Supplementary Online Content

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**eAppendix 1.** Detailed Descriptions of the Danish National Registries  
**eAppendix 2.** Diagnostic Classification of Diabetes  
**eAppendix 3.** Detailed Description of Covariates and Missing Data Analysis  
**eTable 1.** Diagnostic Classification of Psychiatric Disorders According to *ICD-10* and *ICD-8* Equivalents  
**eTable 2.** Exposure Classification of Maternal Diabetes During Pregnancy According to *ICD-10* and *ICD-8* Equivalents  
**eTable 3.** Incidence Rates (IRs) of Psychiatric Disorders in Offspring per 10 000 Person-Years by Exposure to Maternal Diabetes During Pregnancy, Denmark, 1978-2016 (N = 2 413 335)  
**eTable 4.** Associations Between Maternal Diabetes During Pregnancy and Psychiatric Disorders in Offspring by Multiple Imputation  
**eTable 5.** Associations Between Maternal Diabetes During Pregnancy and Psychiatric Disorders in Offspring, Additionally Adjusted by Maternal Body Mass Index (BMI)  
**eTable 6.** Sibship Design  
**eReferences.**

This supplementary material has been provided by the authors to give readers additional information about their work.
eAppendix 1. Detailed Descriptions of the Danish National Registries

Danish National Registries

The Danish National Registries are a part of the tax-funded Danish health care system. All residents of Denmark pay taxes to the federal and local governments to finance the health care system. This system offers universal access to all residents of Denmark for all levels of health care, from general practitioners to specialized hospital care. In addition, it offers partial reimbursement for prescribed medications.

The Danish National Registries have been collecting data routinely on health-related variables since 1968. A key feature of these registries is their use of a unique personal identification number [the Central Personal Register (CPR) number], assigned to legal residents at birth or upon immigration. In epidemiological research, the CPR number is encrypted using a unique code. The coded CPR number is extremely useful because it allows (1) linkage of individual-level information among all national registers, and (2) follow-up of study participants over time with accurate censoring at emigration or death. Encryption procedures guarantee that national data protection, privacy, and confidentiality requirements are fulfilled. For the current study, we used data from the Danish Civil Registration System, the Danish Medical Birth Registry, the Danish National Patient Registry, the Psychiatric Central Research Register, the National Diabetes Register, and the Danish Integrated Database for Longitudinal Labour Market Research. Further information on these registries is provided below.

Danish Civil Registration System

The Danish Civil Registration System (CRS) was established on April 2, 1968 and records the following information on all Danish residents: sex, date and place of birth, current address, marital status, spouse, parents, children, and vital statistics.
Danish Medical Birth Registry

The Danish Medical Birth Registry was established in 1968 and has been computerized since 1973. It includes a wide variety of data on maternal and child characteristics, such as gestational age, parity, date of birth, sex, singleton status, maternal smoking during pregnancy, birth weight, and Apgar score at 5 minutes.

Danish National Patient Registry

The Danish National Patient Registry was established in 1977 to record hospital discharge diagnoses from all Danish hospitals. In 1995 this Registry also began to record diagnoses from outpatient clinics and emergency departments. In Denmark, diseases have been coded according to the International Classification of Diseases, Eighth Revision (ICD-8) (1969 to 1993) and the Tenth Revision (ICD-10) (1994 onwards). On a daily basis, each hospital discharge or outpatient visit is recorded in the Registry with one primary diagnosis and potentially several secondary diagnoses, each classified according to ICD codes.

In the present study, we used the Danish National Patient Registry to identify the study population, comorbidities within the study population, and the first diagnosis of all psychiatric disorders. The occurrence of any psychiatric disorder included the following ICD-10 codes (and corresponding codes in ICD-8): F00–99 (290–315); F10–F19 (291.x9, 294.39, 303.x9, 303.20, 303.28, 303.90, 304.x9); F20–F29 (295.x9, 296.89, 297.x9, 298.29–298.99, 299.04, 299.05, 299.09, 301.83); F30–F39 (296.x9 (excluding 296.89), 298.09, 298.19, 300.19, 300.49), F40–F48 (300.x9 (excluding 300.49), 305.x9, 305.68, 307.99); F40–F48 (300.x9 (excluding 300.49), 305.x9, 305.68, 307.99); F50 (305.60, 306.50, 306.58, 306.59); F60 (301.x9 (excluding 301.19), 301.80, 301.81, 301.82, 301.84); F70–F79 (311.xx, 312.xx, 313.xx, 314.xx, 315.xx); F80–F84 (299.00, 299.01, 299.02,
Specific types of psychiatric disorders were classified into ten groups based on previous publications (Supplementary Table 1).²⁹

