

## REVIEW SUMMARY

# Health professionals' counselling on the use of infant formula: A scoping review

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## Abstract

**Objective:** Many parents experience lack of support and access to resources on how to prepare, handle, and provide formula milk to their infants. The purpose of this scoping review was to map and describe key information in existing research about how health-care professionals receive information and how they inform and counsel parents about formula milk.

**Design:** A scoping review fulfilling the PRISMA-ScR checklist criteria used systematic searches targeting the study objective in the databases Embase, MEDLINE, and CINAHL on February 8th and 9th, 2022.

**Results:** Six studies with 959 participants in total were included. The research designs were focus group studies with and without combining individual interviews, an individual interview study, a study consisting of individual interviews and ethnographic observations, a survey, and a two-phase study consisting of a qualitative interview and a quantitative survey. Findings indicate lack of evidence-based information provided about infant formula by health care professionals when they counsel parents on formula feeding.

**Conclusions:** Few studies focus on how healthcare professionals inform and counsel parents about formula milk. Health authorities should provide more evidence-based information to make formula feeding more feasible. Due to conflicting and omitted information, mothers often receive poor counselling on formula feeding.

## KEYWORDS

counselling, health personnel, infant, infant formula, information dissemination, parents, review

## 1 | INTRODUCTION

The feeling of becoming a mother can be overwhelming (Parfitt & Ayers, 2014) and there are many new skills to learn. Breastfeeding is one of the skills that can be challenging in this context (Leahy-Warren et al., 2017; Spannhake et al., 2021). Because exclusive breastfeeding

gives health benefits for the child and the mother it is recommended for the first 6 months after birth by the health authorities (Norwegian Directorate of Health, 2022; WHO, 2003). Despite this recommendation, there are women who, for various reasons, do not breastfeed, and infant formula is used extensively internationally. Globally, only 41% of children younger than 6 months are exclusively breastfed

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(WHO & UNICEF, 2019). According to a recent study (Myhre et al., 2020), 97% of infants aged 1 week in Norway were breastfed, either exclusively or in combination with infant formula feeds. According to Myhre et al. (2020) the proportion of exclusively breastfed children in Norway diminishes from 64% to 39% between the age of 3.5 and 4 months. At the age of 6 months, 76% of the infants who were breastfed received formula milk or other milk in addition (Myhre et al., 2020).

To avoid health risks and infections such as respiratory tract infection (Munblit et al., 2020), it is important to prepare formula feeds correctly and hygienically (Boué et al., 2018). As indicated in a study by Appleton et al. (2018), some parents who fed their infants with formula said that they lacked support and access to resources to guide them on formula feeding. In another study, mothers commented that they wanted the health authorities to provide more information about how to prepare infant formula (Hvatum & Glavin, 2016). Parents reported that they perceived paucity of advice and support on infant formula (Cheng et al., 2022). Incorrect preparation, overfeeding, using large bottles, or feeding while in bed, might put formula fed children at risk of developing overweight or obesity (Appleton et al., 2018). Cheng et al. (2022) pointed out that some parents of newborns might also add cereals to bottles of infant formula. While there is satisfactory information from health authorities to promote and support breastfeeding, many formula-feeding parents must rely on the text on the formula packaging or on commercial online resources for information (Cheng et al., 2022).

In a previous study by Hvatum et al. (2014), it was revealed that mothers who formula fed their child might have avoided asking a health professional for support and advice with feeding due to fear of not being seen as a good mother because of not breastfeeding. According to Labiner-Wolfe et al. (2008), most formula-feeding mothers did not receive advice on formula preparation (77%) and storage (73%) from a health professional. Thirty percent of these mothers did not read the safe-use directions on the formula package label and an approximately equal percentage (38%) thought that formula was unlikely to contain germs. Eighty-five percent of the mothers believed that following safe-storage directions was very important. Among the mothers of the youngest infants in the study, 55% did not always wash their hands with soap and water before preparing infant formula, and 32% did not adequately wash bottle teats between the uses. Thirty-five percent of the mothers heated formula bottles in a microwave oven even if this was not recommended, and 6% did not always follow instructions to discard the prepared formula if not used within 2 h (Labiner-Wolfe et al., 2008).

