

DOI: <https://doi.org/10.29352/mill0218e.40835>

RESUMO

Introdução: A introdução da alimentação complementar constitui um marco fulcral no desenvolvimento infantil. Tal requer boa orientação assim como a transmissão de informações precisas, baseadas na evidência científica e que vão ao encontro das necessidades reais de cada família, de modo a garantir que as crianças adquiram bons hábitos alimentar, capazes de proporcionar um crescimento saudável.

Objetivo: Mapear e resumir a literatura existente sobre o papel do enfermeiro na introdução da diversificação alimentar e na capacitação dos pais neste âmbito.

Métodos: Scoping Review, realizada em sete bases de dados com critérios de inclusão e exclusão previamente definidos. Incluíram-se artigos primários e secundários que abordassem intervenções de enfermagem.

Resultados: Após a análise dos artigos, obteve-se uma amostra de 20 artigos, os quais foram categorizados: conhecimentos dos enfermeiros; capacitar os pais; e integrar a cultura nos cuidados.

Conclusão: O enfermeiro tem um papel fundamental na capacitação dos pais, envolvendo a capacitação nutricional, a influência das abordagens culturais e locais e as abordagens/conhecimentos dos mesmos, mas também na renovação e atualização dos conhecimentos de enfermeiros.

Palavras-chave: enfermeiro; diversificação alimentar; capacitação; pais

ABSTRACT

Introduction: The introduction of complementary feeding marks a pivotal milestone in child development. This process requires sound guidance and the transmission of accurate, evidence-based information that addresses the specific needs of each family, ensuring that children acquire healthy eating habits to support their growth.

Objective To map and summarize the existing literature on the role of nurses in introduction of complementary feeding and empowering parents in this context.

Methods: A scoping review was conducted across seven databases using pre-defined inclusion and exclusion criteria. Primary and secondary articles addressing nursing interventions were included.

Results: Following the analysis of the articles, a sample of 20 was obtained and categorized as follows: nurses' knowledge, empowering parents, and delivering care that is culturally sensitive.

Conclusion: Nurses are key in empowering parents, encompassing nutritional education, cultural and local approaches, and the assessment of parental knowledge, but also in updating the knowledge of nurses.

Keywords: nurse; complementary feeding; empowerment; parents

RESUMEN

Introducción: La introducción de la alimentación complementaria constituye un hito crucial en el desarrollo infantil. Este proceso requiere una orientación adecuada y la transmisión de información precisa, basada en evidencia científica y adaptada a las necesidades reales de cada familia, para garantizar que los niños adquieran hábitos alimentarios saludables que favorezcan un crecimiento óptimo.

Objetivo: Mapear y resumir la literatura existente sobre el papel del enfermero en la introducción de la diversificación alimentaria y en la capacitación de los padres en este ámbito

Métodos: *Scoping Review* realizada en siete bases de datos con criterios de inclusión y exclusión previamente definidos. Se incluyeron artículos primarios y secundarios que abordaran intervenciones enfermería.

Resultados Tras el análisis de los artículos, se obtuvo una muestra de 20 artículos, clasificados en las siguientes categorías: conocimientos de enfermería; capacitación de los padres; e Integración de la cultura en los cuidados.

Conclusión: El enfermero desempeña un papel fundamental en la capacitación de los padres, incluyendo la educación nutricional, las aproximaciones culturales y locales, y la evaluación de sus conocimientos, sino también en la renovación y actualización del conocimiento de otros colegas.

Palabras Clave: enfermero; alimentación complementaria; capacitación; padres

DOI: <https://doi.org/10.29352/mill0218e.40835>

1. THEORETICAL FRAMEWORK

Complementary feeding is defined as the period during which a child transitions from breast milk or formula to family foods. Although it is a universal practice, the forms and methods of introduction vary across cultures, individuals, and socioeconomic classes. Inadequate complementary feeding practices, with adverse health consequences, continue to be a significant global public health problem (Ariko et al., 2018).

According to Fewtrell et al. (2017), complementary feeding refers to all solid and liquid foods except for breast milk or infant formula. The introduction of solid foods denotes the initial offering of non-liquid foods - usually pureed, mashed or in soft pieces - and is part of the complementary feeding period. Dietary diversification, on the other hand, refers specifically to the variety, quality, and nutritional balance of foods introduced as part of complementary feeding. These terms, although interrelated, describe different aspects of the broader process of transitioning an infant to a family diet. It is important to emphasise that this process includes both breastfed and formula-fed babies, and can be implemented through a range of methods, such as traditional spoon-feeding, mashed or pureed foods, or baby-led weaning (BLW).

Given the complexity and variability of practices across cultural and individual contexts, and the fundamental role of early nutrition in child's development, it is essential to understand how health professionals - particularly nurses - support families during this transition.

The World Health Organization (WHO) recommends exclusive breastfeeding from birth until six months of age, followed by the introduction of complementary foods while continuing breastfeeding for as long as possible (Fewtrell et al., 2017). Early weaning can increase the risk of childhood obesity and the development of cardiovascular diseases later in life (Rito et al., 2021). Conversely, children who were exclusively breastfed for the first six months of life are less likely to develop overweight or obesity (Rito et al., 2021).

On the other hand, late weaning or weaning with foods of low energy density can lead to malnutrition, growth retardation, and an increased risk of iron deficiency, leading to anaemia in late childhood (Hopkins et al., 2007). Inadequate weaning has been associated with various other health problems, such as an increased risk of allergic disorders, dental caries, and neurocognitive deficits (Hopkins et al., 2007).

