**Online only supplement**

**Perinatal adversity profiles and suicide attempt in adolescence and young adulthood: Longitudinal analyses from two 20-year birth cohort studies**

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**Table S1. Rate of each perinatal factor and sex in the analysis sample and in the nonincluded sample, for QLSCD**a **and ALSPAC**

|  |  |  |  |
| --- | --- | --- | --- |
|   | QLSCD a |  | ALSPAC |
| Variable | **n (%) among included participants****(max N=1623)** | **n (%) among non-included participants (max N=497)** | ***P*-value χ2** | **Risk more common in analysis sample?** |  | **n (%) among included participants****(max N=5765)** | **n (%) among non-included participants (max N=8023)** | ***P*-value χ2** | **Risk more common in analysis sample?** |
|   | **Yes** | **No** | **Yes** | **No** |  |  |  | **Yes** | **No** | **Yes** | **No** |  |  |
| *Fetal growth adversities* |   |   |   |   |   |   |  |   |   |   |   |   |   |
| Short birth length | 130 (8.7) | 1368 (91.3) | 43 (9.9) | 392 (90.1) | 0.583 |   |  | 163 (4.4) | 3533 (95.6) | 251 (5.4) | 4424 (94.6) | 0.045 | No |
| Low birth weight | 51 (3.1) | 1571 (96.9) | 20 (4.0) | 477 (96.0) | 1.000 |   |  | 240 (4.2) | 5457 (95.8) | 427 (5.4) | 7490 (4.6) | 0.002 | No |
| Short head circumference | 133 (8.2) | 1490 (91.8) | 39 (7.8) | 458 (92.2) | 0.070 |   |  | 360 (7.9) | 4211 (92.1) | 523 (8.8) | 5445 (91.2) | 0.103 |   |
| Growth restriction | 129 (8.0) | 1493 (92) | 43 (8.7) | 454 (91.3) | 0.539 |   |  | 101 (2.9) | 3435 (97.1) | 188 (4.0) | 4532 (96.0) | 0.006 | No |
| Prematurity | 78 (4.8) | 1545 (95.2) | 26 (5.2) | 471 (94.8) | 0.385 |   |  | 275 (4.8) |  5490 (95.2) | 491 (6.1) | 7532 (93.9) | 0.001 | No |
| *Pregnancy complications* |   |   |   |   |   |   |  |   |   |   |   |   |   |
| Mother hemorrhage | 47 (2.9) | 1576 (97.1) | 14 (2.8) | 483 (97.2) | 0.458 |   |  | 25 (0.8) | 3312 (99.8) | 46 (1.0) | 4437 (99.0)  | 0.202 |   |
| Mother hypertension | 62 (3.8) | 1561 (96.2) | 27 (5.4) | 470 (94.6) | 1.000 |   |  | 812 (14.5) | 4804 (85.5) | 1114 (14.5) | 6550 (85.5)  | 0.901 |   |
| Mother diabetes | 5 (0.3) | 1618 (99.7) | <5 (<1.6) | <5 (<1.0) | NA |   |  | 33 (0.9) | 3503 (99.1) | 53 (1.1) | 4667 (98.9)  | 0.401 |   |
| *Birth/delivery adversities* |   |   |   |   |   |   |  |   |   |   |   |   |   |
| Long hospitalization | 130 (8.2) | 1458 (91.8) | 49 (10.5) | 419 (89.5) | 0.703 |   |  | 1477 (44.3) | 1855 (55.7) | 1804 (40.6) | 2640 (59.4) | 0.001 | Yes |
| Transfer hospital | 24 (1.9) | 1224 (98.1) | 6 (1.6) | 376 (98.4) | 0.738 |   |  | 326 (5.9) | 5212 (94.1) | 484 (7.4) | 6040 (92.6)  | 0.001 | No |
| low APGAR | 25 (1.6) | 1579 (98.4) | <5 (<1.6) | ≥460 (≥98.0) | 1.000 |   |  | 28 (0.8) | 3360 (99.2) | 84 (1.9) | 4419 (98.1)  | <0.001 | No |
| Birth induction | 495 (31.3) | 1088 (68.7) | 143 (30.6) | 324 (69.4) | 0.810 |   |  | 667 (19.3) | 2798 (80.8) | 916 (19.8) | 3721 (80.3)  | 0.571 |   |
| Delivery acceleration | 756 (51.9) | 700 (48.1) | 202 (49.3) | 208 (50.7) | 1.000 |   |  | 1994 (63.8) | 1134 (36.3) | 2777 (67.2) | 1355 (32.8)  | 0.002 | No |