Healthcare professionals should thus be mindful of the potential for unsafe practices regarding infant formula and they should offer parents support and advice. This presupposes sufficient knowledge about formula feeding and related themes to ensure correct and balanced information and reduce the stigma among parents who formula feed (Diez-Sampedro et al., 2019; Jackson et al., 2021; Moss-Racusin et al., 2020). The guidelines of the Norwegian health authorities emphasize that healthcare professionals shall provide sufficient counselling to parents on the use of infant formula to their children (Norwegian Direc-

torate of Health, 2022). A sense of obligation to protect and support breastfeeding might cause health professionals to feel uncomfortable about providing parents with information and counselling about infant formula and bottle feeding (Fahlquist, 2016; Fallon et al., 2017). Given this, the aim of this scoping review was to map and describe key information in existing research about how healthcare professionals receive information as well as how they inform and counsel parents about formula milk feeding. To our knowledge there is no previous systematic review on these themes.

## 2 | METHODS

### 2.1 | A scoping review framework

We chose a scoping review method because the aim is to identify the available evidence in a given field (Peters et al., 2020). We used the methodological approach described by The Joanna Briggs Institute (JBI) as a nine-step scoping review framework (Peters et al., 2020). This is based on the original framework by Arksey and O'Malley (2005). First, we prepared a review protocol. However, this was not registered or published. In the protocol, we used the recommended mnemonic PCC, which stands for Population, Concept and Context (Peters et al., 2020). In our case, Population indicated health professionals, the Concept was defined as information or counselling about formula milk and the Context was healthcare settings. To detail the review decision process (Figure 1), we used the PRISMA 2020 flow diagram as described by Page et al. (2021). We have fulfilled the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist (Tricco et al., 2018).