**Danish Psychiatric Central Research Register**

The Danish Psychiatric Central Research Register contains information on all admissions to psychiatric inpatient facilities since 1969 and information from outpatient psychiatric departments and emergency departments since 1995.⁵ Besides retrieving diagnoses of psychiatric disorders from the Danish National Patient Registry, we gathered data from the Psychiatric Central Research Register on all first occurrences of psychiatric disorders recorded in Denmark from 1978 (study start) to 2016 (study end). Thus, the same ICD-10 codes (and corresponding ICD-8 codes) obtained from the Danish National Patient Registry were used to collect data on psychiatric illnesses from the Psychiatric Central Research Register.

**Danish National Diabetes Register**

The Danish National Diabetes Register contains information on individuals diagnosed with diabetes by general practitioners and medical specialists in Denmark.⁶ The register is based on data from existing Danish health registers, including the Civil Registration System,² the Danish National Patient Registry,⁴ the National Health Insurance Service Register,¹⁰ and the Danish National Prescription Registry.¹¹ In Denmark, a diabetes diagnosis must fulfil at least one of the following criteria: (1) a diagnosis code for diabetes (ICD-8 codes: 249, 250; ICD-10 codes: E10-E11, H36.0, O24 excluding O24.4 and O24.9); (2) receipt of chiropody for diabetic conditions; (3) two redeemed prescriptions for insulin (ATC code: A10A); (4) two redeemed prescriptions for oral antidiabetics (ATC code: A10B); or (5) two blood glucose measurements per year for five consecutive years.

**Danish Integrated Database for Longitudinal Labour Market Research**

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We obtained information on educational level from the Danish Integrated Database for Longitudinal Labour Market Research (established in 1981).
Appendix 2. Diagnostic Classification of Diabetes

Information on diabetes diagnoses was collected from the Danish National Diabetes Register (1995-2016), the Danish National Patient Registry (1977-2016), and the Danish National Prescription Registry (1994-2016). In Denmark, disease diagnoses, including diabetes, are coded according to the International Classification of Diseases, Eighth Revision (ICD-8) (1969 to 1993) and Tenth Revision (ICD-10) (1994 onwards). Anatomical Therapeutic Chemical (ATC) classification codes also were used in the study.

In the present study, the exposure “maternal diabetes during pregnancy” was categorized into gestational diabetes and pregestational diabetes. We used the following codes to identify gestational diabetes: ICD-10: O24.4, O24.9; ICD-8: 634.74. To identify pregestational diabetes, we applied the following criteria: (1) a diagnosis of diabetes coded as: ICD-10: E10-E11, H36.0, O24 excluding O24.4 and O24.9; ICD-8: 249, 250; (2) receipt of chiropody for diabetic conditions; (3) two redeemed prescriptions for insulin (ATC code: A10A); or (4) two redeemed prescriptions for oral antidiabetics (ATC code: A10B). Blood glucose measurements were not used due to their poor validity. Further, pregestational diabetes was classified as type 1 (ICD-10 codes: E10, O24.0; ATC code: A10A; ICD-8 code: 249) or type 2 (ICD-10 codes: E11, O24.1; ATC code: A10B; ICD-8 code: 250).

Pregestational diabetes was defined as the diagnosis of type 1 or type 2 diabetes before giving birth rather than before conception, because preexisting but unrecognized diabetes was likely to be identified and registered during pregnancy. Because diabetes was recorded using a single code (250) during 1977-1986, we used two approaches to distinguish between type 1 and type 2 diabetes during that period: (1) a specific code for type 1 or type 2 diabetes applied later in time; or (2) age of diabetes onset [cut-off age for type 1: <30 years and cut-off age for type 2: ≥30 years]. If a
woman was diagnosed with multiple types of diabetes during one pregnancy, she was classified according to the type that was diagnosed first. Once a woman was diagnosed with the specific code for type 1 or type 2 diabetes, she retained this diagnosis for any subsequent pregnancy. A mother diagnosed with gestational diabetes in one pregnancy was not assumed to have gestational diabetes or preexisting diabetes in future pregnancies in the absence of a subsequent diagnosis.
eAppendix 3. Detailed Description of Covariates and Missing Data Analysis

