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## Assessing and promoting responsive interaction between parents and children – A qualitative study of the experiences of child health care nurses in Sweden

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## ABSTRACT

**Purpose:** One of the main tasks of a child health care nurse is to assess and promote a responsive interaction and secure connection between children and their parents for the future. This study aims to develop an understanding of Swedish child health care nurses' experiences of assessing and promoting responsive interaction between parents and children.

**Design and method:** A qualitative interview study using an inductive approach was implemented. Eleven nurses were interviewed (range: 30–58 min) during the period March to August 2016, and the transcripts were analysed using qualitative content analysis according to Graneheim and Lundman.

**Results:** Three categories emerged: *Interpreting signals in parent and child behaviour*, *Reinforcing the parents in their role* and *Feeling inadequate as professional*. Interpreting signals in parent and child behaviour was described fundamental when promoting responsive interaction. Further reinforcing the parents in their role was described central. The child health care nurses also described how they often felt inadequate in promoting responsive interaction.

**Conclusions:** Assessing and promoting responsive interaction is an important but challenging task which requires extensive knowledge and good communication skills. The child health care nurses express their insufficiency in that regard.

**Practice implications:** A targeted education and sufficient time for each visit at the child health care center should be allocated to facilitate the important work on parenting and child interaction and to enhance nurses' feelings of managing their work.

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## Introduction

It is well established by previous research that responsive interaction between parent and a child benefits secure attachment and in turn children's health and development (Bowlby, 1982; Eshel et al., 2006; Rocha et al., 2019). The foundations for a good parent-child relationship and secure attachment are laid early in life (Bowlby, 1982; Britto et al., 2017). Recent research has shown that the quality of mother-child interaction is strongly related to social and cognitive development during the first year (Rocha et al., 2019). Child health care nurses play an important role in supporting parents of young children (Pridham et al., 2010) although there is limited access to methods for assessing and promoting parent-child interaction during the first year

of a child's life (Broberg et al., 2008; The National Board of Health and Welfare, 2014), and previous research shows that child health care nurses assess the interaction between parent and child very differently (Appleton et al., 2012). Thus, the focus of this study is on child health care nurses' experiences assessing and promoting responsive interaction.

According to Bowlby's attachment theory (1982), the first year of life is critical for the development of positive parent-child interaction. Children form inner, unconscious, experience-based models of how social relations work and they develop either a secure or insecure attachment to the parent. This means that the parent's ability to take care of the child is of great importance for the progression of socio-emotional and psychological development (Bowlby, 1982). Ainsworth et al. (1971) describe four dimensions of a parent's responsiveness, which are important for the child's ability to develop a secure attachment. The first dimension relates to a responsive parent giving a social response to a social invitation, giving a playful response to an invitation to play, and

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noticing when the child wants to be nearby. The second dimension relates to a responsive parent reading a child's signals and responding to them appropriately. The third dimension relates to a responsive parent respecting the child's integrity, autonomy, and wishes. The fourth dimension relates to the parent needing to be present both physically and mentally with the child (Ainsworth et al., 1971). Similarly, Eshel et al. (2006) describe how responsiveness can be conceptualised as a three-step process – observation, interpretation, and action. Consequently, an assessment of a parent-child interaction includes assessing how a parent observes the child's signals (e.g., movements and vocalization), interprets these signals (e.g., whether the child is hungry, tired, or indicating an illness), and responds to these signals (e.g., touching and talking). Such assessments are presumably made in the family's natural environment (i.e., their home) (Eshel et al., 2006), but often they are made during visits at a child health care centre (Pridham et al., 2010; The National Board of Health and Welfare, 2014).

Various factors can negatively affect parental responsiveness and parent-child interactions, including parental stress (Ward & Lee, 2020). Previous studies have also shown that socioeconomic status (Bøe et al., 2012; Davis et al., 2010; Rajmil et al., 2014) and work-related stress (Strazdins et al., 2013) can have a negative effect on parenting skills. Furthermore, it is well established that both maternal (Batten et al., 2012; Rocha et al., 2019) and paternal depression (Sweeney & MacBeth, 2016) can negatively affect parent-child interaction and therefore children's mental health and development. Thus, efforts to reinforce parents' responsiveness and their interactions with their children are valuable for promoting children's mental health and should be directed at all families (Morgan et al., 2012; Pridham et al., 2010). Since the majority of families with young children have an ongoing and regular contact with primary child health care, this is a natural context for assessing and promoting parent-child interactions (Leslie et al., 2016). The UN Convention on the Rights of the Child (UNICEF, 1989) is indicative of the work in Swedish child health care: All planning and all actions should have a child perspective where the best interest of the child comes first. The Swedish Child Health Care Mission (The National Board of Health and Welfare, 2014) includes a national program for families with children 0–6 years old that promotes regular encounters with a child health care nurse. The program invites all families in Sweden to participate in 12 scheduled encounters. The program is voluntary and a majority of families in Sweden participate. Moreover, additional visits or contacts with the child health care nurse are offered to those who might need some extra support, and parents can contact a child health care nurse when needed. The goal is to contribute to the best possible physical, mental, and social health for children by promoting health and development, preventing health problems, and identifying problems as early as possible. In addition to vaccinations and traditional health controls, the child health care program includes promoting responsive interaction and a secure attachment between children and parents. Specifically, child health care nurses actively ask about and observe how the relationship between parent and child works in all families and offers individual support to those parents who experience challenges with their responsiveness (The National Board of Health and Welfare, 2014).