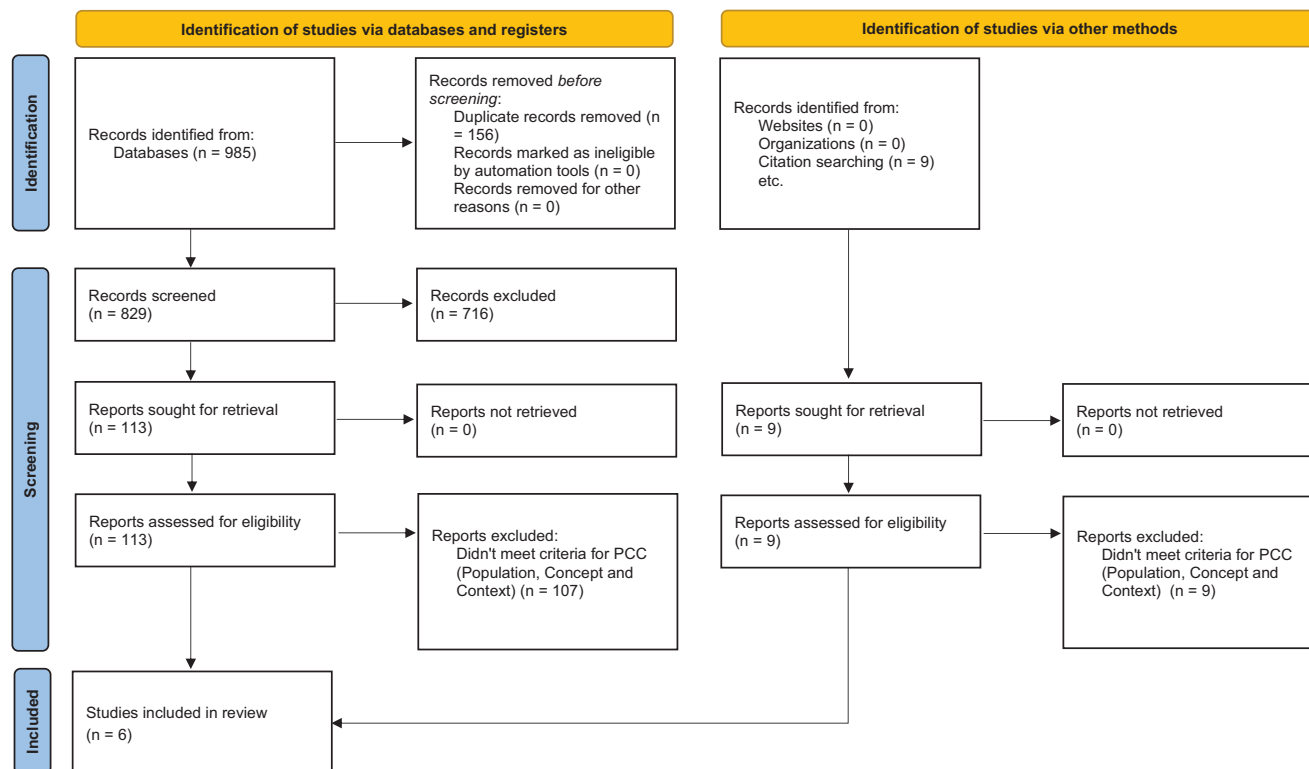
### 2.2 | Identifying relevant studies

#### 2.2.1 | Inclusion and exclusion criteria

The sources included were primary research articles in English, available on the current topic and reflecting the specified PCC, and without any methodology requirement.

#### 2.2.2 | Search strategy

A professional librarian performed the systematic searches in the databases Embase, MEDLINE and CINAHL on February 8th and 9th, 2022. In addition, records were identified in reference lists in applicable publications when the research group read relevant articles. Search terms were identified from keywords, abstracts, titles, and controlled vocabulary from the databases (MeSH, CINAHL subject headings, and Emtree). The final search strategy was designed through discussion in the research group during the pilot testing phase. The search terms were entered as keywords in addition to subject terms, including truncation to increase the search sensitivity. No year limiters were added.



**FIGURE 1** A flow diagram detailing the review decision process. This flow diagram is based on The PRISMA 2020 statement (Page et al., 2021) [Color figure can be viewed at wileyonlinelibrary.com]

The combinations of search terms, limiters, Boolean operators, and the number of results in each database are listed in Table 1.

### 2.2.3 | Review decision process

Figure 1 summarizes the article selection process in a flow diagram. The identification from the systematic searches resulted in 985 records from the databases (Table 1). First, duplicates were removed, then the titles and abstracts were screened, and nonresearch papers were removed. Nine additional records were identified through reference lists of relevant articles. Articles that did not meet inclusion criteria, based on titles and abstracts were then removed. After a thorough reading of the remaining 113 articles, six articles were included based on their relevance to the inclusion and exclusion criteria.

We used the Rayyan software-tool for organizing the included records (Ouzzani et al., 2016). The first author organized the records into two groups of the same size and then arbitrarily assigned two authors to each group. The authors then screened the assigned records independently, and after a thorough reading, they decided which articles to include. Any disagreements between the assigned authors were solved through discussion with the other pair of authors.

There were 959 participants altogether in the included studies, consisting of nurses working in early parenting residential units, a dieti-

tian, general practitioners, child- and family health nurses, midwives, child-care workers, pediatricians, healthcare assistants, mothers and grandmothers. The studies either explored experiences or assessed knowledge among the participants using qualitative ( $n = 4$ ), quantitative ( $n = 1$ ) or mixed methods ( $n = 1$ ). Data collection methods included focus groups ( $n = 1$ ), individual interviews ( $n = 1$ ) combined focus groups and individual interviews ( $n = 1$ ), individual interviews integrated with one qualitative observation ( $n = 1$ ), a quantitative survey based on the participants' completed questionnaires ( $n = 1$ ), and a quantitative survey combined with a qualitative approach ( $n = 1$ ).

### 2.2.4 | Data extraction

The included articles were organized in a charting table (Table 2). In this table, one of the columns shows the extracted evidence or key findings from each article corresponding to the scoping review question. Because scoping reviews do not synthesize the results or outcomes of the included articles, the results were extracted descriptively according to the guidance from Peters et al. (2020). Based on the included articles and their key findings related to the scoping review question as seen in Table 2, similarities and differences were identified and summarized in a descriptive narrative. The authors worked together to create themes based on the narratives. In the following section the themes comprising the findings of the study are presented.