In the current study, we included relevant covariates (maternal and birth characteristics and sociodemographic variables) that could be related to both maternal diabetes and development of psychiatric disorders, in order to minimise bias due to potential confounding.\textsuperscript{13} We gathered information on maternal and birth characteristics from the Danish Medical Birth Registry,\textsuperscript{3} and sociodemographic information from the Danish Civil Registration System\textsuperscript{2} and the Danish Integrated Database for Longitudinal Labour Market Research.\textsuperscript{7} Data on maternal and paternal history of any psychiatric disorders were collected from the Danish National Patient Registry\textsuperscript{4} and the Psychiatric Central Research Register.\textsuperscript{5} Additional maternal characteristics included age (<20, 20-24, 25-29, 30-34, or ≥35 years), parity (1, 2, or ≥3 children), cohabitation (single or multiple), educational level (0-9, 10-14, or ≥15 years), residence (Copenhagen, cities with ≥100,000 inhabitants, or other), and smoking during pregnancy (yes or no). We also included singleton delivery (yes or no), sex of offspring (male or female), age of offspring as the time-scale, and calendar period of delivery (before 1980, or 5-year intervals during 1981-2016). Age of offspring and calendar period of birth were treated as time-varying variables.

Our missing data analysis indicated that, in the final study population, there were no missing values for maternal age, maternal and paternal history of psychiatric disorders, singleton status, parity, maternal age at childbirth, maternal residency, and offspring age (Table 1). However, some values were missing for offspring sex [9 (0.0%)], maternal educational level [54 894 (5.0%)], maternal smoking during pregnancy [808 543 (34.9%)], and maternal cohabitation [3339 (0.0%)]. We handled missing data by performing listwise deletion. In addition, in a sensitivity analysis, we imputed all missing values for covariates by applying multiple imputation techniques (eTable 2).\textsuperscript{14,15} The SAS statements proc mi, and proc mianalyze were used to conduct multiple imputations.\textsuperscript{16}
### eTable 1. Diagnostic Classification of Psychiatric Disorders According to ICD-10 and ICD-8 Equivalents

| Psychiatric disorders, \(^8\) | Abbreviation | ICD-10 | ICD-8 equivalents | Start of follow-up (earliest possible age at onset, years) | No. of incident cases during follow-up |
|-------------------------------|--------------|---------|-------------------|-----------------------------------------------------------|---------------------------------------|
| Any psychiatric disorder      | Any psychiatric disorder | F00–F99 | 290–315 | 1 | 151 208 |
| Psychiatric and behavioural disorders due to psychoactive substance use, e.g., use of alcohol, cannabis, cocaine, opioids, etc. | Substance use disorders | F10–F19 | 291.x9, 294.39, 303.x9, 303.20, 303.28, 303.90, 304.x9 | 10 | 64 328 |
| Schizophrenia and related disorders, e.g., schizoaffective disorders and other psychotic disorders | Schizophrenia | F20–F29 | 295.x9, 296.89, 297.x9, 298.29–298.99, 299.04, 299.05, 299.09, 301.83 | 10 | 3825 |
| Mood disorders, e.g., bipolar, and depressive disorders | Mood disorders | F30–F39 | 296.x9 (excluding 296.89), 298.09, 298.19, 300.19, 300.49 | 10 | 10 088 |
| Anxiety disorders, e.g., neurotic, stress-related, and somatoform disorders: anxiety due to phobias, and obsessive-compulsive disorders | Anxiety disorders | F40–F48 | 300.x9 (excluding 300.49), 305.x9, 305.68, 307.99 | 5 | 25 078 |
| Eating disorders, e.g., anorexia and bulimia nervosa | Eating disorders | F50 | 305.60, 306.50, 306.58, 306.59 | 1 | 5625 |
| Specific personality disorders | Personality disorders | F60 | 301.x9 (excluding 301.19), 301.80, 301.81, 301.82, 301.84 | 10 | 2521 |
| Intellectual disabilities | Intellectual disorders | F70–F79 | 311.xx, 312.xx, 313.xx, 314.xx, 315.xx | 1 | 8148 |
| Developmental disorders e.g., language and scholastic skill deficits, autism spectrum disorders | Developmental disorders | F80–F84 | 299.00, 299.01, 299.02, 299.03 | 1 | 11 125 |
| Behavioural and emotional disorders, e.g., attention-deficit hyperactivity disorder, conduct disorders, emotional disorders | Behavioural disorders | F90–F98 | 306.x9, 308.0x | 1 | 29 094 |

