Citation

Lynn Buckley, Katherine Harford, Nicola Cornally, Louise Gibson, Margaret Curtin. The impact of community-based paediatric clinics on the developmental outcomes of children living in disadvantaged communities: A Systematic Review Protocol. PROSPERO 2021 CRD42021243889 Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42021243889

Review question

What are the impacts of community-based paediatric clinics on the developmental outcomes of children living in disadvantaged communities?

Searches

Five electronic databases will be searched: MEDLINE, Embase, Scopus, CINAHL, and PubMed. Google Scholar, Mendeley Archive and the UCC Boole Library archive will also be searched. The database search will be supplemented by a review of reference lists, hand-searching of key journals, and contacting authors of conference abstracts and key authors in the field.

Search dates: 01-Jan-2021 to 01-Apr-2021

Restrictions: No language or publication date restrictions will be applied.

All searches carried out will be re-run prior to final analysis to ensure identification of newly published research.

Unpublished studies will not be sought.

Types of study to be included

Studies will be eligible for inclusion if they are published, peer-reviewed studies. All empirical study designs (quantitative, qualitative and mixed method) will be included in order to achieve the multi-faceted research aim and objectives. Given the nature of the research question, it is anticipated that a range of study design types will emerge. Mixed method studies will be included only if quantitative and qualitative findings can be extracted separately.

Condition or domain being studied

Community-based paediatric clinics. Developmental outcomes of children living in disadvantaged areas.

Children living in disadvantaged communities have substantially increased risk for deleterious health and development outcomes. Given the multiplicity of health risks associated with social disadvantage, strategies to promote child health and well-being go beyond the traditional medical-based setting and involve community-wide strategies that change the broader environments in which children live. Community-based paediatric clinics provide medical treatment to unwell children as well as delivering child health promotion services, counselling and advice to caregivers, and referral to other health professionals. Research has found that a considerable proportion of developmental delay is avoidable, and if children do not receive appropriate treatment within the critical period of the first 1000 days, damage may be irreparable. A number of studies have been conducted on the impact of community paediatric clinics, particularly in terms of early identification of developmental delay and intervention. A systematic review of the evidence has yet to be

conducted. The aim of this study is to provide a synthesis of available quantitative and qualitative data regarding the impact of community-based paediatric clinics on the developmental outcomes of children living in disadvantaged communities.

Participants/population

Studies will be eligible for inclusion if:

• They explore the impact of community-based paediatric clinics on the developmental outcomes of children (aged 0-12 years) living in disadvantaged communities. The nature of the developmental outcomes of interest for this review; physical growth and development, intellectual, language, emotional and social development; pertain to children aged 0-6 years predominantly but we acknowledge that it is sometimes difficult to assign an age range to child development.

Studies will be excluded if:

• They focus on an adult population or children over the age of 12 years

• They include a mixed adult-child population, and the child population cannot be separated.

Intervention(s), exposure(s)

Community-based paediatric clinics are located in the community, usually outside a tertiary centre, whose practice is focused on children and their families who visit the clinic and supporting their access to needed services within the community.

Studies will be eligible for inclusion if: they explore the impact of community-based paediatric clinics on the developmental outcomes of children (aged 0-12 years) living in disadvantaged communities.

Studies will be excluded if: They focus on community-based paediatric clinics not located in disadvantaged areas.

Comparator(s)/control

Not applicable

Context

Disadvantaged communities refer to areas which suffer most from a combination of economic, health, and environmental burdens.

Studies will be eligible for inclusion if:

• They explore the impact of community-based paediatric clinics on the developmental outcomes of children (aged 0-12 years) living in disadvantaged communities.
Studies will be excluded if:
• They focus on community-based paediatric clinics not located in disadvantaged areas.

• They focus on community-based paediatric clinics in developing countries (studies classified as ‘low’ or ‘medium’ on the human development index).

Main outcome(s)

Developmental outcomes refer to physical growth and development of the child as well as intellectual, language, emotional and social development.

Studies will be eligible for inclusion if:

• They explore the impact of community-based paediatric clinics on the developmental outcomes of children (aged 0-12 years) living in disadvantaged communities.

Studies will be excluded if:

• Developmental outcomes cannot be extracted from other child health outcomes.

Measures of effect

Review aim: to provide a synthesis of available quantitative and qualitative data regarding the impact of community-based paediatric clinics on the developmental outcomes of children living in disadvantaged communities.

Additional outcome(s)

Not applicable

Measures of effect

Not applicable

Data extraction (selection and coding)

Study Selection

Five electronic databases will be searched: MEDLINE, Embase, Scopus, CINAHL, and PubMed. These databases contain a collection of robust, high-quality peer-reviewed literature, scientific journals, books and conference proceedings across a range of medical and health-related research fields. Google Scholar, Mendeley Archive and the UCC Boole Library archive will also be searched. The database search will be supplemented by a review of the reference lists, hand-searching of key journals, and contacting authors of conference abstracts and key authors in the field. The PRISMA Statement will guide reporting.

Two independent reviewers will engage in a 3-stage study selection process: judging titles/abstracts against inclusion criteria; removing duplicates; and undertaking a detailed screening of full papers. Results of respective analyses will be compared following completion of each phase. Any conflicts will be resolved through discussion between reviewers. Where necessary, a third reviewer will be consulted, and a decision will be made.