**TABLE 1** Combinations of search terms, limiters, and the number of results obtained.

Database	Combinations of search terms	Number of results
EMBASE	health personnel OR health care personnel OR midwifery OR midwife/ OR midwife* OR public health nursing OR community health nursing OR community health nurses OR public health nurses OR health visitor* AND infant formula OR artificial milk OR bottle feeding OR supplemental infant feeding OR formula feeding AND counseling OR directive counseling OR guid* OR patient education OR information	553
MEDLINE	Health Personnel OR health care personnel OR Midwifery OR midwife* OR Public Health Nursing OR Community Health Nursing OR Nurses, Public Health OR Nurses, Community Health OR health visitor* AND Infant Formula OR artificial milk OR Bottle Feeding OR formula feeding OR supplemental infant feeding AND Directive Counseling OR Counseling OR Patient Education as Topic OR guid* OR information	155
CINAHL	Health Personnel OR health care personnel OR Midwifery OR Midwife* OR Community Health Nursing OR public health nursing OR public health nurses OR community health nurses OR health visitor* AND Infant Formula OR artificial milk OR Bottle Feeding OR Infant Feeding, Supplemental OR formula feeding AND directive counseling OR Counseling OR Patient Education OR guid* OR information	277
Database	Limiters	
EMBASE	Language: English	
MEDLINE	Language: English	
CINAHL	Language: English	

### 3 | RESULTS

In this section we will present the key findings organized under themes that emerged based on the data extraction. The four themes are: healthcare professionals provide information and conflicting information, making supplementary feeding feasible for the parents, lack of updated evidence-based information from healthcare providers, and lack of important aspects in the information concerning formula milk feeding.

#### 3.1 | Healthcare professionals provide information and conflicting information

All the included studies described content of information on formula milk given by health professionals (Battersby, 2010; Berry et al., 2011; Calamusa et al., 2009; Cloherty et al., 2004; Kotowski et al., 2022; Lakshman et al., 2011). In one of the studies the mothers described how they perceived conflicting information because the content in counselling on feeding infants varied widely among healthcare providers (Lakshman et al., 2011).

According to Berry et al. (2011), previous policy changes prohibited the distribution of materials that advertised formula milk to or by health staff in Australia and the available information materials on formula milk were thus outdated.

The health professionals found it difficult to access workplace policies about bottle feeding, because there was usually only a breast-feeding policy to follow (Kotowski et al., 2022). To counsel parents on formula milk, they had to rely on the information from the formula-producing companies, because the national infant feeding guidelines did not answer all their queries on formula and teats. They had often experienced that parents gave too much formula milk to the baby based on

reading the text on the tin (Kotowski et al., 2022) and they were concerned that the formula milk manufacturers gave biased information (Berry et al., 2011; Kotowski et al., 2022). Likewise, a mother had been told by a midwife that “you cannot give supplementary feeds too often because the baby gets hungry” (Cloherty et al., 2004).

According to Kotowski et al. (2022), nurses were confident about counselling parents on the preparation of formula, sterilization of the bottle and feeding equipment, and about responsive feeding practices. However, they had limited knowledge about the differences between various formulas, bottles, and teats. This made it difficult for them to know what to advise. Some even felt that they were not the appropriate person for the mothers to ask (Kotowski et al., 2022).

#### 3.2 | Making supplementary feeding feasible for the parents

Midwives expressed how they often suggested formula feeding to the mother either if they felt distressed themselves when seeing the pain experienced by the mother due to breastfeeding, or because they wanted to protect the mothers who seemed very tired (Cloherty et al., 2004).

Despite feelings of uncertainty in connection to lack of confidence about their role regarding families in the need for bottle-feeding support, the nurses described how they informed parents about feeding practices connected to bottle-feeding. This information was about positioning the infant for eye contact and physical contact, as well as understanding infant cues and social interaction during feeding (Kotowski et al., 2022). A health visitor emphasized that because some mothers equate crying with hunger, there is a need to support and educate the mothers to use other tactics than feeding to calm the baby (Lakshman et al., 2011). Moreover, nurses described