Abbreviations: ICD-10 = International Classification of Diseases, Tenth Revision; ICD-8 = Danish modification of the International Classification of Diseases, Eighth Revision; x9 = numbers that end in 9; xx = any number in between; 0x = numbers that start with 0.
eTable 2. Exposure Classification of Maternal Diabetes During Pregnancy According to ICD-10 and ICD-8 Equivalents

| Maternal diabetes during pregnancy | Abbreviation | ICD-10 | ICD-8 equivalents |
|-----------------------------------|--------------|--------|-------------------|
| Pregestational diabetes melitus   | PGDM         | E10-E11, H36.0, O24 excluding O24.4 and O24.9; A10A; A10B | 249, 250 |
| Type 1                            | PGDM type 1  | E10, O24.0; A10A | 249 |
| Type 2                            | PGDM type 2  | E11, O24.1; A10B | 250 |
| Gestational diabetes melitus      | GDM          | O24.4; O24.9    | 634.74 |

Abbreviations: ICD-10 = International Classification of Diseases, Tenth Revision; ICD-8 = Danish modification of the International Classification of Diseases, Eighth Revision.
**eTable 3. Incidence Rates (IRs) of Psychiatric Disorders in Offspring per 10 000 Person-Years by Exposure to Maternal Diabetes During Pregnancy, Denmark, 1978-2016 (N = 2 413 335)**

| Outcome/Exposure                  | No. of Events | IR/10 000 person-years |
|-----------------------------------|---------------|------------------------|
| **Any psychiatric disorder**      |               |                        |
| Maternal diabetes                 |               |                        |
| No                                | 146 053       | 35.8                   |
| Yes                               | 1964          | 38.0                   |
| PGDM                              | 1227          | 38.7                   |
| Type 1                            | 850           | 38.0                   |
| Type 2                            | 377           | 42.1                   |
| GDM                               | 737           | 36.5                   |
| **Substance use disorders**       |               |                        |
| Maternal diabetes                 |               |                        |
| No                                | 63 845        | 27.1                   |
| Yes                               | 483           | 24.1                   |
| PGDM                              | 366           | 25.9                   |
| Type 1                            | 237           | 25.3                   |
| Type 2                            | 129           | 27.1                   |
| GDM                               | 117           | 19.8                   |
| **Schizophrenia**                 |               |                        |
| Maternal diabetes                 |               |                        |
| No                                | 3780          | 1.5                    |
| Yes                               | 45            | 2.2                    |
| PGDM                              | 32            | 2.2                    |
| Type 1                            | 25            | 2.6                    |
| Type 2                            | 7             | 1.4                    |
| GDM                               | 13            | 2.1                    |
| **Mood disorders**                |               |                        |
| Maternal diabetes                 |               |                        |
| No                                | 10 105        | 4.2                    |
| Yes                               | 73            | 3.5                    |
| PGDM                              | 61            | 4.2                    |
| Type 1                            | 37            | 3.8                    |
| Type 2                            | 24            | 4.9                    |
| GDM                               | 12            | 2.0                    |
| **Anxiety disorders**             |               |                        |
| Maternal diabetes                 |               |                        |
| No                                | 24 760        | 7.4                    |
| Yes                               | 318           | 8.9                    |
| PGDM                              | 199           | 8.6                    |
| Type 1                            | 139           | 8.6                    |
| Type 2                            | 60            | 8.5                    |
| GDM                               | 119           | 9.5                    |
| **Eating disorders**              |               |                        |
| Maternal diabetes                 |               |                        |
| No                                | 5539          | 1.3                    |
| Yes                               | 36            | 1.6                    |
| PGDM                              | 56            | 1.7                    |
| Type 1                            | 39            | 1.6                    |
| Type 2                            | 17            | 1.8                    |
| GDM                               | 30            | 1.4                    |
| **Personality disorders**         |               |                        |
| Maternal diabetes                 |               |                        |
| No                                | 2499          | 1.0                    |
| Yes                               | 22            | 1.0                    |
| PGDM                              | 15            | 1.0                    |
| Type 1                            | 10            | 1.0                    |
| Type 2                            | 5             | 1.0                    |
| GDM                               | 7             | 1.1                    |
| **Intellectual disabilities**     |               |                        |
| Maternal diabetes                 |               |                        |
| No                                | 7979          | 1.8                    |
| Yes                               | 169           | 3.1                    |
| PGDM                              | 101           | 3.1                    |
| Type 1                            | 75            | 3.2                    |
| Type 2                            | 26            | 2.8                    |
| GDM                               | 73            | 3.5                    |
| **Developmental disorders**       |               |                        |
| Maternal diabetes                 |               |                        |
| No                                | 10 819        | 2.5                    |
| Yes                               | 306           | 5.7                    |
| PGDM                              | 149           | 4.5                    |