Decisions regarding a child's diet should consider the different stages of neurological, motor, sensory, and cognitive development, as well as the maturation of different organs, systems, and digestive enzymes (DGS, 2019). According to the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN), renal and gastrointestinal functions are sufficiently mature and capable of metabolizing nutrients from complementary foods by 4 months of age, with gastrointestinal function being stimulated by the foods ingested (Fewtrell et al., 2017).

The WHO (2021) outlines the principles for complementary feeding, which are: maintaining breastfeeding until the age of two; practicing responsive feeding; ensuring good hygiene and proper food handling; gradually increasing the consistency and variety of foods; increasing the number of times the child is fed; using fortified complementary foods or vitamin and mineral supplements if necessary; and during periods of illness, increasing fluid intake and offering soft, familiar foods.

Responsive feeding is considered very important in the formation of eating habits and should be encouraged by health professionals (Silva et al., 2016). It aims for caregivers to be sensitive to the child's cues, reducing stress during feeding and making it enjoyable. Its principles include: feeding younger children and assisting older children who are already able to feed themselves; feeding patiently and encouraging the child to eat without forcing them; if the child refuses food, trying different combinations of foods, textures, and encouragement methods; minimizing distractions during feeding; and making mealtimes a time for learning and love, talking to the child and maintaining eye contact (Silva et al., 2016).

Another factor to consider is the appropriateness of foods (variety, consistency, and texture), as well as the use of the most suitable utensils for each situation, always respecting the child's development (Silva et al., 2016).

Sensory processing plays a predominant role, as it is necessary to integrate and modulate sensations coming from texture, taste, smell, sight, and even the sounds that trigger these sensations. Difficulties in any of these areas may lead to food restrictions and refusals (Correia, 2015; Oliveira & Souza, 2022).

Therefore, knowledge and consideration of feeding-related skills (motor, sensory, and metabolic) become fundamental for the child's safety, as well as for the acquisition of healthy eating habits for life (DGS, 2019).

Currently, family meals have become a less frequent occurrence in the contemporary world. It is crucial to encourage children to eat with their families and share the same foods, when appropriate (Silva et al., 2016). Children learn a great deal through imitation, and this is fundamental for adapting eating behaviours (Silva et al., 2016). Another concerning aspect of modern society is the fact that many children and adults spend mealtimes with their attention diverted to screens (Silva et al., 2016). As mentioned earlier, all senses play a crucial role in acquiring eating skills. So, in this specific case, visual and auditory inputs are not being integrated, leading to unpleasant memories related to the taste and/or texture of foods (Correia, 2015). Additionally, Rossi et al. (2010) link increased screen time to lower consumption of fruits and vegetables among children and adolescents.

Thus, it can be said that the introduction of complementary feeding is a very important and complex moment, and it should be more consistent, especially in the introduction of solids. Initially, children often refuse food, and in the face of this, parents interpret that they

DOI: <https://doi.org/10.29352/mill0218e.40835>

do not like the food, stopping its introduction and resorting to foods of their preference, which are not always nutritionally adequate. However, there is a need for repeated exposure to new foods to ensure that the child feels safe, regulates their sensations, and gradually eats larger quantities (Hart et al., 2010; Fisberg et al., 2014).

Hence, nutritional training for parents has the predominant potential to improve child health. It is imperative that parents and families have access to nutrition education through scientifically accurate, culturally sensitive, and economically appropriate guidance (Caroli et al., 2012).

After an initial search, there are two reviews (Ojha et al., 2020; Ariko et al., 2018) that mention that empowering family members with knowledge about complementary feeding practices improves children's nutrition, growth, and development in various contexts worldwide. However, they do not delve into the role of nurses in this parental empowerment.

The introduction of complementary feeding and parental education are important areas in child and paediatric health, making it fundamental to understand and deepen the role of the nurse in this area. The objective of this scoping review is to map and summarize the existing literature on the role of the nurse in the introduction of complementary feeding and in parental empowerment.

2. METHODS

A scoping review was conducted, following the guidelines of the Daudt et al. (2013), some steps were modified according to certain criteria of Peters et al. (2020). The purpose of this review was to map and summarize the existing literature on the role of nurses in introduction of complementary and empowering parents in various healthcare settings where nurses work.

2.1 Search strategy

Based on the PCC (Population, Concept, and Context) framework (Peters et al., 2020), the research question was formulated as follows: "What role do nurses play in empowering parents about to complementary feeding in different practice settings?"

A search was conducted for articles published up to July 19, 2023, in the EBSCO search engine, using the following databases via EBSCOhost: CINAHL Complete, MEDLINE Complete, Nursing & Allied Health Collection: Comprehensive, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, Cochrane Methodology Register, Library, Information Science & Technology Abstracts, and MedicLatina. The following Boolean phrase was used: "(complementary feeding) AND (nurs*) AND (intervention* OR care OR program OR education) NOT (breastfeeding)".

2.2 Inclusion criteria

To answer the research question, we established specific criteria for including or excluding studies. In accordance with the PCC framework: Participants encompassed all individuals playing a role in the complementary feeding of infants, including parents, caregivers, and nursing professionals. The Concept focused on nursing interventions related to the introduction of complementary feeding and the empowerment of parents. The Context covered all healthcare settings where nurses practice.