**TABLE 2** Key information from the included studies, chronologically from newest to oldest.

Study	Purpose	Sample	Methodology/methods	Key findings that relate to the scoping review question
Kotowski et al. (2022; Australia)	To explore nurses' knowledge of the components in the bottle-feeding act. (Bottle-feeding includes feeding with either breast milk or infant formula.)	Nurses working in early parenting residential units (21)	<ul style="list-style-type: none"> <li>Three focus group interviews based on an exploratory, descriptive, qualitative approach.</li> </ul>	<ul style="list-style-type: none"> <li>The nurses were giving bottle-feeding information that was not evidence based.</li> <li>Because of lack of knowledge about differences between formulas, and teats, the nurses were unsure about what constitutes accurate bottle-feeding information versus promotion of products.</li> <li>The nurses described how they gave similar advice on feeding practices to that given to breast-feeding mothers, like positioning the infant for eye contact and physical contact, understanding infant cues and social interaction during feeding.</li> <li>The nurses described strategies to normalize infant feeding behavior and bottle-feeding techniques and to support whatever choice the parents made on feeding.</li> </ul>
Berry et al. (2011; Australia)	To explore the participants' brand awareness and sources of information about formula milk products in addition to exploring their responses to print advertisements for toddler milk.	Total participants (15) Registered dietitian (1) General practitioner (1) Child and family health nurses (7) Mothers (2) Grandmothers (4)	An interview study; <ul style="list-style-type: none"> <li>Two individual interviews, one with a registered dietitian and one with the general practitioner.</li> <li>One discussion group with five children and family health nurses (CFHNS) and another with two CFHNS.</li> <li>One friendship group of two mothers and two friendship groups of two grandmothers in each.</li> </ul> Data collection until saturation, that is, until no new themes were identified or additional interviews did not provide any new data about the theme.	<ul style="list-style-type: none"> <li>The health professionals are an important source of information about infant formula for mothers.</li> <li>The nurses describe how they perceive negative impact for their capacity to advise mothers about choosing formula milk for their babies. This is because a recent policy change prohibits the distribution of formula milk advertising materials to or by health staff in New South Wales (Australia). Because of this prohibition, the available information materials on formula milk are out-dated.</li> <li>Nurses are not allowed to recommend any formulas, just to tell parents about formulas. The mothers are told to read the formula-tin themselves to compare the different brands.</li> <li>Health professionals do not access independent information about infant formula products, but they rely on advertising materials. This is of concern.</li> </ul>
Lakshman et al. (2011; UK)	To understand users' perspectives about 'The Program for Healthy Growth and Nutrition during infancy' and a planned trial (the <i>Bobby</i> milk trial) an intervention for healthy growth and nutrition in formula milk-fed babies. To assess the two draft leaflets about the messages of the program.	Mothers participating in focus groups (10) Health visitors (7) Midwife (1) Mother participating in individual interviews (1)	<ul style="list-style-type: none"> <li>Three focus group discussions with 10 mothers in total;</li> <li>Nine individual interviews with seven health visitors, one community midwife and one mother discussing the program materials and the trial protocol.</li> </ul> Respondent validation was done by summarizing the main findings and offering these back to the participants to confirm them.	<ul style="list-style-type: none"> <li>The mothers said that there was a lot of conflicting information on feeding that they received from the healthcare providers and other sources.</li> <li>There was a lack of information on different types of formula milk, bottles and teats.</li> <li>A health visitor said that because some mothers think that "crying equals hunger," there is a need to support and educate the mothers to use tactics other than feeding to calm the baby.</li> </ul>

(Continues)



TABLE 2 (Continued)

