



# Systematic reviews on child welfare services: identifying and disseminating the evidence

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## Keywords

child welfare, dissemination, evidence-based practice, knowledge translation, plain language summary, systematic review

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Accepted for publication: 28 April 2015

doi:10.1111/jep.12391

## Abstract

**Rationale, aims and objectives** Evidence-based practice is at an early stage of uptake within child welfare services. To facilitate well-informed decisions, we disseminated evidence from systematic reviews (SR) to local child welfare stakeholders in Norway through plain language summaries on a website (<http://www.r-bup.no>).

**Method** We developed and implemented our dissemination strategy through seven steps: (1) systematic literature search; (2) selection of relevant SRs; (3) assembly of an advisory board; (4) selection of child welfare SRs relevant to Norway; (5) prioritization of the included SRs; (6) development of a plain language summary (PLS) after feedback from the advisory board; and (7) implementation of website.

**Results** A total of 9266 potentially relevant records were screened and 120 SRs were included. The advisory board was assembled from local policymakers, practitioners, researchers, carers and consumers. The advisory board members independently ranked the 120 SRs according to relevance and prioritized 20 SRs that were written up into the PLS. The format of the PLS was tested and agreed with the board members. A website was developed and the PLSs were published starting September 2014.

**Conclusion** We think that the PLSs will be valuable resources to practitioners and it will be easily accessible to caregivers and consumers. This knowledge will inform research priorities and practice in Norway, leading the way to the use of evidence-based decisions in local child welfare services.

## Introduction

Evidence-based practice ensures that the best available interventions are identified and utilized and that harmful practices are avoided. While areas such as medicine and mental health have embraced evidence-based practice, its uptake into child welfare is still at an early stage. Although the number of systematic reviews of research evidence in the field of child welfare is growing rapidly, this growth does not ensure that local stakeholders (1) know about this evidence or know where to find it or that (2) they can make sense of the findings [1]. Knowledge translation, defined as 'the effective and timely incorporation of evidence-based information into the practices of [health] professionals in such a way as to effect optimal [health] care outcomes and maximize the potential of the [health] system' [2], is an interactive process between users and creators of research-based knowledge that involves many steps from planning and conducting research to applying it to patient or client care [2]. Here, we describe a method of knowl-

edge translation that overcomes some of the barriers to evidence-based practice in child welfare. It does so by disseminating evidence from systematic reviews to local stakeholders in Norway through plain language summaries on a website within the Centre for Child and Adolescent Mental Health in Eastern and Southern Norway (RBUP)'s website (<http://www.r-bup.no>). The RBUP website is widely used by practitioners, students and researchers in the child welfare and mental health fields. The overarching aim of this project was to facilitate well-informed, evidence-based decisions in local child welfare services.

The main objective of Norwegian child welfare services is to provide necessary assistance and care to children and young people living under conditions that may harm their health and development. Child welfare services include various intervention programmes for children staying at home or in out-of-home services, such as foster care and small institutions. All interventions are publicly funded. The Norwegian child welfare services employ approximately 8000 people. Most services are delivered at a local

level, but state-level services are also available, depending on the type of services needed. There are 26 response and consultations teams, funded by the state, located across the country. These consist of psychologists, child welfare officers, social workers and teachers. The teams collaborate with local authorities to find solutions for each individual case.

Fifty-three thousand out of Norway's 1.5 million children and adolescents aged 0–23 years received some kind of child welfare services during 2012. Of these, 1400 lived in a residential child care institution and 10 000 in foster homes. Seventy four per cent of the children who received child welfare services had problems related to their parents' ability to provide proper care. Twelve per cent of the children had been exposed to maltreatment and 13% had behaviour problems.

The Norwegian Directorate for Children, Youth and Family Affairs (BUFdir) has begun a quality improvement initiative for the child welfare services, with one of the objectives being the development of evidence-based child welfare services. Inspired by BUFdir's quality improvement initiative, RBUP, in collaboration with Enhance Reviews Ltd, set up a strategy for identifying and disseminating research-based evidence. Specifically, our goal was to publish Norwegian plain language summaries of high-quality, systematic reviews with relevance to the Norwegian child welfare field. In this article, we describe how we developed and implemented our dissemination strategy.