We included studies that: described nursing interventions related to introduction of complementary feeding and empowering parents; were published in English, Spanish, or Portuguese, as these are the languages spoken fluently by the reviewers; and were either original research or reviews. Studies were excluded if they: did not address our research question; focused on specific diseases; were opinion pieces; poster presentation, and protocols or registered in clinical trial databases but without published results. No restrictions were applied regarding the year of publication.

2.3 Data extraction and analysis

The results were organized in an Excel spreadsheet, and duplicates were removed. No specialized software tool for data extraction was used; however, Microsoft Excel was employed to organize and extract the relevant data systematically. Two researchers independently screened the studies first by title, then abstract, and finally full text, applying the inclusion and exclusion criteria. Disagreements between the reviewers were resolved through regular discussions until consensus was reached.

To organize the results, a content analysis of the extracted data was conducted, leading to its categorization into three main areas: nurses' knowledge, empowering parents, delivering care that is culturally sensitive.

3. RESULTS

After conducting the search in the databases using the specified terms, 271 articles were identified. Of these, 238 originated from MEDLINE Complete, 17 from CINAHL Complete, 12 from the Cochrane Central Register of Controlled Trials, and four from the Nursing & Allied Health Collection: Comprehensive. The Boolean search strategy did not retrieve any records from the remaining databases. The article selection process was analysed using the PRISMAScR flow diagram (Figure 1), which illustrates the process leading to the final sample. Of the 271 articles, 15 were removed as duplicates, leaving 256. Thus, 256 titles were analysed, and 91 were excluded for not meeting the inclusion criteria and for not addressing the research question, leaving 165 articles for the next stage of analysis: the abstract. After this stage, 136 were excluded, leaving 29 articles for full-text review. Subsequently, nine articles were excluded from this analysis phase, resulting in a final sample of 20 articles.

DOI: <https://doi.org/10.29352/mill0218e.40835>

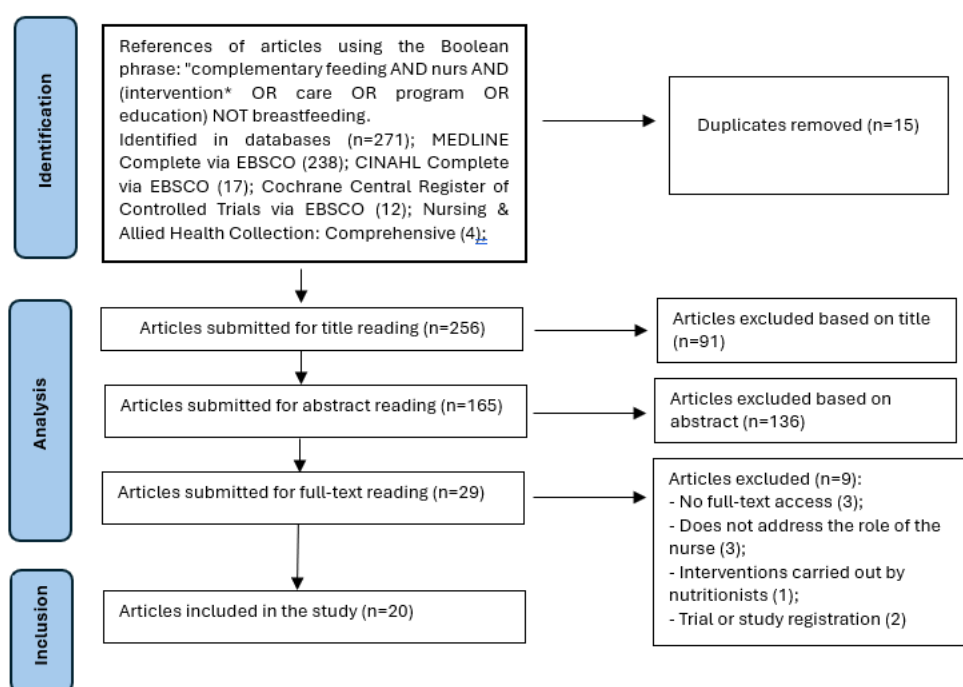


Figure 1 - PRISMA 2020 Flow Diagram for Study Selection (Adapted from Page et al., 2021)

The publication years of the studies ranged widely, with eight articles published within the last five years, including two in 2023. The oldest article was from 2003.

The studies were conducted in various countries, with the United Kingdom producing the most publications at four. Of the selected studies, 15 were original research studies and five were reviews (Table 1).