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| Type   | No. of Events | IR/10,000 person-years |
|--------|---------------|------------------------|
| Type 1 | 104           | 4.3                    |
| Type 2 | 49            | 5.1                    |
| GDM    | 157           | 7.6                    |

| Outcome/Exposure | No. of Events | IR/10 000 person-years |
|------------------|---------------|-------------------------|
| Behavioural disorders |               |                         |
| Maternal diabetes |               |                         |
| No               | 28,480        | 6.8                     |
| Yes              | 614           | 11.6                    |
| PGDM             | 338           | 10.4                    |
| Type 1           | 260           | 11.2                    |
| Type 2           | 78            | 8.4                     |
| GDM              | 276           | 13.4                    |

Abbreviations: PGDM = Pregestational diabetes mellitus; GDM = Gestational diabetes mellitus; IR = incidence rate.
| Outcome/Exposure                      | HR (95% CI) * |
|--------------------------------------|---------------|
| Any psychiatric disorder             |               |
| Maternal diabetes                    |               |
| No                                   | 1.0 (ref)     |
| Yes                                  | 1.14 (1.09–1.20) |
| PGDM                                 | 1.09 (1.06–1.12) |
| Type 1                               | 1.13 (1.06–1.20) |
| Type 2                               | 1.13 (1.04–1.17) |
| GDM                                  | 1.06 (1.04–1.08) |
| Substance use disorders               |               |
| Maternal diabetes                    |               |
| No                                   | 1.0 (ref)     |
| Yes                                  | 0.88 (0.70–1.06) |
| PGDM                                 | 0.98 (0.90–1.03) |
| Type 1                               | 1.00 (0.90–1.05) |
| Type 2                               | 0.94 (0.79–1.02) |
| GDM                                  | 0.98 (0.93–1.02) |
| Schizophrenia                        |               |
| Maternal diabetes                    |               |
| No                                   | 1.0 (ref)     |
| Yes                                  | 1.54 (1.15–2.07) |
| PGDM                                 | 1.39 (1.12–1.72) |
| Type 1                               | 1.84 (1.24–2.72) |
| Type 2                               | 0.83 (0.40–1.75) |
| GDM                                  | 1.20 (1.04–1.40) |
| Mood disorders                        |               |
| Maternal diabetes                    |               |
| No                                   | 1.0 (ref)     |
| Yes                                  | 0.97 (0.80–1.30) |
| PGDM                                 | 1.00 (0.80–1.20) |
| Type 1                               | 1.06 (0.76–1.16) |
| Type 2                               | 1.10 (0.74–1.35) |
| GDM                                  | 1.00 (0.87–1.13) |
| Anxiety disorders                     |               |
| Maternal diabetes                    |               |
| No                                   | 1.0 (ref)     |
| Yes                                  | 1.21 (1.09–1.36) |
| PGDM                                 | 1.15 (1.07–1.25) |
| Type 1                               | 1.17 (1.00–1.35) |
| Type 2                               | 1.11 (0.86–1.44) |
| GDM                                  | 1.10 (1.04–1.16) |
| Eating disorders                      |               |
| Maternal diabetes                    |               |
| No                                   | 1.0 (ref)     |
| Yes                                  | 1.22 (0.99–1.51) |
| PGDM                                 | 1.11 (0.97–1.29) |
| Type 1                               | 1.26 (0.92–1.52) |
| Type 2                               | 1.36 (0.85–2.19) |
| GDM                                  | 1.07 (0.98–1.18) |
| Personality disorders                 |               |
| Maternal diabetes                    |               |
| No                                   | 1.0 (ref)     |
| Yes                                  | 1.10 (0.63–1.68) |
| PGDM                                 | 1.11 (0.78–1.51) |
| Type 1                               | 1.06 (0.57–1.77) |
| Type 2                               | 0.93 (0.39–2.23) |
| GDM                                  | 1.07 (0.86–1.31) |
| Intellectual disabilities            |               |
| Maternal diabetes                    |               |
| No                                   | 1.0 (ref)     |
| Yes                                  | 1.29 (1.11–1.50) |
| PGDM                                 | 1.17 (1.11–1.50) |
| Type 1                               | 1.35 (1.07–1.50) |
| Type 2                               | 1.17 (0.79–1.73) |
| GDM                                  | 1.10 (1.03–1.18) |
| Developmental disorders               |               |
| Maternal diabetes                    |               |
| No                                   | 1.0 (ref)     |
| Yes                                  | 1.14 (1.02–1.27) |