Study	Purpose	Sample	Methodology/methods	Key findings that relate to the scoping review question
Battersby (2010; UK)	To explore midwives' knowledge and support on formula feeding and to identify barriers for the midwives when giving information to mothers who formula feed their infants.	Midwives participated in Phase 1 (22) Midwives participating in Phase 2 (110)	A qualitative (Phase 1) and quantitative approach (Phase 2). <ul style="list-style-type: none"> <li>Phase 1: in-depth face-to-face interviews. This was used to develop a survey for</li> <li>Phase 2: a quantitative survey.</li> </ul>	<ul style="list-style-type: none"> <li>The midwives asked the mothers about their feeding intentions antenatally, even if this is not recommended because it might negatively impact the mothers' intentions to breast-feed.</li> <li>A midwife commented that she felt compelled to promote breastfeeding; she was not allowed to support bottle feeding or formula feeding.</li> <li>There was no longer a policy to demonstrate feeding and sterilization practices of bottles in antenatal classes.</li> <li>Most midwives asked if the mother knew about how to make up formula feeds, but they only followed up with information if there were concerns.</li> <li>The latest government guidelines for formula feeds were either being misinterpreted or not used because the midwives were unaware of them.</li> <li>Use of leaflets to back up the oral information was very ad hoc. The midwives' knowledge about formula and its ingredients was weak. Because of limited sources of information in hospitals, midwives frequently got information about official recommendations from mothers themselves.</li> <li>Only 51% of the midwives saw it as their duty to inform their mothers about formula milks. A midwife who knew a lot about breastfeeding could not talk about formula milk because there was a lack of relevant information.</li> </ul>
Calamusa et al. (2009; Italy)	To assess and compare knowledge and self-reported formula handling practices of a sample of parents and childcare workers in Palermo, Italy. Associations between some socio-demographics among the participants was also evaluated.	Parents (417) Childcare workers (314)	<ul style="list-style-type: none"> <li>A survey based on a self-administered questionnaire.</li> </ul>	<ul style="list-style-type: none"> <li>Eighty percent of the mothers reported that they had not received instructions on formula preparation or storage from a doctor or other health professional.</li> </ul>
Cloherly et al. (2004; UK)	To explore mothers' and healthcare professionals' beliefs, expectations, and experiences in relation to supplementation of breast feeding in the postnatal ward and new-born-baby unit.	Mothers (30) Midwives (17) Neonatal nurses (4) Pediatricians (3) Senior house officers (3) Healthcare assistants (3)	<ul style="list-style-type: none"> <li>A qualitative study with an ethnographic approach involving participant observation and interviews. Categories derived from field notes and interviews.</li> </ul>	<ul style="list-style-type: none"> <li>Some midwives saw supplementation to breast feeding as the mother's right.</li> <li>It also seems possible that midwives might feel distressed when seeing pain experienced by a mother. This may result in the midwife suggesting that the mother provide supplements to her child. Sometimes, the mothers asked for supplementation for their babies themselves.</li> <li>A large proportion of babies thus received supplement milk for reasons other than having a medical need.</li> <li>Some midwives saw it as important to make it easy for the mother to discuss giving up breast feeding. Having a medical reason allows the mother to feel less guilt if she wants to stop breast feeding.</li> <li>Not all mothers were told about the disadvantages of supplementation use. This might have been because midwives were too busy.</li> <li>Other midwives did not suggest supplementation to mothers but made it accessible if the mother requested this, without offering other feeding strategies first. Explaining why supplementary feeding may adversely affect subsequent breast feeding often takes more time than giving a bottle or cup.</li> </ul>

strategies to normalize infant feeding behavior and bottle-feeding techniques. The nurses supported the parents no matter what choice they made on feeding (Kotowski et al., 2022).

A study by Battersby (2010) found that most of the participating midwives asked prospective mothers about their feeding intentions antenatally. According to Battersby (2010), this is not recommended by the Baby Friendly Initiative (BFI), because it might have a negative impact on the mothers' breastfeeding intentions later. However, the current BFI does not explicitly state that discussion about feeding intentions should be avoided during pregnancy (WHO & UNICEF, 2018). Only 51% of midwives saw it as their duty to inform the mothers about formula milk. Many midwives thought that this information should be given by a health visitor. Others thought that manufacturers of formula milk should provide the information (Battersby, 2010).

### 3.3 | Lack of updated evidence-based information from healthcare providers

According to Battersby (2010), the latest government guidelines from the European Food Safety Authority (European Food Safety Authority, 2017) were not used because the midwives were either unaware of them or misinterpreting them. These guidelines recommend, among other things, that formula feeds should be freshly prepared just before feeding. They also have recommendations on the heat of the water (Battersby, 2010).

The nurse participants in four out of the six included studies described having difficulties, for different reasons, in informing and counselling parents about formula milk (Battersby, 2010; Berry et al., 2011; Kotowski et al., 2022; Lakshman et al., 2011). Some healthcare professionals had limited evidence-based knowledge on the differences between various formula milks, bottles and teats (Battersby, 2010; Berry et al., 2011; Lakshman et al., 2011). Due to lack of knowledge about differences between formulas and teats, the nurses were unsure about what was accurate, unbiased bottle-feeding information versus promotion of products (like advertising) when discussing bottle-feeding with parents. Accordingly, it was difficult for them to know what advice to give. The counselling on these themes was thus based on their experience and not evidence based (Kotowski et al., 2022).

### 3.4 | Lack of important aspects in the information concerning formula feeding

In two of the studies, most of the mothers reported that they lacked information about formula feeding, especially information on different types of formula milk, bottles, and teats (Calamusa et al., 2009; Lakshman et al., 2011). Some mothers only received information if they asked for it (Cloherty et al., 2004). The majority of the midwives provided information about formula feeding only if the mother expressed concerns (Battersby, 2010). A nurse stated that they were not allowed

to recommend any formulas, just to tell parents about formulas. She therefore recommended the mothers read information on the formulas themselves, in order to compare the different brands (Berry et al., 2011).