Table 1 - Characteristics of studies

Author; year, country	Type of study	Objectives
Samuel et al., 2016 Nigeria	Quase-experimental study	To evaluate the effect of training on the knowledge, attitudes and provision of infant and young child feeding (IYCF) information and counselling among primary healthcare (PHC) workers.
Warren, 2018 United Kingdom	Review study	To provide an up-to-date overview of complementary feeding by reviewing the scientific literature and sharing practical information about feeding infants.
Arias-Ramos et al., 2022 Spain	Mixed methods study	To describe the knowledge of health professionals about complementary feeding and baby-led weaning (BLW) method and the attitudes towards its recommendation, and to explore the knowledge, experiences and attitudes of parents who have used this method to feed their children.
Neves et al., 2021 Brazil	Cross-sectional, descriptive study	To describe Brazilian health professionals' perception about the Baby-Led Weaning (BLW) method use for complementary feeding.
Ojha et al., 2020 United Kingdom	Systematic review	To compare effects of family nutrition educational interventions for infant weaning with conventional management on growth and neurodevelopment in childhood.
Shi et al., 2010 China	Randomized controlled trial – RCT	To assess the effects of an educational intervention delivered through health-care providers on caregiver feeding practices and child growth.
Fernández-Medina et al., 2022 Spain	Qualitative study	to describe and understand the experiences and opinions of pediatricians and pediatric nurse specialists of the implementation of the BLW approach.
Davis et al., 2017 Ghana	Qualitative study	To examine the nutrition and young child feeding (YCF) education and training of nurses in public health clinics of Ghana's Komenda-Edina-Eguafo-Abrem region (KEEA) in relation to global health guidelines, and how nurses served as educators for caregivers with children aged 0-5 years.
Hohman et al., 2016 United States of America	Randomized controlled trial – RCT	to 1) identify patterns of milk and complementary feeding among 40 week old infants participating in the INSIGHT study, an ongoing randomized, controlled trial designed to prevent childhood obesity, and 2) determine whether infants in the parenting intervention group consumed a wider variety of age-appropriate, nutrient dense foods than control infants.

DOI: <https://doi.org/10.29352/mill0218e.40835>

Author; year, country	Type of study	Objectives
Susanto et al., 2017 Indonesia	Quase-experimental study	evaluate a pilot project of the Nursing Feeding Center “Posyandu Plus” (NF CPP) through local food-based complementary feeding (LFCF) program designed to improve the nutritional status of children aged 6–36 months at community health centers in Indonesia.
Bramhagen et al., 2006 Sweden	Qualitative study	To describe parents' experiences concerning feeding situations and their contact with the nurse at the Child Health Service (CHS).
Ishikawa et al., 2018 Japan	Cross-sectional, multilevel study	To clarify the factors affecting collaboration with community organizations in providing nutritional guidance to families following health checks for infants in Japan.
Williams & Pinninghton, 2003 United Kingdom	Cross-sectional study	To determine whether hospital paediatric nursing staff are familiar with the recommendations of the Department of Health (DOH) Weaning Report (DOH, 1994).
Thompson et al., 2023 United States of America	Integrative Review.	To synthesize the recent empirical evidence on parental decision-making around introducing CF. To identify the factors that influence parental decision-making around when to introduce CF. To understand parental needs around making decisions about complementary feeding
Paul et al., 2011 United States of America	Randomized controlled trial – RCT	To test the independent and combined effects of two behavioral interventions delivered to parents, designed to promote healthy infant growth in the first year.
Moura et al., 2021 Brazil	Integrative review	to describe the health promotion actions carried out by nurses to favor a healthy complementary diet in children under two years of age.
Shi & Zhang, 2011 United Kingdom	Review study	To provide evidence from published studies in the past decade on the effectiveness of educational intervention programs on improving complementary feeding practices in the developing world.
Monterrosa et al., 2013 Mexico	Quasi-experimental study	To evaluate whether an IYCF nutrition communication strategy using radio and nurses changed beliefs, attitudes, social norms, intentions, and behaviors related to breastfeeding (BF), dietary diversity, and food consistency.
Robert et al., 2017 Peru	Ethnographic study	To describe the formative research undertaken in the community and health facilities of Trujillo, Peru, and its translation into an effective nutrition education intervention that was delivered through the IYC health services.
Rachmah et al., 2023	Randomized controlled trial – RCT	To analyse the effectiveness of nutrition education using online digital platforms (WhatsApp) in increasing maternal nutritional knowledge, attitudes, subjective norms, perceived behavioral control, self-efficacy, and intention to practice healthy complementary feeding

Based on the included studies, we categorized the nurse's role in educating parents about introducing solid foods into four main areas: training nurses, empowering parents, and incorporating cultural considerations into care.

4. DISCUSSION

To facilitate a more comprehensive understanding of the findings, the discussion will likewise be structured according to the same categories.

Nurses Knowledge

The review shows that nurses have varying levels of knowledge about child nutrition. Those in primary care have adequate basics, but paediatric emergency nurses lack knowledge of the recommendations (Williams & Pinninghton, 2003; Davis et al., 2017).

Fernández-Medina et al. (2022) and Thompson et al. (2023) found that infant feeding advice is often inconsistent and poorly supported by evidence. This lack of consensus among healthcare providers can erode parents' trust and lead them to seek information from unreliable sources like social media.

Nutritional education should extend beyond families to include nurses themselves. Given that knowledge and attitudes improve rapidly after training, innovative in-service training and regular updates can enhance nurses abilities to provide tailored care. Communication skills are crucial for effective training (Monterrosa et al., 2013). Common training methods include presentations, interactive sessions, group work, and simulations (Samuel et al., 2016).

A new approach to complementary feeding, known as Baby-Led Weaning (BLW), was highlighted in the sample. This method encourages infants to self-feed from the start, rather than being spoon-fed purees. Healthcare professionals generally view BLW as a valid alternative to traditional methods (Neves et al., 2021; Fernández-Medina et al., 2022; Arias-Ramos et al., 2022). However, they often report limited formal training in BLW, relying on self-directed learning. BLW is believed to facilitate a smoother transition to family meals, promote healthy eating habits, and may even protect against obesity (Neves et al., 2021; Fernández-Medina et al., 2022; Arias-Ramos et al., 2022).