## Methods

The process had seven steps:

- 1 Searching the literature systematically;
- 2 Selecting systematic reviews of relevance to the field of child welfare in general;
- 3 Assembling an advisory board,
- 4 Selecting systematic reviews relevant to the Norwegian child welfare field,
- 5 Prioritizing the included systematic reviews;
- 6 Developing a plain language summary format with feedback from the advisory board; and
- 7 Developing a website within RBUP's website (<http://www.r-bup.no>).

### Step 1: systematic literature search

Our first goal was to identify all systematic reviews related to the child welfare field. We searched Medline (Ovid), Embase (Ovid), PsycInfo (Ovid) Cinahl, Cochrane Library (CDRS and DARE), Campbell Collaboration Register and TRIP Database from inception to August 2012 without any language restrictions. We developed broad search strategies for each database individually (see Supporting Information Appendix S1 for detailed search strategies). We did not search for grey literature.

### Step 2: selecting systematic reviews of relevance to the field of child welfare in general

Two researchers independently screened titles and abstracts identified in the search. Potentially relevant records were obtained and screened independently in full text performed by the two research-

ers. To identify as many relevant systematic reviews as possible, we used one broad inclusion criterion: the review had to report effects of any intervention of possible relevance to child welfare services.

Examples of relevant interventions:

- Therapies to reduce behaviour problems and delinquency, such as multisystemic therapy or functional family therapy;
- Foster homes;
- Residential child care institutions;
- Family support centres;
- Parent/carer training programmes;
- Social/financial interventions for socially disadvantaged families;
- Interventions for parents with poor parental skills due to substance use or other mental health problems; and
- Treatments for specific mental health problems, such as traumatic stress, depression or anxiety.

To ensure that the systematic reviews had adequate methodological quality, they also had to meet five criteria based on the AMSTAR checklist to be included [3]. These five criteria were chosen by a senior researcher as central to systematic review methodology. They were:

- 1 The research question and inclusion criteria were established before the conduct of the review;
- 2 A comprehensive literature search was performed;
- 3 The characteristics of the included studies were provided;
- 4 The scientific quality of the included studies was assessed and documented; and
- 5 The methods used to combine the findings of studies were appropriate.

Disagreements regarding inclusion were resolved by a senior researcher.

### Step 3: assembling an advisory board

To ensure applicability, we assembled an advisory board representing our target audience. We defined our target audience as anyone with an interest in Norwegian child welfare services, including policymakers, practitioners, researchers, carers and consumers. Thus, we invited BUFdir and *Landsforeningen for barnevernsbarn* ('the National Organization for Looked-After Children') to nominate a person representing policymakers and consumers, respectively. We also invited three employees at RBUP: a researcher with special interest in the child welfare field, a project leader with former experience from BUFdir and as a practitioner in child welfare services and a part-time advisor with main employment in a local Response and Consulting Team. The board members' tasks are described in steps 4–6.

### Step 4: selecting systematic reviews of relevance to the Norwegian child welfare field

The advisory board's first task was to select systematic reviews of specific relevance to the Norwegian child welfare field among the 120 reviews that were included from the literature search. The advisory board members formed three pairs and each pair was assigned 40 abstracts to screen for inclusion. We instructed the advisory board to apply a broad set of inclusion criteria:

- Children and adolescents that would be eligible for child welfare services in Norway;
- Child welfare services that would be applicable in Norway; and
- Outcomes consistent with the aims of Norwegian welfare services.

Each board member screened their 40 assigned abstracts independently. Disagreements regarding inclusion were resolved by discussions.

### **Step 5: prioritizing the included systematic reviews**

The next step was to rank these reviews according to applicability to the Norwegian setting. We used a method based on the Delphi process [4]. Three pairs of advisory board members each received a list of 20 included systematic reviews. They were asked to score each systematic review in terms of applicability to the Norwegian setting, using a score between 1 and 20, where 20 was most applicable and 1 was least applicable. The pairs worked independently, resulting in two scores for each review that were added to create a ranking of the 60 included reviews.

### **Step 6: developing a summary format**

#### **Pilot summary feedback**

From the list of included systematic reviews, we drafted 10 pilot summaries in English. We emailed the summary drafts to the advisory board along with an invitation to a focus group meeting that took place a few weeks later. At the focus group meeting, we received the advisory board members' general feedback on the usefulness and readability of the summaries, as well as comments regarding applicability specific to the Norwegian child welfare setting. We used the feedback to decide the criteria for the further development of the summary format.