Sometimes, if the mother wanted to supplement breast milk with formula, the midwife provided no information about possible disadvantages of supplementation feeding. They saw no reason to offer this information, because they saw it as the mothers' right to choose (Cloherty et al., 2004). Some midwives experienced a dissonance when providing information on formula feeding as they were expected to support breastfeeding (Battersby, 2010).

## 4 | DISCUSSION

We identified six studies, which suggest scant research in this area although there is widespread use of formula milk (Myhre et al., 2020; WHO & UNICEF, 2019). The studies referred to various aspects concerning the aim of our scoping review. The current scoping review focused on information giving and counselling by healthcare professionals. This differs from the view of a previous systematic review about formula feeding which focused on the bottle feeding experience of mothers (Lakshman et al., 2009). Five of our studies were published from 2004 – through 2011 and one in 2022. The studies originate from Europe and Australia.

### 4.1 | Despite intentions of providing updated evidence-based information, there are still shortcomings in applicable materials

Different aspects of information on formula milk given by healthcare professionals were described (Battersby, 2010; Berry et al., 2011; Calamusa et al., 2009; Cloherty et al., 2004; Kotowski et al., 2022; Lakshman et al., 2011). Ever since 2003 there has been an increased focus on evidence-based knowledge on formula feeding from the *Global strategy for infant and young child feeding* (WHO, 2003). This has prompted policies stating that healthcare professionals shall provide sufficient updated counselling to parents on the use of infant formula for their children. However, limited knowledge among health professionals about the differences between various formulas, bottles, and teats have, for instance, led to mothers experiencing that they receive conflicting information on feeding. They have thus been requesting leaflets, clearer guidance, and demonstrations on how to mix and give formula milk and which brand to choose (Lakshman et al., 2011). Healthcare professionals have experienced a dilemma because the available information from health authorities has often been insufficient and outdated. Simultaneously, they have considered it unsatisfactory to rely on information from the formula-producing companies due to not receiving adequate information from health authorities. Moreover, they are not allowed to hand out accessible information about formula milk from the manufacturers because that could seem like advertising in favor of stopping breastfeeding.



Midwives have thus expressed how they provide less information on infant feeding than they thought they should, to be on the safe side of not promoting infant formula instead of breastfeeding (Berry et al., 2011). This corresponds to the mothers' experience of not getting enough information, for instance, about how to prepare infant formula milk (Calamusa et al., 2009; Hvatum & Glavin, 2016). Hindering mothers from receiving adequate recommendations for preparing formula milk might lead to incorrect practices handed down from one generation to the next (Labiner-Wolfe et al., 2008; Lakshman et al., 2009), because, when women do not get information from healthcare professionals, they are reliant on friends and family (Lakshman et al., 2009).

#### 4.2 | A common misunderstanding of the highest standard possible

The Baby Friendly Initiative (WHO & UNICEF, 2018) was meant to lay the foundation for education of the highest standard possible to women either for formula feeding or for breastfeeding their child. However, it may have worked against its intended purpose because of a rather one-sided focus in society on exclusively supporting breastfeeding (Wirihana & Barnard, 2012). Similarly, Cloherty et al. (2004) describe how some midwives did not agree to discuss feeding intentions with becoming mothers because they thought it was the manufacturers of formula milk that should provide this information. They thought that by not mentioning bottle feeding they could encourage breastfeeding. This corresponds to what some mothers reported, that they were only given information about formula milk if they asked for it (Cloherty et al., 2004).

#### 4.3 | Updated and evidence-based focus on infant feeding

In recent years, there has been an updated focus in the Nordic countries on the health authorities' responsibility to provide adequate information on formula feeding, that corresponds to the standard information on breastfeeding. Hence, health authorities are supposed to promote breastfeeding and, in addition, to provide information about how to formula feed. However, to avoid any confusion of this information as similar to marketing, no information about formula milk brands should be given (Norwegian Directorate of Health, 2022; *The National Handbook for Child Health, Services* n.d.; WHO, 2007). The available information on formula feeding from the health authorities is regarding the preparation and the storage of formula milk and on how to react if the child gets constipation from formula milk. This advice to parents and health professionals is supported by practical, user-friendly videos and information leaflets in various languages, but does not include information on the different brands and types of infant formula (Danish Health Authority, 2021; Norwegian Directorate of Health, 2022; *The National Handbook for Child Health, Services* n.d.; WHO, 2007).