Healthcare professionals have expressed concerns about the Baby-Led Weaning (BLW) method, citing potential risks such as choking, malnutrition, and the possibility of an unhealthy diet (Neves et al., 2021; Arias-Ramos et al., 2022). They often recommend against BLW due to a perceived lack of scientific evidence. To address choking concerns, nurses are encouraged to educate parents on safe food preparation and emergency procedures. Some professionals suggest a combined approach, incorporating BLW with traditional purees, to mitigate the risk of malnutrition (Fernández-Medina et al., 2022). These authors

DOI: <https://doi.org/10.29352/mill0218e.40835>

emphasize the importance of a thorough assessment before recommending Baby-Led Weaning (BLW). BLW is suitable for healthy 6-month-olds who can sit up and show interest in food. While some studies suggest that BLW can reduce maternal anxiety and mealtime conflicts, not all healthcare professionals agree with these findings (Neves et al., 2021; Arias-Ramos et al., 2022). These differing opinions contrast with the positive experiences reported by mothers who use BLW.

There is a consensus that more research is needed to fully understand the risks and benefits of this method. This is essential for healthcare professionals to provide confident and informed advice to parents (Neves et al., 2021; Arias-Ramos et al., 2022).

Empowering parents

Knowledge of mothers' feeding experiences and attitudes can help nurses better support mothers struggling with complementary feeding (Bramhagen et al., 2006). Mothers seeking information about BLW often turn to informal sources due to perceived barriers with healthcare professionals (Arias-Ramos et al., 2022). To improve the quality of care and build trust with parents, there is a critical need for more high-quality research on specific feeding methods.

Studies indicate that empowerment interventions by healthcare professionals, like nurses, can improve complementary feeding practices and child growth outcomes (Shi et al., 2010; Shi & Zang 2011; Ojha et al., 2020). Early interventions can also foster healthier eating habits and enhance the positive impact of parental involvement (Hohman et al., 2016).

Starting complementary feeding based on a baby's readiness cues, rather than a fixed age, is key to effective parental empowerment and improved care (Warren, 2018; Thompson et al., 2023).

Therefore, empowerment about complementary feeding focuses mainly on how to offer foods, including which foods and the preferred methods for their preparation. It also addresses the nutrients that should be present in complementary foods, such as proteins and iron, recommending that they offer a varied range of foods and discouraging the use of processed, pre-cooked, and expensive foods (Davis et al., 2017).

One way to involve parents in learning and acquiring feeding skills is using praise, commending their efforts and creating a greater relationship of trust and security (Robert et al., 2017). In addition, it is important to validate the teachings through verification questions about the key messages. Nurses also mentioned strategies on how to encourage children to eat, such as more flexible practices. Singing, playing, and clapping are also recommended to attract and encourage children to eat, as well as associating colourful materials with food (Davis et al., 2017).

To individual counselling sessions, regarding the resources used, it was possible to verify a variety, such as: home visits; group sessions; presentations; telephone consultations; written messages; online education technologies (eg. WhatsApp); and even the media, such as radio, these methods being important for the dissemination of information and knowledge and, consequently, for parental empowerment regarding feeding (Shi & Zhang, 2011; Paul et al., 2011; Monterrosa et al., 2013; Hohman et al., 2016; Susanto et al., 2017; Davis et al., 2017; Ojha, 2020; Moura et al., 2021; Rachmah et al., 2023). With these resources, there is an observed increase in parents' knowledge, as well as improvement in attitudes, behavioural control, self-efficacy, and intention to practice healthy complementary feeding.

Regarding intervention strategies, it is necessary to consider a culturally sensitive intervention, with access to local resources, always using effective communication with the goal of having parents adopt the recommended feeding behaviours (Samuel et al., 2016; Shi & Zhang, 2021). This should be implemented through health services, ensuring greater long-term sustainability, and should not be limited to primary caregivers but rather to all family members, as well as the entire community (Samuel et al., 2016; Shi & Zhang, 2021). The data also indicate that another strategy to be used to identify problems in child growth and adjust their feeding practices was growth monitoring (Shi & Zhang, 2021). Monterrosa et al. (2013) mention the use of various simple and didactic materials for this teaching, such as: the use of illustrated cards; using cups to relate the size of the child's stomach to the amount of food ingested; using porridges and a spoon to demonstrate the desired consistencies; or offering a fridge magnet with reminder messages. In home visits, authors mention the delivery of individual guidance, leaflets, and videos (Paul et al. 2011).

As for the actual learning, there are references to empowering parents about the signs of hunger and fullness around 2-3 weeks of age, as well as the appropriate time to introduce solid foods (Paul et al. 2011). This includes discussions on readiness cues, food safety, and choking prevention (Hohman et al. 2016; Warren, 2018; Thompson et al., 2023). Shi et al., (2010) recommend home visits to identify potential feeding problems and provide individualized counselling, as well as distributing leaflets with guidelines on feeding and recipe preparation. Group training sessions on topics such as food selection, preparation, and hygiene; child nutrition and growth; responsive feeding; demonstrations of preparing recipes using locally available, affordable, nutritious foods are also suggested.

Hohman et al. (2016) conclude that these trainings allow parents to recognize signs of hunger and fullness, offer age-appropriate foods and portions, use food only to satisfy hunger and not as a reward or punishment to calm a distressed but not hungry child. Moreover, they trigger repeated exposure to promote food acceptance, understand the importance of modelling healthy eating behaviours and share responsibility for feeding, as well as begin to establish routines and limits.

These empowerment's, in addition to being fundamental in the introduction of complementary feeding, also demonstrate benefits in the prevention of obesity, as early life growth patterns have been increasingly associated with childhood and adult obesity, as well as the risk of hypertension, coronary heart disease, and type 2 diabetes (Paul et al., 2011).