#### **Selecting a summary format model**

To learn about other organizations' summary formats, we browsed various electronically published summaries of systematic reviews, such as the DARE database (<http://crd.york.ac.uk>), Health Evidence (<http://thehealthevidence.org>), Evidence Based Mental Health (<http://ebmh.bmj.com>), Cochrane Collaboration systematic reviews (<http://thecochranelibrary.com>) and the Swedish Council on Health Technology Assessment's (SBU; <http://sbu.se>) summaries with comments ('SBU kommenterar').

#### **Final summary format**

One of the included systematic reviews was selected for further summary piloting and feedback on this summary from the advisory group was used to create a second summary template. Technical, comprehensive summaries were first written in English by one of the reviewers and then translated into Norwegian plain language summary drafts by another reviewer who spoke Norwegian as her native language.

We also engaged a publishing agency (Lex Norsk samfunnsinformasjon AS) to assist with the language and structure of the summary template.

### **Step 7: developing a website**

Lex Norsk samfunnsinformasjon AS also assisted us in developing a website for the dissemination of the summaries. The website is still under development and we plan to run tests with the advisory board prior to launching. Its main page will contain a list of our most recently published summaries; there will also be pages for the site's background, our methodology and a glossary, as well as a 'Search & find' page. On the 'Search & find' page, readers will be able to enter search terms or tick predefined categories in which they are interested. Broad categories will be type of service, age group and topic, each with subcategories. Relevant summary titles will then appear and a further click will lead the reader to the full summary.

The citations of included systematic reviews will also appear on the website, along with their original abstracts and links to the full-text report.

The website will have its own URL from which readers can enter. Moreover, there will be a banner in a central location on RBUP's main page (<http://www.r-bup.no>) linking to the website. Our promotion strategy includes newsletters, presentations at national conferences, dissemination in relevant publications and promotion merchandise. We will use Google Analytics to monitor traffic on the website. We will also record how often and in which contexts the site is mentioned in meetings and in written materials from policymakers and services, as well as in relevant publications.

## **Results**

### **Step 1: systematic literature search**

The literature search identified 9266 records. The final number of records was reduced to 9164 after removal of duplicates.

### **Step 2: selecting systematic reviews of relevance to the field of child welfare in general**

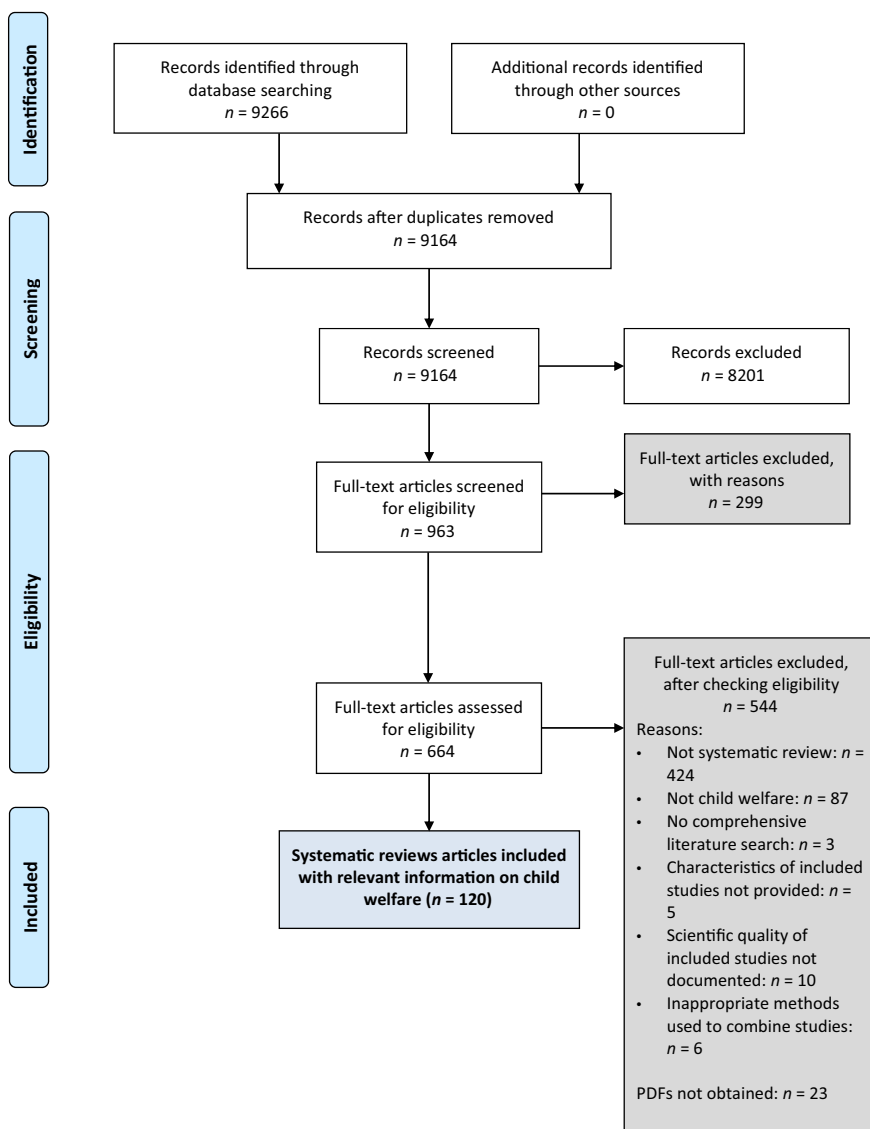
After removing 102 duplicate references, we identified and excluded 8201 references deemed irrelevant through title and abstract screening. The remaining 963 full texts were screened and 299 were excluded because they did not report effects of an intervention of relevance to child welfare. We then applied the five systematic review methodology criteria to assess the remaining 664 full texts, which resulted in 544 studies being excluded. Thus, 120 systematic reviews were included for advisory board review (see Fig. 1 for an overview of the selection process).

