

Current Landscape and Overview of Gastrointestinal Health in Indonesian Children: A Scoping Review



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PRISMA 2020 CHECKLIST

| Section and Topic | Item # | Checklist Item | Location where Item is Reported |
|---------------------|--------|--|--|
| TITLE | | | |
| Title | 1 | Identify the report as a systematic review. | Page 1 "Current Landscape and Overview of Gastrointestinal Health in Indonesian Children: A Scoping Review" |
| ABSTRACT | | | |
| Abstract | 2 | See the PRISMA 2020 for Abstracts checklist. | Attached in separate file |
| INTRODUCTION | | | |
| Rationale | 3 | Describe the rationale for the review in the context of existing knowledge. | Page 4 "Research efforts on GI health done explicitly in Indonesia, on the other hand, had recently increased, including specific studies in children, with donors and academic institutions paying close attention to the identification, challenges, and treatment of GI health. However, it is still somewhat tedious and challenging to try and find a study that can picture the current GI health condition of children in Indonesia mostly due to small sample sizes, within the desired age group, and is longitudinally based to determine its effects on growth and development." |
| Objectives | 4 | Provide an explicit statement of the objective(s) or question(s) the review addresses. | Page 4 "This study aims to rectify that problem by providing knowledge bases through a scoping review that could describe current GI health conditions of children under five years old in Indonesia" |
| METHODS | | | |

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| Eligibility criteria | 5 | Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses. | Page 5 "The inclusion criteria for this study include [1] Children under five, [2] Children in Indonesia, [3] Studies with full text available, [4] Studies available in English or Indonesian, [5] Studies conducted in the last ten years (2012-2022). [6] Official government report. Exclusion criteria include [1] Study without a full text in English or Indonesian, [2] Study without peer review process (preprints, internal academic publications), and [3] study without the inclusion of children under five." |
| Information sources | 6 | Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted. | Page 5 "This research is a scoping review conducted via literature search in PubMed and GoogleScholar ... The literature search was done using the search terms "gastrointestinal health", "children", "under five", and "Indonesia" between the 1st-14th April 2022 by all members of the research team" |
| Search strategy | 7 | Present the full search strategies for all databases, registers and websites, including any filters and limits used. | Page 5 "In order to prevent overwhelming information from literature, this study tries to limit the search to children under five to understand the current GI health condition of children at this vulnerable age (in terms of GI development). The literature search was done using the search terms "gastrointestinal health", "children", "under five", and "Indonesia" between the 1st-14th April 2022 by all members of the research team. Boolean operators (AND, OR, NOT or AND NOT) are used whenever necessary with a combination of two or more search terms. Abstract of studies from search results were reviewed, and relevant studies were included. A shared excel document was made between the researchers to include a list of relevant studies (title, author, year of publication), which will help sort for duplicates." |
| Selection process | 8 | Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process. | Page 5 "After the search deadline ended, all relevant papers (a total of 58 studies) were gathered, sorted, discussed, and reviewed involving the research team and professors of paediatrics in Jakarta, Indonesia. The experts were asked to review whether information from the study is valid and relevant in actual daily practice." |
| Data collection process | 9 | Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process. | Page 5 "Abstract of studies from search results were reviewed, and relevant studies were included. A shared excel document was made between the researchers to include a list of relevant studies (title, author, year of publication), which will help sort for duplicates." |
| Data items | 10a | List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect. | Page 5 "After the search deadline ended, all relevant papers (a total of 58 studies) were gathered, sorted, discussed, and reviewed involving the research team and professors of paediatrics in Jakarta, Indonesia. The experts were asked to review whether information from the study is valid and relevant in actual daily practice." |
| | 10b | List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information. | Not applicable |
| Study risk of bias assessment | 11 | Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process. | Page 5 "After the search deadline ended, all relevant papers (a total of 58 studies) were gathered, sorted, discussed, and reviewed involving the research team and professors of paediatrics in Jakarta, Indonesia. The experts were asked to review whether information from the study is valid and relevant in actual daily practice." |
| Effect measures | 12 | Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results. | Not applicable |
| Synthesis methods | 13a | Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)). | Not applicable |

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| Synthesis methods | 13b | Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions. | Not applicable |
| Synthesis methods | 13c | Describe any methods used to tabulate or visually display results of individual studies and syntheses. | Not applicable |
| Synthesis methods | 13d | Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used. | Not applicable |
| Synthesis methods | 13e | Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression). | Not applicable |
| Synthesis methods | 13f | Describe any sensitivity analyses conducted to assess robustness of the synthesized results. | Not applicable |
| Reporting bias assessment | 14 | Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases). | Not applicable |
| Certainty assessment | 15 | Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome. | Not applicable |
| RESULTS | | | - |
| Study selection | 16a | Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram. | Page 5 "After the search deadline ended, all relevant papers (a total of 58 studies) were gathered" |
| | 16b | Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded. | Not applicable |
| Study characteristics | 17 | Cite each included study and present its characteristics. | Page 8-10 |
| Risk of bias in studies | 18 | Present assessments of risk of bias for each included study. | Not applicable |
| Results of individual studies | 19 | For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots. | Page 8-10 |
| Results of syntheses | 20a | For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies. | Not applicable |
| | 20b | Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect. | Not applicable |
| | 20c | Present results of all investigations of possible causes of heterogeneity among study results. | Not applicable |
| | 20d | Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results. | Not applicable |
| Reporting biases | 21 | Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed. | Not applicable |
| Certainty of evidence | 22 | Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed. | Not applicable |
| DISCUSSION | | | - |
| Discussion | 23a | Provide a general interpretation of the results in the context of other evidence. | Page 18 |
| Discussion | 23b | Discuss any limitations of the evidence included in the review. | Page 21 "Most epidemiological studies conducted in Indonesia are published in a local journal or university's internal database (paper without peer review) that is not indexed in PubMed; finding these studies requires a manual search in Google which demands extra time and attention" |
| Discussion | 23c | Discuss any limitations of the review processes used. | Page 21 "Most epidemiological studies conducted in Indonesia are published in a local journal or university's internal database (paper without peer review) that is not indexed in PubMed; finding these studies requires a manual search in Google which demands extra time and attention" |

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| Discussion | 23d | Discuss implications of the results for practice, policy, and future research. | Page 21-22 " ... seeing how the impact of GI health is paramount to the development of children, the creation of an ad-hoc medical report concentrating on GI health would be beneficial for improving the country's health condition. Future research involving an expert interview on the topic featuring pediatricians, internists, clinical nutritionists, and general practitioners is recommended to further an understanding of the current GI health of children in Indonesia." |
| OTHER INFORMATION | | | - |
| Registration and protocol | 24a | Provide registration information for the review, including register name and registration number, or state that the review was not registered. | Not applicable |
| | 24b | Indicate where the review protocol can be accessed, or state that a protocol was not prepared. | Not applicable |
| | 24c | Describe and explain any amendments to information provided at registration or in the protocol. | Not applicable |
| Support | 25 | Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review. | Page 23 "Funding This review supported by Danone Specialized Nutrition Indonesia" |
| Competing interests | 26 | Declare any competing interests of review authors. | Page 23 "Conflicts of interest R.W.B., C.D., T.S. and E.W. are employees of Danone Specialized Nutrition Indonesia, the rest of authors declare no conflict of interest." |
| Availability of data, code and other materials | 27 | Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review. | Not applicable |

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, *et al.* The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71

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