Healthcare professionals are essential in communities as they are trusted sources of information and have regular contact with families (Shi et al., 2010). It is important to highlight the limitations of complementary feeding in developing countries, even those with a safe food supply. This is particularly due to a lack of knowledge among caregivers about foods that are beneficial for children's health and development, limiting their ability to provide appropriate guidance to families (Shi & Zhang, 2011). In

DOI: <https://doi.org/10.29352/mill0218e.40835>

countries like Ghana, Peru, and Indonesia, one intervention involved cooking demonstrations to show how to hygienically prepare nutritious complementary foods (Davis et al., 2017; Robert et al., 2017; Susanto et al., 2017).

Delivering care that is culturally sensitive

With the data collected, it is possible to denote the importance of transcultural care in complementary feeding, and the need for nurses to adapt their approaches and respect individual needs. Significant improvements were noted after intervention in beliefs, attitudes, and intentions regarding child feeding (Monterrosa et al., 2013). Sometimes, deeply rooted attitudes, possibly influenced by sociocultural factors, seem to shape healthcare professionals' opinions, even after receiving training and public health interventions (Samuel et al., 2016).

Sharing information about nutritional guidance between healthcare professionals and municipalities allows for the creation of a shared vision, strong leadership, and broad collective objectives, as well as clarifying strengths and priorities for the development and launch of projects. There are studies that prioritize the inclusion of all family members, as well as the entire community, in these learnings' objectives, as they affirm that it is important for children to live in community environments that promote optimal health, development, and well-being throughout their lives (Shi et al., 2010; Shi & Zhang, 2011; Ishikawa et al., 2018).

Complementary feeding with local foods can significantly improve the nutritional status of infants and children, especially in economically disadvantaged families. Local foods are often affordable and readily available (Susanto et al., 2017).

Regarding the BLW method, the family and social context also plays an important role, as healthcare professionals that report, frequently, grandmothers consider the method dangerous, limiting the family's willingness to use it (Fernández-Medina et al., 2022).

It is extremely important to emphasize that, regardless of the approach used, regional food should be prioritized and recognized, valuing the economic and cultural advantages it can bring (Robert et al., 2017; Moura et al., 2021). Therefore, knowledge should be shared and built, and it is not the nurse's responsibility to impose a certain diet, but rather to dialogue with the caregiver and, together, find healthy alternatives that are within the family's budget and culture (Moura et al., 2021).

Therefore, there is a need to implement culturally sensitive, comprehensive intervention activities integrated with local resources (Shi et al., 2010), focusing on child development and family cultural traditions, both identified as gaps in current approaches, thus allowing for greater flexibility in the introduction of complementary feeding (Thompson et al., 2023).

This scoping review provided a broad and diverse overview of nurses' approaches and knowledge regarding complementary feeding, nutritional education, culture, and the knowledge of parents/caregivers. It is considered that this provides significant insights into the trends, gaps, and divergences present in the studies addressed, allowing for a global understanding of perspectives and practices in the context of introducing complementary feeding and empowering parents, demonstrating the role of the nurse in this area of practice.

CONCLUSION

The role of parents and caregivers is central to the formation of children's eating habits, and nutritional empowerment plays a crucial role in this process. The scoping review was fundamental for mapping the existing articles, being able to answer the research question, addressing what the nurse's role within the specific thematic context of complementary feeding and parental empowerment. As such, this health professional has a pivotal role not only in teaching parents, involving nutritional education, the influence of cultural and local approaches, and the approaches/knowledge of the parents themselves, but also in renewing and updating other colleagues so that the recommendations are the most appropriate and safe, respecting the individual needs of families, increasing the quality of care provided and, consequently, the trust and respect of the community for the nurse.

Considering nurse's daily clinical practice, this research shows these health professionals play a vital role in providing parental counselling regarding complementary feeding guidance. This study highlights the need to incorporate structured, evidence-based educational interventions into routine nursing care. It is important that nurses can have access to ongoing professional development and culturally sensitive communication skills, to understand the real and diverse needs of each family. For future research, it is recommended to evaluate the impact of nurse-led interventions on parental practices and subsequent impact on child health, as well as to explore the long-term outcomes of such counselling.

LIMITATIONS

This scoping review has some limitations related to the scope and selection of databases. Although a wide range of databases was consulted, it is possible that relevant studies indexed in other sources were missed, which may have introduced selection bias. However, the use of multiple, well-established databases with broad coverage of healthcare literature helped to mitigate this limitation and enhance the comprehensiveness of the review. The absence of time restrictions allowed for a broader search but may have introduced variability in study designs and outcomes, which could affect the consistency of the findings. Nevertheless, this approach ensured that both historical and recent evidence was considered, providing a more complete picture of the research landscape. Although the data extraction and analysis were conducted by only two investigators, potential bias was minimized through regular discussions and consensus-building during the review process.