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Table 4. Associations Between Maternal Diabetes During Pregnancy and Psychiatric Disorders in Offspring by Multiple Imputation.
| Outcome/Exposure | HR (95% CI) |
|-----------------|-------------|
| PGDM            | 1.09 (1.02–1.17) |
| Type 1          | 0.95 (0.78–1.16) |
| Type 2          | 1.51 (1.14–1.90) |
| GDM             | 1.07 (1.02–1.12) |

**Behavioural disorders**

| Maternal diabetes | HR (95% CI) |
|-------------------|-------------|
| No                | 1.0 (ref)   |
| Yes               | 1.14 (1.05–1.24) |
| PGDM              | 1.08 (1.03–1.14) |
| Type 1            | 1.17 (1.03–1.32) |
| Type 2            | 1.15 (0.92–1.44) |
| GDM               | 1.05 (1.02–1.09) |

Abbreviations: PGDM = Pregestational diabetes mellitus; GDM = Gestational diabetes mellitus; HR = hazard ratio; CI = confidence interval

*Cox regression model included maternal diabetes, maternal and paternal history of any psychiatric disorder, calendar period of birth, sex, singleton status, parity, maternal educational level, maternal smoking, maternal cohabitation, maternal residence at birth, maternal age, and offspring age as the time-scale.*
eTable 5. Associations Between Maternal Diabetes During Pregnancy and Psychiatric Disorders in Offspring, Additionally Adjusted by Maternal Body Mass Index (BMI)

