21 (2.79–6.36)	+13.97%
Substance use disorders	113,134	253	1.61 (1.42–1.83)	1.70 (1.49–1.93)	+5.45%
Bipolar disorder	22,736	160	4.94 (4.21–5.79)	5.00 (4.26–5.87)	+1.31%
Major depressive disorder	131,192	402	2.25 (2.03–2.50)	2.17 (1.95–2.41)	–3.89%
Personality disorders	23,984	84	2.54 (2.05–3.16)	2.39 (1.92–2.97)	–6.14%
Anxiety disorders	121,089	371	2.29 (2.05–2.55)	2.05 (1.83–2.28)	–10.64%

Note: Both models use cluster-robust standard errors. Birth year adjustment includes maternal year of birth as a covariate.

Supplementary Table 5. Sibling Bipolar Disorder Association by Maternal Birth Cohort

Birth Cohort	N Mothers	N Exposed to Sibling Bipolar	PPS Cases	OR (95% CI)
1980–1989	704,890	8,027	18	3.35 (2.09–5.37)
1990–1999	441,421	5,133	24	6.11 (4.04–9.26)
2000–2009	491,779	5,703	36	4.82 (3.44–6.74)
2010–2017	370,730	3,873	82	5.52 (4.41–6.91)

Note: Odds ratios adjusted for maternal age at first birth, with cluster-robust standard errors.

Supplementary Table 6. Sibling Bipolar Disorder Association by Number of Siblings

Sibship Size	N Mother-Sibling Pairs	OR (95% CI)
1 sibling	685,090	4.98 [3.73-6.64]
2–3 siblings	1,057,228	5.37 [4.29-6.72]
4+ siblings	266,502	3.57 [2.26-5.62]

Note: Odds ratios adjusted for maternal age and year at first birth, with cluster-robust standard errors.