

A Rapid Evidence Assessment of educational interventions for nurses in paediatric settings - Executive Summary

Context

The aim of this review is to inform a framework to strengthen the capacity of "Tipat Halav" nurses in Israel to support parents of young children. The first steps of this initiative are building a leadership group and developing training tools and organisational processes which will support the implementation of practice-change across the service. The purpose of this review is to uncover the "ingredients" of successful a training program designed to achieve practice-change among nurses in their work with families. This review will enable us to build on the systematic evidence from similar models. These models include professional development, education and training programs for nurses, aimed to change or improve nurses' practice and skill in their work with families.

In the review we aimed to identify models that share similar goals and methods (i.e., in-service training and building capacity of nurses to engage effectively with families, to promote children's development and well-being), extract and synthesize the evidence on program contents, strategies and structure of training, implementation strategies, evaluation measures and evidence of effectiveness.

Methods

A rapid evidence assessment methodology was used to conduct this review. This accelerated version of full systematic review, facilitates rigorous overviews of current knowledge and synthesis of evidence within a shorter timeframe. Evaluations of in-service training programs for nurses were identified via a systematic search of electronic bibliographic databases and by a hand search of eligible study reports. We conducted a systematic search of the following academic databases in July 2019: MEDLINE, PsycInfo, and Educational Resources Information Centre (ERIC). The search was limited to studies published after 2008, in the English language. Peer-reviewed studies, from the last 10 years, evaluating training programs that were designed to achieve a practice change in the way nurses work with parents and children were eligible for inclusion in this review. Studies were included if (a) Intervention is a program delivered to nurses in a paediatric setting, who are supporting parents and/or children. (b) Intervention is in-service training, professional development, quality improvement, or practice-change. (c) Intervention is related to working with children, parents or families (d) Study reports quantitative outcomes measures (at the practitioner, parent and/or child level), and uses at minimum a pre-post or comparative design. (e) conducted in middle-high income countries. Studies evaluating programs in which contents only related to medical procedures, safety practice, or nurses' wellbeing, reporting qualitative or post-intervention data only, or involved only nurse undergraduate training were excluded. Out of 1,513 potentially relevant studies, 34 studies, reported in 43 articles were included in the review.

Program characteristics

Interventions and training programs in the studies included a variety of topics and skills, and were grouped programs by the program content: Nurse-family relationship (14 studies), Health promotion (5 studies), breastfeeding (5 studies), parent well-being and parent-child relationship (4 studies) and child mental health (6 studies). Twenty programs took place in a hospital setting, nine in community settings, and five in mixed or online settings. Length of training lasted from 30 minutes, to several hours, to days, spread over days to months. Strategies used in programs varied, and included theory (lectures, learning modules, reading materials, manuals and resource kits), skills practice (role plays, simulation, exercises, videos, demonstrations), and reflective practice (individual and groups reflection, case studies, coaching).

Six study designs were randomised controlled trials; 5 were cluster randomised control trials, 6 were quasi-experimental, non-randomised trials and 17 studies were single group, pre-post designs with no comparison group. In 23 studies, outcome measures included subjective assessments: trainee satisfaction; self-competence (knowledge, skills, confidence), and practice. Three studies used objective observers rate assessment of trainees' practice from recorded sessions; two used documentation of practice; three used parent report on nurse practice and perceived support; and four reported on parent and/or child outcomes. Implementation strategies, where the nurse training was on educational component of a wider quality-improvement initiative, included: Co-design with parents and nurses; having mentors acting as 'practice champions' and supporting implementing nurses; ongoing reflective practice and supervision; resources for parents and train-the-trainer seminars. All but one study results showed some positive effects of training programs. However, the majority of study designs were of an inherently very high risk of bias. Findings tended to be more favourable when using self-report assessments of knowledge, participant ratings of confidence, and participant satisfaction. When using more "objective" measures such as trainers' ratings of competence, the results are less reliably favourable. In addition, very few studies reported any fidelity assessment for the training, which is known to be a key factor in successful implementation.

Conclusions

Given the high risk of bias, there is a need of more rigorous research using controlled design and "external" measures to conclude about the effectiveness of training programs. As most of the programs reported on positive results it is difficult to differentiate the programs who are effective from those that are not. The scope of the review is therefore limited to describing common practices of in-service training programs in relation to the theoretical and clinical literature, rather than drawing conclusions regarding the most effective or evidence-based practices. Therefore, the recommendations are based on the common practices and relevant theoretical and clinical literature.

Recommendations

Training strategies and structure:

- Keep learning active, using experiential methods (role plays, demonstrations, discussions) with learners engaged in experiential learning, and making judgements about when and how they modify their knowledge.
- Encourage social learning from peers and creating a community of practice.
- Keep learning closely related to real-life conditions, embed training in practice with opportunities to complete cycles of learning, implementing and reflection.
- Encourage and provide opportunities for reflective practice, self-assessment, and feedback in a safe environment.

Organisation context:

- Co-design the training and organisational processes with nurses, experts, and parents.
- Practice-change, especially in "soft skills" is a continuous improvement process, not a one-time, stand-alone experience.
- Training is one component and should be integrated with quality-improvement processes to ultimately provide high-quality care and achieve better outcomes for parents and children.

Implementation:

To ensure effectiveness and sustainability, Implementation plan should be tailored to the unique circumstances, strengths and needs of the organisation. It could include the following:

- Build training and supervision capacity within organisation, leadership and champions who are responsible for training, implementation, and monitoring.
- Embed reflective practice in work routines.
- Use measures of fidelity as part of the training.
- Plan additional activities and changes to facilitate the desired changes (resources and pamphlets, change in procedures, structural changes, behavioral nudges, etc.)
- Use quality standards that reflect the desired practice to monitor implementation and enable continuous improvement.