#### 4.4 | Confidence in counselling about infant formula

According to a recent study by Kotowski et al. (2022), healthcare professionals were confident in counselling about the preparation of infant formula, and the sterilization of the bottle and feeding equipment, which is important to avoid health risks like various infections (Boué et al., 2018; Munblit et al., 2020). They also provided information about responsive feeding practices such as positioning the infant for eye contact, physical contact and social interaction (Kotowski et al., 2022). Further, Kotowski et al. (2022) reported that some healthcare professionals described their strategies as means to normalize whatever choice the parents made on feeding. This is in accordance with findings in a previous study by Battersby (2010), that most midwives asked prospective mothers about their feeding intentions antenatally.

#### 4.5 | To focus on formula feeding in the same way as breastfeeding

Support by health professionals was emphasized as important (Fahlquist, 2016) so that mothers did not avoid asking for advice from healthcare professionals about formula feeding due to fear of not being seen as a good mother if they did not breastfeed (Hvatum et al., 2014; Larsen & Kronborg, 2012; Redshaw & Henderson, 2012). Focusing solely on benefits of breastfeeding, might cause formula feeding mothers to feel guilty (Jackson et al., 2021). A study by Simonardóttir and Gislason (2018) indicated that mothers who were formula feeding longed for health professionals to support them. They expressed a wish for some kind of green light for their choice of feeding their child.

#### 4.6 | Implication for practice

Evidence-based counselling on infant formula feeding is crucial to help parents not to feel stigmatized for not breastfeeding their child. Particularly, the mothers need support for their way of feeding, to feel that they are a good mother for their child. Healthcare professionals need increased evidence-based knowledge when they inform and counsel parents about infant formula milk including differences between various brands, bottles, and teats. Knowledge about how to guide parents about formula milk should be a central part of the education and training of healthcare professionals. Safe and sound counselling of parents, about these themes is important for infant health.

#### 4.7 | Strengths and limitations

This study summarizes relevant information on an ordinary and widespread practice in the feeding of infants but was limited by a paucity of related research that explored these themes. The search for literature was conducted in three databases, and two teams of researchers cooperated on the selection and analysis of the literature.



As is the case for other similar reviews, it is uncertain whether all relevant studies were retrieved and included in our findings. To minimize this risk, an experienced librarian in the health field conducted the literature search in cooperation with the authors. In addition, some relevant studies may have been missed because the search was limited to studies published in English and conducted in high-income countries. The studies included represent few countries and the timeframe between the oldest and the newest study is almost 20 years. Hence, direct transferability of study findings to the performance of health services today is limited. Another limitation is that hardly any literature focuses on counselling of fathers. However, this review, based on the scoping review framework, provides recommendations on directions for further research in this field.

## 5 | CONCLUSION

The current review provides an updated overview to contribute to an extended focus on a core aspect of healthcare professionals counselling, that is, supporting parents who formula feed their infant. The studies have demonstrated that healthcare professionals want more evidence-based information from health authorities to make supplementary feeding more feasible. Some mothers experience the content of information as conflicting and lacking in important aspects. The findings of our review reveal that there is limited research on how healthcare professionals inform and counsel parents about formula milk. The studies refer to various aspects concerning the aim of our scoping review. Based on the results of this review, we recommend more focus on research on healthcare professionals' evidence-based counselling to parents about formula milk. This is important to ensure that parents are given the prerequisites to make informed, knowledge-based choices.

### AUTHOR CONTRIBUTIONS

*Study design:* Ingjerd Hvatum, Kari Glavin, Bettina Holmberg Fagerlund, Anne Marie Eikenæs Cand san, Marte Irjall. *Systematic literature search:* Marte Irjall. *Data analysis:* Ingjerd Hvatum, Bettina Holmberg Fagerlund, Kari Glavin, Anne Marie Eikenæs. All authors have contributed to the manuscript and agree to its submission to Public Health Nursing.

### CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

### DATA AVAILABILITY STATEMENT




Research data are not shared.

### ETHICS STATEMENT

Ethical approval was not required as this scoping review collected data from publicly available materials.

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