Experiences and needs of parents following their child's admission to a PICU: a mixed methods systematic review

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Citation

Efa Apryanti, Lisa Kirwan, Greg Sheaf, Imelda Coyne. Experiences and needs of parents following their child's admission to a PICU: a mixed methods systematic review. PROSPERO 2023 CRD42023453372 Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42023453372

Review question

What are the experiences of parents following their child's admission to PICU?

What are the needs of parents following their child's admission to PICU?

Searches

Sources to be searched: MEDLINE, PsycINFO, CINAHL, and Web of Science

Restrictions: Only English-language studies published between 2003 and the present will be included to represent the current practices

Review date: Starting 20 June 2023

Types of study to be included

This proposed review will consider peer-reviewed studies using quantitative, qualitative, or mixed methods. For mixed method studies, they will be included if the data from quantitative and qualitative can be extracted separately. This review will not include any grey literature or protocols, and review of all kinds, including review protocols (reference lists will be scanned for possible results)

Condition or domain being studied

This proposed review will consider studies that explore the experiences of parents with a child admitted to a PICU, including the needs that may be embedded in the experiences

Participants/population

This review will consider studies conducted in the PICU that include parents of the patients with any medical diagnosis, length of stay, or clinical outcome. Family members like grandparents, siblings, or broader family members will not be included

Intervention(s), exposure(s)
Inclusion: Parents’ experiences and needs during their child’s stay in the PICU

Exclusion: Parents’ specific experiences and needs during the transfer between PICU and paediatric ward or end-of-life care

Comparator(s)/control

Not applicable

Context

This review will consider studies associated with PICU admissions in any paediatric critical care unit, including but not limited to General PICU, Paediatric Surgery ICU and Paediatric Cardiac ICU. In this review, there will not be a limitation on geography to gain more understanding about any difference that may arise among regions. This review will not include any study from the adult ICU or NICU

Main outcome(s)

The primary outcome of this review is to synthesise and summarise the current evidence that explores the experiences and needs of parents following their child’s admission to the PICU

Additional outcome(s)

1. To identify similarities and differences in parents’ experiences and needs across the illness trajectory of children in the PICU

2. To identify similarities and differences in experiences and needs between parents of short and long-stay patients in the PICU

3. To identify similarities and differences in experiences and needs between parents from developed and developing countries (if data is available)

4. To provide recommendations for more empathetic and reflective care and the development of appropriate support interventions for parents of PICU/PICUs patients

Data extraction (selection and coding)

Our subject librarian (GS) will search the databases using several search strings. For independent screening, all retrieved studies will be imported to Covidence (a web-based literature review tool). After eliminating duplicate citations, two reviewers (EA and LK) will independently assess the eligibility of the remaining citations. During the initial screening, each reviewer will be blinded to the judgements of the other reviewers. Disagreements will be resolved through discussion, an independent clinical academic (IC) will be involved when consensus cannot be reached.

In order to enhance the rigor of the synthesis, all eligible studies from the second screening process will undergo data extraction and synthesis, regardless of their methodological quality. The first reviewer (EA) will extract data from the studies using data extraction template which is modified based on JBI Mixed Methods Data Extraction Form following a Convergent Integrated Approach (Lizarondo et al., 2020). The process of data extraction will be done through Covidence and will be cross-checked by the second reviewer (LK) for consistency and accuracy. Any disagreements will be discussed with an independent clinical academic (IC) until consensus is achieved.

Data will be extracted from each article's results section and will include specific populations characteristics, sample sizes, details of methodology, study aim, phenomena of interest, context, and outcome measures pertinent to the review query regarding experiences and needs. When necessary, authors will be contacted to request absent or additional data for clarification.
Risk of bias (quality) assessment

As a mixed method systematic review, this proposed study will use the Mixed Methods Appraisal Tool (MMAT) (Hong et al., 2018). All included studies will be assessed using the 2018 version of MMAT. The evaluation will be appraised based on each study's methodology, the possibility of bias, study design, data collection methods, sample size, intervention integrity, and analysis. Using the MMAT, studies will be assigned a methodological rating of low (0 to 49%), fair (50 to 74%), or good (75 to 100%). No studies will be excluded on the basis of their methodology quality.

Strategy for data synthesis

To synthesise the findings of the selected studies, a qualitative convergent integrated synthesis will be employed (Stern et al., 2020). To facilitate the integration, quantitative findings will be turned into qualitative (qualitising) (Noyes et al., 2019). For this review, as proposed by Thomas and Harden (2008), a three-step thematic synthesis will be conducted. Initial inductive codes will be generated through line-by-line coding. The codes will be compared and categorized based on similarities, and subsequently organized into subcategories to form descriptive themes. The reviewers will then re-read the descriptive themes and compare them with the textual data of the included studies, which will allow the emergence of analytical themes. Through discussion among the reviewers (EA & IC), emerging themes will be solidified.

Analysis of subgroups or subsets

Not applicable

Contact details for further information

Efa Apriyanti
apriyane@tcd.ie

Organisational affiliation of the review

School of Nursing, Trinity College Dublin; Faculty of Nursing, University of Indonesia

Review team members and their organisational affiliations

Mrs Efa Apriyanti. School of Nursing and Midwifery, Trinity College Dublin; Faculty of Nursing, University of Indonesia

Mrs Lisa Kirwan. School of Nursing and Midwifery, Trinity College Dublin

Mr Greg Sheaf. Trinity College Dublin

Professor Imelda Coyne. School of Nursing and Midwifery, Trinity College Dublin

Type and method of review

Systematic review

Anticipated or actual start date

20 June 2023

Anticipated completion date

20 December 2023
Funding sources/sponsors

This review is not sponsored and will be self-funded. Nonetheless, this review will be conducted as part of a PhD scholarship awarded by Indonesia Endowment Fund for Education (LPDP), The Indonesian Ministry of Finance.

Conflicts of interest

Language

English

Country

Ireland

Stage of review

Review Ongoing

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

Child; Hospitalization; Humans; Intensive Care Units, Pediatric; Parents

Date of registration in PROSPERO

21 August 2023

Date of first submission

10 August 2023

Stage of review at time of this submission

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<tr>
<th>Stage</th>
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<tr>
<td>Preliminary searches</td>
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<td>Piloting of the study selection process</td>
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<td>Formal screening of search results against eligibility criteria</td>
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<td>Data extraction</td>
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<td>Data analysis</td>
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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
21 August 2023
21 August 2023