DOI: <https://doi.org/10.29352/mill0218e.40835>

AUTHORS' CONTRIBUTION

Conceptualization, T.A. and R.F.; data curation, T.A. and R.F.; formal analysis, T.A. and R.F.; investigation, T.A. and R.F.; methodology, T.A. and R.F.; supervision, R.F.; validation, T.A. and R.F.; visualization, T.A. and R.F.; writing-original draft, T.A. and R.F.; writing-review and editing, T.A. and R.F.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

- Arias-Ramos, N., Andina-Díaz, E., Grando-Soto, M., Rodríguez, R. A., & Liébana-Presa, C. (2022). Baby-led weaning: Health professionals' knowledge and attitudes and parents' experiences from Spain. A mixed methods approach. *Health & Social Care in the Community*, 30(4), e1352–e1363. <https://doi.org/10.1111/hsc.13543>
- Ariko, D., Edet, E. S., Chibuzor, M. T., Odey, F., & Caldwell, D. M. (2018). Educational interventions for improving primary caregiver complementary feeding practices for children aged 24 months and under (Review). *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1002/14651858.CD011701.pub2>
- Bramhagen, A., Axelsson, I., & Hallström, I. (2006). Mothers' experiences of feeding situations. *Journal of Clinical Nursing*, 15(1), 29–34. <https://doi.org/10.1111/j.1365-2702.2005.01242.x>
- Caroli, M., Mele, R. M., Tomaselli, M. A., Cammisa, M., Longo, F., & Attolini, E. (2012). Complementary feeding patterns in Europe with a special focus on Italy. *Nutrition, Metabolism and Cardiovascular Diseases*, 22, 813–818. <http://dx.doi.org/10.1016/j.numecd.2012.07.007>
- Correia, C. (2015). *Seletividade Alimentar e Sensibilidade Sensorial em Crianças com Perturbação do Espectro do Autismo* (Projeto de Mestrado). Escola Superior de Saúde do Alcoitão, Lisboa.
- Daudt, H. M. L., van Mossel, C., & Scott, S. J. (2013). Enhancing the scoping study methodology: A large, inter-professional team's experience with Arksey and O'Malley's framework. *BMC Medical Research Methodology*, 13, 48. <https://doi.org/10.1186/1471-2288-13-48>
- Davis, J., Brown, H., & Ramsay, S. (2017). Gaps in international nutrition and child feeding guidelines: A look at the nutrition and young child feeding education of Ghanaian nurses. *Public Health Nutrition*, 20(12), 2215–2224. <https://doi.org/10.1017/S1368980017000908>
- Direção-Geral da Saúde. (2019). *Alimentação saudável dos 0 aos 6 anos: Linhas de orientação para profissionais e educadores*. <http://www.spgp.pt/media/1316/n-e-a-alimenta%C3%A7%C3%A3o-saud%C3%A1vel-dos-0-aos-6-anos-dgs-2019.pdf>
- Fernández-Medina, I. M., Márquez-Díaz, R. E., Arcas-Rueda, M., Ruíz-Fernández, M. D., Ortiz-Amo, R., & Ventura-Miranda, M. I. (2022). Experiences and opinions of Baby-Led Weaning by healthcare professionals: A qualitative study. *Pediatric Research*. <https://assets.researchsquare.com/files/rs-2201747/v1/ecc0585e-09b9-48e6-95b1-e9eae8a1b53f.pdf?c=1671480869>
- Fewtrell, M., Bronsky, J., Campoy, C., Domellöf, M., Embleton, N., Mis, N. F., Hojsak, I., Hulst, J. M., Indrio, F., Lapillonne, A., & Molgaard, C. (2017). Complementary feeding: A position paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition. *Journal of Pediatric Gastroenterology and Nutrition*, 64(1), 119–123. <http://spgp.pt/media/1061/pdf29.pdf>
- Fisberg, M., Tosatti, A., & Abreu, C. (2014). A criança que não come – abordagem pediátrico-comportamental. *Blucher Medical Proceedings*, 4(1). <https://www.proceedings.blucher.com.br/article-details/a-criana-que-no-comes-abordagem-peditrico-comportamental-11190>
- Hart, C. N., Raynor, H. A., Jelalian, E., & Drotar, D. (2010). The association of maternal food intake and infants' and toddlers' food intake. *Child: Care, Health and Development*, 36(3), 396–403. <https://doi.org/10.1111/j.1365-2214.2010.01072.x>
- Hohman, E., Savage, J., Paul, I., & Birch, L. (2016). INSIGHT study parenting intervention to prevent childhood obesity improves patterns of dietary exposures in infants. *The FASEB Journal*, 30(1), 295.2. https://doi.org/10.1096/fasebj.30.1_supplement.295.2
- Hopkins, D., Emmett, P., Steer, C., Rogers, I., Noble, S., & Emond, A. (2007). Infant feeding in the second 6 months of life related to iron status: An observational study. *Archives of Disease in Childhood*, 92(10), 850–854. <https://doi.org/10.1136/ad.2006.114074>
- Ishikawa, M., Eto, K., Haraikawa, M., Sasaki, K., Yamagata, Z., Yokoyama, T., Kato, N., Morinaga, Y., & Yamazaki, Y. (2018). Multi-professional meetings on health checks and communication in providing nutritional guidance for infants and toddlers in Japan: A cross-sectional, national survey-based study. *BMC Pediatrics*, 18, 325. <https://doi.org/10.1186/s12887-018-1292-7>