| Caesarean section | 242 (15) | 1373 (85.0) | 90 (19.0) | 383 (81.0) | 0.538 |   |  | 588 (10.4) | 5050 (89.6) | 834 (10.8) | 6882 (89.2)  | 0.483 |   |
| Child hypoxia/asphyxia | 154 (9.5) | 1469 (90.5) | 41 (8.2) | 456 (91.8) | 1.000 |   |  |   |   |   |   |   |   |
| *Socioeconomic adversities* |   |   |   |   |   |   |  |   |   |   |   |   |   |
| Low maternal education | 273 (16.8) | 1348 (83.2) | 112 (22.6) | 384 (77.4) | 0.453 |   |  | 1134 (20.3) | 4452 (79.7) | 2547 (38.2) | 4118 (61.8)  | <0.001 | No |
| Low paternal education | 251 (16.8) | 1244 (83.2) | 88 (20.1) | 349 (79.9) | 0.043 | No |  | 1348 (24.7) | 4107 (75.3) | 2723 (43.1) | 3597 (56.9)  | <0.001 | No |
| Low socioeconomic status | 370 (23) | 1239 (77) | 153 (31.5) | 333 (68.5) | 0.029 | No |  | 515 (14.1) | 3138 (85.9) | 1072 (30.1) | 2492 (69.9)  | <0.001 | No |
| Nonintact family | 300 (18.6) | 1317 (81.4) | 106 (21.4) | 389 (78.6) | 0.045 | No |  | 347 (6.2) | 5219 (93.8) | 838 (14.1) | 5113 (85.9)  | <0.001 | No |
| Low maternal age | 39 (2.4) | 1583 (97.6) | 20 (4) | 477 (96) | 0.452 |   |  | 105 (1.8) | 5660 (98.2) | 544 (6.8) | 7479 (93.2)  | <0.001 | No |
| Advanced paternal age | 444 (29.5) | 1063 (70.5) | 126 (28.4) | 317 (71.6) | 0.021 | Yes |  | 803 (20.0) | 3214 (80.0) | 581 (15.5) | 3173 (84.5)  | <0.001 | Yes |
| High birth order | 71 (4.4) | 1552 (95.6) | 86 (17.3) | 411 (82.7) | 0.945 |   |  | 515 (9.2) | 5086 (90.8) | 704 (10.5) | 6010 (89.5)  | 0.017 | No |
| *Exposures during pregnancy* |   |   |   |   |   |   |  |   |   |   |   |   |   |
| Maternal smoking | 393 (24.3) | 1221 (75.7) | 140 (28.2) | 356 (71.8) | 0.012 | No |  | 1056 (18.4) | 4671 (81.6) | 2487 (32.6) | 5138 (67.4)  | <0.001 | No |
| Maternal alcohol use | 622 (38.5) | 992 (61.5) | 130 (26.2) | 366 (73.8) | 0.499 |   |  | 1687 (29.6) |  4012 (70.4) | 3226 (41.7) | 4513 (58.3) | <0.001 | No |
| Maternal drug use | 22 (1.4) | 1592 (98.6) | 8 (1.6) | 488 (98.4) | 0.566 |   |  | 288 (5.0) | 5450 (95.0) | 437 (5.7) | 7241 (94.3)  | 0.088 |   |
| Maternal medication use | 1026 (63.6) | 586 (36.4) | 288 (58.1) | 208 (41.9) | 0.538 |   |  | 3732 (66.2) |  1909 (33.8) | 4736 (65.5) |  2498 (34.5)  | 0.413 |  |
| *Parental mental health* |   |   |   |   |   |   |  |   |   |   |   |   |   |
| Maternal depression | 222 (13.7) | 1395 (86.3) | 96 (19.4) | 400 (80.6) | 0.156 |   |  | 406 (7.6) |  4957 (92.4) | 562 (9.9) | 5123 (90.1)  | <0.001 | No |
| Paternal depression | 80 (5.7) | 1315 (94.3) | 28 (7.5) | 347 (92.5) | 0.935 |   |  | 99 (2.6) |  3730 (97.4) | 107 (3.4) | 3058 (96.6)  | 0.05 | No |
| Maternal anxiety |  |  |  |  |  |   |  |  1354 (25.3) | 4009 (74.8) | 1679 (29.5) | 4006 (70.5)  | <0.001 | No |
| Paternal anxiety |  |  |  |  |  |  |  | 166 (4.3) | 3705 (95.7) | 157 (4.9) | 3055 (95.1)  | 0.228 |   |
| Maternal antisocial behavior | 315 (20.2) | 1248 (79.8) | 88 (19) | 374 (81) | 0.835 |   |  |  |  |  |  |  |  |
| Paternal antisocial behavior | 326 (23.4) | 1067 (76.6) | 79 (21.4) | 291 (78.6) | 0.034 |  Yes |  |  |  |  |  |  |  |
|   |   |   |   |   |   |   |  |   |   |   |   |   |   |
| *Child sex (female)* | 845 (52.1) | 778 (47.9) | 195 (39.2) | 302 (60.8) | <0.001 | Yes |  | 3356 (58.2) | 2409 (41.8) | 3311 (41.3)  | 4712 (58.7)  | <0.001 | Yes |

