

**Supplementary Materials for the manuscript entitled “Influence of the Month of Birth on Persistence of ADHD in Prospective Studies:
Protocol for an Individual Patient Data Meta-Analysis”**

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This file includes:

S1. Supplemental Table: PRISMA-P checklist

S2. Supplemental Text: Search strategy

Supplemental Table 1: PRISMA-P checklist

| Section and topic | Item No | Checklist item | |
|-----------------------------------|---------|---|---|
| ADMINISTRATIVE INFORMATION | | | |
| Title: | | | |
| Identification | 1a | Identify the report as a protocol of a systematic review | P.5: Influence of the Month of Birth on Persistence of ADHD in Prospective Studies: Protocol for an Individual Patient Data Meta-Analysis |
| Update | 1b | If the protocol is for an update of a previous systematic review, identify as such | N/A |
| Registration | 2 | If registered, provide the name of the registry (such as PROSPERO) and registration number | N/A |
| Authors: | | | |
| Contact | 3a | Provide name, institutional affiliation, e-mail address of all protocol authors; provide physical mailing address of corresponding author | P.1 |
| Contributions | 3b | Describe contributions of protocol authors and identify the guarantor of the review | P12: "Contributors: all authors contributed to drafting this protocol." |
| Amendments | 4 | If the protocol represents an amendment of a previously completed or published protocol, identify as such and list changes; otherwise, state plan for documenting important protocol amendments | N/A |
| Support: | | | |

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| Sources | 5a | Indicate sources of financial or other support for the review | P.13: "Funding: This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors." |
| Sponsor | 5b | Provide name for the review funder and/or sponsor | N/A |
| Role of sponsor or funder | 5c | Describe roles of funder(s), sponsor(s), and/or institution(s), if any, in developing the protocol | N/A |
| INTRODUCTION | | | |
| Rationale | 6 | Describe the rationale for the review in the context of what is already known | P.5-6 |
| Objectives | 7 | Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO) | P.6: <i>"The aim of the present study will be to quantify the role of month of birth as a possible factor contributing to the low persistence of ADHD throughout the lifespan. To this end, we will perform a systematic review of prospective observational studies assessing the persistence of ADHD with increased age and, through an individual patient data (IPD) meta-analysis, we will quantify the magnitude of the month-of-birth effect on the persistence of ADHD."</i> |
| METHODS | | | |
| Eligibility criteria | 8 | Specify the study characteristics (such as PICO, study design, setting, time frame) and report characteristics (such as years considered, language, publication status) to be used as criteria for eligibility for the review | P.7-8 |
| Information sources | 9 | Describe all intended information sources (such as electronic databases, contact with study authors, trial registers or other grey | P.8: <i>In order to identify relevant studies, we will search five main databases (MEDLINE, Embase, CINAHL, PsycInfo and PubPsych). The search will be from inception up to September 2020. We will use controlled vocabulary (when available) and free text to search for two constructs, namely, 'ADHD' and 'prospective studies' (see Supplemental Text 1). No date, publication type or language restriction will be applied.</i> |

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| | | literature sources) with planned dates of coverage | |
| Search strategy | 10 | Present draft of search strategy to be used for at least one electronic database, including planned limits, such that it could be repeated | Supplementary Materials 1. |
| Study records: | | | |
| Data management | 11a | Describe the mechanism(s) that will be used to manage records and data throughout the review | P.8-9 |
| Selection process | 11b | State the process that will be used for selecting studies (such as two independent reviewers) through each phase of the review (that is, screening, eligibility and inclusion in meta-analysis) | P.8-9 |
| Data collection process | 11c | Describe planned method of extracting data from reports (such as piloting forms, done independently, in duplicate), any processes for obtaining and confirming data from investigators | P.8-9 |
| Data items | 12 | List and define all variables for which data will be sought (such as PICO items, funding sources), any pre-planned data assumptions and simplifications | P.8-9 |
| Outcomes and prioritization | 13 | List and define all outcomes for which data will be sought, including prioritization of main | P7: "Outcome. The primary and only study outcome of the present study will be a categorical diagnosis of ADHD, consistent with standard classifications (as defined above). This diagnosis at follow-up should be |

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| | | and additional outcomes, with rationale | <i>performed at least four years after the diagnosis at baseline, and should have occurred after the child has reached the age of 10."</i> |
| Risk of bias in individual studies | 14 | Describe anticipated methods for assessing risk of bias of individual studies, including whether this will be done at the outcome or study level, or both; state how this information will be used in data synthesis | <i>P.9: "The risk of bias of the included studies will be assessed based upon the Newcastle Ottawa Scale – cohort studies by two reviewers"</i> |
| Data synthesis | 15a | Describe criteria under which study data will be quantitatively synthesised | <i>P10: "No quantitative analysis will be performed for individual studies including less than 10 participants (and no sensitivity analysis will be performed for conditions including less than 10 participants). Meta-analysis will be performed for synthesizing data from, at least, five studies (Jackson et al., 2017). If data are acquired for less than five studies, they will be described qualitatively. No moderation analysis or publication bias analysis will be performed for less than 10 studies (Higgins, 2011). We anticipate that a number of studies will meet inclusion criteria but will not be included in quantitative analysis (for example, because month of birth will not be recorded, because we will not be able to obtain response from study authors, because the sample size was too small, etc...). Characteristics of eligible studies included in quantitative analysis will be compared to those not included in quantitative analysis."</i> |
| | 15b | If data are appropriate for quantitative synthesis, describe planned summary measures, methods of handling data and methods of combining data from studies, including any planned exploration of consistency (such as I^2 , Kendall's τ) | P. 10-12 |
| | 15c | Describe any proposed additional analyses (such as sensitivity or subgroup analyses, meta-regression) | P-11-12 |

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| | 15d | If quantitative synthesis is not appropriate, describe the type of summary planned | P10: "Meta-analysis will be performed for synthesizing data from, at least, five studies (Jackson et al., 2017). If data are acquired for less studies, they will be described qualitatively." |
| Meta-bias(es) | 16 | Specify any planned assessment of meta-bias(es) (such as publication bias across studies, selective reporting within studies) | P.11-12 |
| Confidence in cumulative evidence | 17 | Describe how the strength of the body of evidence will be assessed (such as GRADE) | N/A |

*** It is strongly recommended that this checklist be read in conjunction with the PRISMA-P Explanation and Elaboration (cite when available) for important clarification on the items. Amendments to a review protocol should be tracked and dated. The copyright for PRISMA-P (including checklist) is held by the PRISMA-P Group and is distributed under a Creative Commons Attribution Licence 4.0.**

From: Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart L, PRISMA-P Group. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. BMJ. 2015 Jan 2;349(jan02 1):g7647.

S2. Supplemental Text: Search strategy

For Medline database:

((“Attention Deficit Disorder with Hyperactivity”[mh]) OR (attention* deficit*[tw]) OR (ADHD[tw]) OR (hyperactive disorder*[tw]) OR (hyperkine*[tw])) AND (("Prospective Studies"[mh]) OR ("Follow-Up Studies"[mh]) OR ("Longitudinal Studies"[mh]) OR (follow up[tw]) OR (prospective[tw]) OR (longitudinal[tw]) OR (persist*[tw]) OR (remiss*[tw]) OR (stab*[tw]))

No date, publication type or language restriction will be applied.