### **Step 3: assembling an advisory board**

All invitations to participate on the advisory board were accepted and BUFdir and *Landsforeningen for barnevernsbarn* each nominated two representatives, so that a total of seven individuals constituted our advisory board.

### **Step 4: selecting systematic reviews of relevance to the Norwegian child welfare field**

The advisory board pairs reached agreement in all cases. The selection process discarded 60 of the systematic reviews as not



**Figure 1** Flow chart of the systematic review screening and selection process.

applicable and a final list of 60 reviews was created (Supporting Information Appendix S2). We categorized the included reviews as follows:

- Traumatic events, abuse, neglect (29 reviews)
- Antisocial behaviour, mental health problems (nine reviews)
- Parents/carers (six reviews)
- Out-of-home placement (11 reviews)
- Socially disadvantaged families (three reviews)
- Child welfare workers (one review)
- Cost-effectiveness (one review)

**Step 5: prioritizing the included systematic reviews**

The 60 systematic reviews obtained total scores ranging from 4 to 36 (see Supporting Information Appendix S2). The scores were considerably inconsistent across raters, with an average discrepancy

of 7.2 points (range: 0 to 19). Five systematic reviews had incomplete sets of scores and were placed at the bottom of the priority list.

**Step 6: developing a summary format**

**Pilot summary feedback**

We grouped the advisory board’s feedback on the pilot summaries into three categories: readability, quality assessments and included studies.

**Readability**

Some members of the advisory board thought the summaries were too technical and difficult to read, while others indicated a preference for more technical details to enable them to make their own

judgements. The advisory board members gave us examples of terms that were difficult to understand. Some of these terms were specific to the child welfare area, such as *antisocial behaviour* versus *behaviour problems* and *effect on placement*. Other terms were more specific to systematic review methodology, such as *summary of findings table*. Board members suggested alternative table headlines: *Effect on/outcome for*, *Main findings*, *Confidence/knowledge status*. We decided to eliminate the summary of findings tables altogether, as they seemed too complicated for our target audience.

### Quality assessments

The board members had questions about the quality assessments, including:

- What does 'low quality' mean? Quality of the research or of the intervention?
- How can a result based on four quasi-randomized trials be of moderate quality in one systematic review, while a result based on four randomized controlled trials (RCTs) is of low quality in another review?
- Observational studies reduce the quality. What if they only include RCTs?