Data Management

Mendeley Reference Manager will be used to import and collate studies and to generate the bibliography. *Covidence Systematic Reviewing Software* will be used to guide the process from importing saved papers from Mendeley, screening titles/abstracts, creating forms, assessing risk of bias, through to data extraction. Covidence will facilitate the two-reviewer process throughout the various stages.

Data extraction

Data on the characteristics of included studies will be extracted and entered into a purpose-built datasheet by one reviewer and checked for accuracy by the second reviewer. Characteristics data will be reported in one table and will include referencing details, methodological approach, study aims, sample size, and participant characteristics. A second table will categorise study methods, results, and conclusions. These tables will be made available as supplementary files to the systematic review. Any data extraction disagreements or discrepancies will be discussed and if necessary, a third reviewer will be consulted.

Risk of bias (quality) assessment

Quality Assessment

All retrieved articles eligible for inclusion will be subject to a quality assessment process during the data synthesis phase of the review. The following critical appraisal tools will be to assess the methodological quality of selected studies; the Critical Appraisal Skills Programme (CASP) tool will be used to appraise qualitative studies, Joanna Briggs Institute Critical Appraisal Tools will be used for quantitative studies, and The Mixed Methods Appraisal Tool (MMAT) will be used for mixed-method studies.

Assessing Confidence in Evidence

Evidence quality for quantitative studies will be assessed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach. Evidence quality for qualitative studies will be assessed using the Confidence in the Evidence from Reviews of Qualitative Research (CERQual) guidelines. Outcomes of interest include: (1) methodological limitations, (2) relevance of studies to the research question, (3) coherence of findings, and (4) adequacy of the data supporting findings. Judgements related to the four CERQual components will be summarised in a CERQual Qualitative Evidence Profile. Two authors will independently assess each of the four CERQual components. Following assessment of confidence, each study will be assigned a 'high', 'moderate', 'low', or 'very low' score, and rationale for judgements will be outlined.

Strategy for data synthesis

Data analysis & synthesis

The Segregated Framework for Mixed Method Systematic Reviews will guide data analysis and synthesis. Within this framework, the 'Integrated Design' model will be employed which will involve a mixed methods analysis, followed by a mixed research synthesis (assimilation). This 'Integrated Design' assumes that 'studies in a targeted domain are grouped for synthesis not by methods but rather by findings'. NVivo 12.0 will be used to collate findings for data analysis and synthesis phases.

Data will be analysed thematically by extracting themes and subthemes from the results sections of the included studies. Thematic analysis will be performed by two reviewers and will involve 5 stages:

1. Analysis of study aims, characteristics, methods and ethical procedures.

2. Analysis of participants' views (where applicable).

3. Analysis of authors' views.

4. Pooling codes and developing overarching themes and sub-themes: conducted independently by the two reviewers, this will take place through a process of line-by-line coding in which similar codes will be grouped together to form themes. Further review and collapsing of themes will see data synthesised to generate a set of overarching themes.

5. Interpreting the findings: synthesised findings will shed light on where qualitative themes could explain the 'why' and 'how' of the quantitative findings.

Differences regarding themes will be resolved through discussion, or through consultation with the third reviewer. Results will be reported to conform with the PRISMA Statement.

Analysis of subgroups or subsets

Not applicable

Contact details for further information

Lynn Buckley
105437687@umail.ucc.ie

Organisational affiliation of the review

University College Cork (UCC), Ireland.
Let's Grow Together! Infant & Childhood Partnerships CLG, Cork, Ireland.
www.ucc.ie

www.letsgrowtogether.ie

Review team members and their organisational affiliations

Ms Lynn Buckley. School of Nursing & Midwifery, University College Cork, Ireland.
Ms Katherine Harford. Let's Grow Together! Infant & Childhood Partnerships CLG

Dr Nicola Cornally. School of Nursing & Midwifery, University College Cork, Ireland.
Dr Louise Gibson. University College Cork
Dr Margaret Curtin. University College Cork

Type and method of review
Systematic review

Anticipated or actual start date
01 January 2021

Anticipated completion date
30 April 2021

Funding sources/sponsors
Funding is provided through Let's Grow Together! Infant & Childhood Partnerships CLG Ireland and the Irish Research Council (IRC).

Grant number(s)

State the funder, grant or award number and the date of award

Irish Research Council, Employment Based Postgraduate Programme Award, Project ID: EBPPG/2019/197, Date of award: September 2019.

Conflicts of interest

Language
English

Country
Ireland

Published protocol
https://www.crd.york.ac.uk/PROSPEROFILES/243889_PROTOCOL_20210319.pdf

Stage of review
Review Ongoing

Subject index terms status
Subject indexing assigned by CRD

Subject index terms
MeSH headings have not been applied to this record

Date of registration in PROSPERO
19 April 2021

Date of first submission
19 March 2021

Details of any existing review of the same topic by the same authors
Not applicable

Stage of review at time of this submission

Stage	Started	Completed
Preliminary searches	Yes	No
Piloting of the study selection process	Yes	No
Formal screening of search results against eligibility criteria	No	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.
The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions

19 April 2021
19 April 2021