DOI: <https://doi.org/10.29352/mill0218e.40835>

- Monterrosa, E., Frongillo, E., Cossío, T., Bonvecchio, A., Villanueva, M., Thrasher, J., & Rivera, J. (2013). Scripted messages delivered by nurses and radio changed beliefs, attitudes, intentions, and behaviors regarding infant and young child feeding in Mexico. *The Journal of Nutrition*, 143(6), 915–922. <https://doi.org/10.3945/jn.112.169235>
- Moura, J., Vasconcelos, E., Vasconcelos, C., Silva, A., Medeiros, K., Lemos, F., & Silva, M. (2021). Promoção da alimentação complementar saudável em menores de dois anos por enfermeiros: revisão integrativa. *Revista de Enfermagem Digital Cuidado e Promoção de Saúde*, 1–8. <https://doi.org/10.5935/2446-5682.20210019>
- Neves, F. S., Romano, B. M., Campos, A. A. L., Pavam, C. A., Oliveira, R. M. S., Cândido, A. P. C., & Netto, M. P. (2021). Brazilian health professionals' perception about the Baby-Led Weaning (BLW) method for complementary feeding: An exploratory study. *Revista Paulista de Pediatria*, 40, 1–10. <https://doi.org/10.1590/1984-0462/2022/40/2020321>
- Ojha, S., Elfzzani, Z., Kwok, T. C., & Dorling, J. (2020). Education of family members to support weaning to solids and nutrition in later infancy in term-born infants (Review). *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1002/14651858.CD012241.pub2>
- Oliveira, P., & Souza, A. (2022). Terapia com base em integração sensorial em um caso de Transtorno do Espectro Autista com seletividade alimentar. *Cadernos Brasileiros de Terapia Ocupacional*, 30. <https://doi.org/10.1590/2526-8910.ctoRE21372824>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., et al. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Paul, I., Savage, J., Anzman, S., et al. (2011). Preventing obesity during infancy: A pilot study. *Obesity (Silver Spring)*, 19(2), 353–361. <https://doi.org/10.1038/oby.2010.182>
- Peters, M. D. J., Godfrey, C., Mclnerney, P., Munn, Z., Tricco, A. C., & Khalil, H. (2020). Chapter 11: Scoping Reviews. In E. Aromataris & Z. Munn (Eds.), *JBI Manual for Evidence Synthesis*. <https://doi.org/10.46658/JBIMES-20-12>
- Rachmah, Q., Astina, J., Atmaka, D., & Khairani, L. (2023). The effect of educational intervention based on Theory of Planned Behavior approach on complementary feeding: A randomized controlled trial. *International Journal of Pediatrics*, 1086919. <https://doi.org/10.1155/2023/1086919>
- Rito, A., Mendes, S., Baleia, J., & Gregório, M. J. (2021). *Childhood Obesity Surveillance Initiative*. https://nutrimento.pt/activeapp/wp-content/uploads/2021/10/COSI_Portugal_2019_out2021.pdf
- Robert, R., Creed-Kanashiro, H., Villasante, R., Narro, M., & Penny, M. (2017). Strengthening health services to deliver nutrition education to promote complementary feeding and healthy growth of infants and young children. *Maternal & Child Nutrition*, 13(2), e12264. <https://doi.org/10.1111/mcn.12264>
- Rossi, C., Albernaz, D., Vasconcelos, F., Assis, M., & Pietro, P. (2010). Influência da televisão no consumo alimentar e na obesidade em crianças e adolescentes: Uma revisão sistemática. *Revista de Nutrição*, 23(4), 607–620. <https://doi.org/10.1590/S1415-52732010000400011>
- Samuel, F. O., Olaolun, F. M., & Adeniyi, J. D. (2016). A training intervention on child feeding among primary healthcare workers in Ibadan Municipality. *African Journal of Primary Health Care & Family Medicine*, 8(1), 1–6. <http://dx.doi.org/10.4102/phcfm.v8i1.884>
- Shi, L., & Zhang, J. (2011). Recent evidence of the effectiveness of educational interventions for improving complementary feeding practices in developing countries. *Journal of Tropical Pediatrics*, 57(2), 91–98. <https://doi.org/10.1093/tropej/fmq053>
- Shi, L., Zhang, J., Wang, Y., Caulfield, L. E., & Guyer, B. (2010). Effectiveness of an educational intervention on complementary feeding practices and growth in rural China: A cluster randomized controlled trial. *Public Health Nutrition*, 13(4), 556–565. <https://doi.org/10.1017/S1368980009991364>
- Silva, G. A. P., Costa, K. A. O., & Giugliani, E. R. J. (2016). Infant feeding: Beyond the nutritional aspects. *Jornal de Pediatria*, 29(3), S2–S7. <http://dx.doi.org/10.1016/j.jped.2016.02.006>
- Susanto, T., Syahrul, R., Salistyorini, L., Rondhianto, R., & Yudisianto, A. (2017). Local-food-based complementary feeding for the nutritional status of children ages 6–36 months in rural areas of Indonesia. *Korean Journal of Pediatrics*, 60(10), 320–326. <https://doi.org/10.3345/kjp.2017.60.10.320>
- Thompson, K., Conklin, J., & Thoyre, S. (2023). Parental decision-making around introducing complementary foods: An integrative review. *Journal of Family Nursing*. <https://doi.org/10.1177/10748407231156914>
- Warren, J. (2018). An update on complementary feeding. *Nursing Children and Young People*, 30(6), 38–47. <https://doi.org/10.7748/ncyp.2018.e1032>
- Williams, A., & Pinnington, L. (2003). Nurses' knowledge of current guidelines for infant feeding and weaning. *Journal of Human Nutrition and Dietetics*, 16(2), 73–80. <https://doi.org/10.1046/j.1365-277x.2003.00430.x>
- World Health Organization. (2021). *Infant and young child feeding*. <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>