Furthermore, some board members were concerned that low quality assessment would give a negative picture of child welfare interventions and possibly 'scare' policymakers from implementing them. Others pointed out that some of the research was consistent with what they already knew and some was not.

### Included studies

Comments in this category included:

- Number of studies in the summary of findings table different than reported number of included studies;
- Some outcomes inconsistent with the intention of the interventions;
- Some outcome measure timing irrelevant; and
- Relevant studies missing in some systematic reviews

### Selecting a summary format model

Based on the feedback on the pilot summaries, we established two main criteria for our final summary format:

- 1 The language should be plain enough to make sense to lay people, including adolescents and
- 2 The level of detail should be sufficient to enable professionals to make their own judgement about the evidence.

Among the summary formats studied, the SBU summaries came closest to meeting these criteria and were chosen as a model for our summary format.

### Final summary format

The final summary template was structured with the following headings:

- Title
- Author(s)
- Introduction
- Background

- The Evidence Base
- Comments

Additionally, the summary template contained text boxes presenting background information about the review topic in a Norwegian setting, as well as explanations of terms considered difficult to understand for lay persons. The full citation of the original systematic review was also included.

### Step 7: developing a website

The website (<http://www.insum.no>) was launched last September 2014. It is still under development and will eventually become a database for systematic reviews on effects of child and adolescent mental health interventions in addition to child welfare interventions. To analyse the social usefulness of the website, we are monitoring traffic on the website and how often and in which contexts it is mentioned in meetings and in written materials from policymakers and services as well as in relevant publications.

### Discussion

We have implemented a part of the knowledge translation process within the child welfare field and the process is continuing. We started by sourcing relevant systematic reviews, a level where much knowledge has already been synthesized. With input from a broad target audience advisory group, including policymakers, researchers, practitioners and consumers, we selected and prioritized reviews relevant to the local, Norwegian context for dissemination by RBUP. Finally, we developed a website and a summary format, plain for anyone to understand, but with sufficient detail for practitioners in the field. All steps in the process are reproducible.

Limitations to the process included:

**1** Most of the included studies in the systematic reviews were conducted in the United States. Although the interventions per se might be applicable in Norway, the settings differ considerably between the two countries. For instance, the use of adoptions and kinship foster homes is more widespread in the United States than in Norway. Norwegian child welfare services also have different requirements for foster carers and provide a different level of economic compensation and support. Furthermore, the two countries have different reasons for placing children in foster care and the US study participants may have other characteristics than Norwegian children in out-of-home placements. An additional major difference between the United States and Norway is the lack of a juvenile justice system in Norway.

**2** We did not search grey literature which may have limited us from finding all relevant systematic reviews.

**3** We aimed for the summaries to both have language plain enough to make sense to lay people, including adolescents, and that the level of detail should be sufficient to enable professionals to make their own judgement about the evidence. This balance between accuracy and readability was sometimes very challenging to achieve.

We hope that the steps we have described here may help other review teams in the planning of similar projects. However, because this project was the first of its kind for us, we found accurate planning to be challenging. The project has involved many people with various expertise, such as researchers, information specialists, child welfare practitioners, policymakers, consumers and publishing experts. The project has been time-consuming and because



we did not set a deadline, we have experienced extended periods with little or no activity, further protracting the timing of the process. Our first discussion about the project took place in November 2012, we held our first focus group meeting in January 2013 and had our final list of included systematic reviews ready in July the same year.

RBUP plays an important role in providing synthesized research to Norwegian decision makers and service providers in the child and adolescent mental health and welfare field. Our summaries and the database of systematic reviews will be valuable resources to practitioners and the plain-language format of the summaries will make important information available to caregivers and consumers in an easily accessible manner.

Ultimately, our summaries and the database of systematic reviews will not only give a picture of what we know. More importantly, it will give a picture of what we *do not* know. This knowledge will inform research priorities in Norway, leading the way to better-informed, evidence-based decisions in local child welfare services.

## Acknowledgements

We wish to thank the Advisory Board members Hedvig Torvik Nilsen, Sandrina Elisabeth Sandrell, Heidi Jacobsen, Eyvind

Elgesem, Birthe Holm, Elin Mangnes and Ruzzel Abueg. We are also very grateful to Hannah Rothstein for her helpful comments on the manuscript drafts.

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## Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's web-site.