| Outcome/Exposure                  | HR (95% CI) * |
|-----------------------------------|--------------|
| **Any psychiatric disorder**      |              |
| Maternal diabetes                 |              |
| No                                | 1.0 (ref)    |
| Yes                               | 1.13 (1.07–1.20) |
| PGDM                             | 1.12 (1.04–1.21) |
| Type 1                            | 1.09 (1.01–1.19) |
| Type 2                            | 1.28 (1.10–1.48) |
| GDM                              | 1.14 (1.05–1.24) |
| **Substance use disorders**       |              |
| Maternal diabetes                 |              |
| No                                | 1.0 (ref)    |
| Yes                               | 0.93 (0.80–1.08) |
| PGDM                             | 0.92 (0.75–1.11) |
| Type 1                            | 0.90 (0.71–1.14) |
| Type 2                            | 0.92 (0.63–1.34) |
| GDM                              | 0.95 (0.76–1.19) |
| **Schizophrenia**                 |              |
| Maternal diabetes                 |              |
| No                                | 1.0 (ref)    |
| Yes                               | 1.43 (0.84–2.43) |
| PGDM                             | 0.88 (0.37–2.12) |
| Type 1                            | 0.97 (0.37–2.60) |
| Type 2                            | 0.64 (0.10–4.52) |
| GDM                              | 2.20 (1.14–4.24) |
| **Mood disorders**                |              |
| Maternal diabetes                 |              |
| No                                | 1.0 (ref)    |
| Yes                               | 0.91 (0.55–1.48) |
| PGDM                             | 0.96 (0.52–1.79) |
| Type 1                            | 1.21 (0.63–2.33) |
| Type 2                            | 0.34 (0.05–2.39) |
| GDM                              | 0.82 (0.37–1.83) |
| **Anxiety disorders**             |              |
| Maternal diabetes                 |              |
| No                                | 1.0 (ref)    |
| Yes                               | 1.20 (1.04–1.39) |
| PGDM                             | 1.11 (0.89–1.39) |
| Type 1                            | 1.16 (0.94–1.44) |
| Type 2                            | 0.96 (0.60–1.52) |
| GDM                              | 1.40 (1.15–1.70) |
| **Eating disorders**              |              |
| Maternal diabetes                 |              |
| No                                | 1.0 (ref)    |
| Yes                               | 1.28 (1.00–1.67) |
| PGDM                             | 1.36 (0.97–1.90) |
| Type 1                            | 1.36 (0.93–2.00) |
| Type 2                            | 1.33 (0.63–2.80) |
| GDM                              | 1.21 (0.82–1.78) |
| **Personality disorders**         |              |
| Maternal diabetes                 |              |
| No                                | 1.0 (ref)    |
| Yes                               | 1.22 (0.61–2.46) |
| PGDM                             | 0.51 (0.13–2.04) |
| Type 1                            | 0.36 (0.10–2.55) |
| Type 2                            | 0.88 (0.12–6.26) |
| GDM                              | 2.29 (1.02–5.14) |
| **Intellectual disabilities**     |              |
| Maternal diabetes                 |              |
| No                                | 1.0 (ref)    |
| Yes                               | 1.32 (1.10–1.60) |
| PGDM                             | 1.37 (1.06–1.78) |
| Type 1                            | 1.35 (1.00–1.82) |
| Type 2                            | 1.42 (0.84–2.40) |
| GDM                              | 1.28 (0.98–1.67) |
| **Developmental disorders**       |              |
| Maternal diabetes                 |              |
| No                                | 1.0 (ref)    |
| Yes                               | 1.14 (1.01–1.30) |
| PGDM                             | 1.09 (0.92–1.31) |

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| Type     | Risk Ratio (95% CI) |
|----------|---------------------|
| Type 1   | 0.94 (0.75–1.17)    |
| Type 2   | 1.65 (1.21–2.26)    |
| GDM      | 1.19 (1.00–1.42)    |
| Outcome/Exposure          | No. of Events | HR (95% CI) *
|--------------------------|--------------|----------------
| Maternal diabetes        |              |                
| No                       | 28,478       | 1.0 (ref)      
| Yes                      | 614          | 1.12 (1.03–1.23) |
| PGDM                     | 338          | 1.10 (0.98–1.26) |
| Type 1                   | 260          | 1.12 (0.98–1.28) |
| Type 2                   | 78           | 1.07 (0.80–1.42) |
| GDM                      | 276          | 1.14 (1.02–1.30) |

Abbreviations: PGDM = Pregestational diabetes mellitus; GDM = Gestational diabetes mellitus; HR = hazard ratio; CI = confidence interval

*Cox regression model included maternal diabetes, maternal and paternal history of any psychiatric disorder, calendar period of birth, sex, singleton status, parity, maternal educational level, maternal smoking, maternal cohabitation, maternal residence at birth, maternal age, offspring age as the time-scale, and maternal BMI.
eTable 6. Sibship Design

| Outcome/Exposure | HR (95% CI) a |
|------------------|--------------|
| Any psychiatric disorder |              |
| Maternal diabetes |              |
| No | 1.0 (ref) |
| Yes | 0.98 (0.88–1.09) |
| PGDM | 0.96 (0.82–1.13) |
| Type 1 | 1.09 (1.01–1.19) |
| Type 2 | 1.28 (1.10–1.48) |
| GDM | 1.00 (0.87–1.12) |

a Cox regression model included maternal diabetes, maternal and paternal history of any psychiatric disorder, calendar period of birth, sex, singleton status, parity, maternal educational level, maternal smoking, maternal cohabitation, maternal residence at birth, maternal age, and offspring age as the time-scale.
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