aData were compiled from the final master file of the Québec Longitudinal Study of Child Development (1998–2018), ©Gouvernement du Québec, Institut de la statistique du Québec

Number below 5 and associated proportion have been rounded at <5. This may contain zero.

**Table S2.** Assessment of behavioral, emotional, interpersonal problems and cognitive skills in QLSCD and ALSPAC

|  |  |  |  |
| --- | --- | --- | --- |
|  | QLSCDa |  | ALSPAC |
| Behavioral problems | **Assessment:** Assessed with the Social Behavioral Questionnaire. E.g., “get into many fights”, “physically attack people”**Rating:** teacher-report**Time points (child age, y):** 6, 7, 8, 10, 12**Number of items:** 9 (3-point scale)**Alpha range:** 0.87-0.88 |  | **Assessment:** Assessed with the Strengths and Difficulties Questionnaires.E.g., “Often fights with other children or bullies them”, “Picked on or bullied by other children”**Rating:** teacher-report**Time points (child age, y):** 7/8, 10/11**Number of items:** 5 (3-point scale)**Alpha range:** 0.73-0.78 |
| Hyperactivity/impulsivity | **Assessment:** Assessed with the Social Behavioral Questionnaire. E.g., “can’t sit still, restless”, “cannot stop fidgeting”**Rating:** teacher-report**Time points (child age, y):** 6, 7, 8, 10, 12**Number of items:** 4 (3-point scale)**Alpha range:** 0.82-0.84 |  | **Assessment:** Assessed with the Strengths and Difficulties QuestionnairesE.g., “Restless, overactive, cannot stay still for long”, “Fidgetiness, restlessness or overactivity”**Rating:** teacher-report**Time points (child age, y):** 7/8, 10/11**Number of items:** 5 (3-point scale)**Alpha range:** 0.89-0.90 |
| Emotional problems | **Assessment:** Assessed with the Social Behavioral Questionnaire. E.g., “not as happy as other children”, “too fearful/anxious”**Rating:** teacher-report**Time points (child age, y):** 6, 7, 8, 10, 12**Number of items:** 7 (3-point scale)**Alpha range:** 0.79-0.81 |  | **Assessment:** Assessed with the Strengths and Difficulties QuestionnairesE.g., “Often unhappy, depressed or tearful”, “Many fears, easily scared”**Rating:** teacher-report**Time points (child age, y):** 7/8, 10/11**Number of items:** 5 (3-point scale)**Alpha range:** 0.83-0.83 |
| Peer victimization | **Assessment:** Self-report victimization scale (modified version)**Rating:** self-report**Time points (child age, y):** 6, 7, 8, 10, 12**Number of items:** 7 (3-point scale)**Alpha range:** 0.70-0.80 |  | **Assessment:** Assessed with the Bullying and Friendship Interview Schedule**Rating:** self-report**Time points (child age, y):** 7/8, 10/11**Number of items:** 5 **Alpha range:** 0.59-0.61 |
| Cognitive skills | **Assessment:** Peabody Picture Vocabulary Test**Rating:** direct assessment performed by a research professional**Time points (child age, y):** 4, 7, 10**Number of items:** NA**Alpha range:** NA |  | **Assessment:** Wechsler Preschool & Primary Scale of Intelligence (full battery) and the Wechsler Intelligence Scale for Children (short form of the measure was employed where alternate items were used for all subtests, with the exception of the coding subtest which was administered in its full form)**Rating:** direct assessment performed by a research professional**Time points (child age, y):** 4, 8**Number of items:** NA**Alpha range:** NA |

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**Figure S1.** Prevalence of suicide attempt by profile and sex in QLSCDa and ALSPAC



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