In summary, it has been previously established that parent-child interaction early in life is important for child development, that child health care nurses are in a unique position to support parents of young children, and that promoting responsive interaction is a complex task. Thus, the aim of this study is to explore Swedish child health care nurses' experiences of assessing and promoting responsive interaction between parents and children.

## Methods

A qualitative inductive research approach was applied where data were collected through individual interviews and analysed using qualitative content analysis according to Graneheim and Lundman (2004).

**Table 1**  
Participants' characteristics.

	n (%)	Mean (SD)	Range	Total
Gender				
Female	10 (91)			
Male	1 (9)			
Age		52 (9,2)	38–67	
Work experience (years)		15,6 (11,9)	3–36	172

The inductive approach included searching for patterns in the material and analysing the text based on the child health care nurse's stories about their experiences with interaction.

## Participants

Purposive sampling was used to recruit nurses from child health care centres in municipalities of various sizes in Western Sweden. The only inclusion criterion was that the nurses should have worked at least one year in the child health care centre. An e-mail with information about the study was sent to 23 health care managers at various child health care centres in Western Sweden. The e-mail included a request for approval to contact nurses employed at the relevant child health care centres. Seven health care managers gave their approval. Subsequently, information about the study, including an invitation to participate, was sent by e-mail to the 14 nurses employed at the relevant child health care centres; 11 agreed to participate in the study (Table 1).

## Data collection

The interviews were conducted at the informants' workplaces or at University West between March and August 2016. The interviews began with two open questions, which were followed by three written vignettes with related questions. Initially, two pilot interviews were conducted. After these were assessed, an interview guide and the vignettes were written and the interviews were conducted. The pilot interviews yielded appropriate information and were included in the data analysis. The vignettes, which described common situations in child health care, were used to gather information on the nurses' perceptions, opinions, and knowledge about promoting responsive interaction between parents and children in different situations. Vignettes simulate certain aspects of real-world scenarios, often bearing some resemblance to situations encountered by the participant (Lapatin et al., 2012; Polit & Beck, 2008). The first vignette described a situation when the parents had difficulty comforting their crying child. The second vignette described a parent who felt fatigued because the child woke up several times during the night. The last vignette described a parent who was exhausted and said it was the 1.5-year-old child who decided everything. Finally, child health care nurses were asked to provide their own example from their own experience of their work with the interaction between a parent and the child (Table 2). The interviews lasted between 30 and 58 min, were recorded using a Dictaphone, and transcribed verbatim.

## Data analysis

Data were transcribed verbatim and analysed using qualitative content analysis according to Graneheim and Lundman (2004). The whole text was read several times. Then, meaning units were identified and condensed, abstracted, and labelled with a code. The codes were formulated textually but could sometimes involve some degree of interpretation. The codes were compared for similarities and differences and formed seven subcategories that were grouped into three categories. The codes and the categories were continuously discussed among the authors until the final structure was agreed upon. Example of the coding process is illustrated in Table 3.

**Table 2**  
Interview guide including vignettes.

Introductory questions	
<ul style="list-style-type: none"> <li>- What do you think of when you hear the word interaction?</li> <li>- What do you think of when you hear the word attachment?</li> </ul>	
Vignettes	
1.	<p><i>Alex, 5 months, comes with a parent to child health care center to get vaccinated. In connection with the vaccination, Alex becomes sad and cries for a long time. The parent finds it noticeably difficult to comfort Alex and becomes anxious and nervous himself.</i></p> <ul style="list-style-type: none"> <li>- Can you describe how you would assess the interaction between Alex and the parent?</li> <li>- What do you look at/after?</li> </ul>
2.	<p><i>Isa, 8 months, comes for control to child health care center with her parent. She wakes up eight times each night, which means that her parent cannot sleep properly. According to the parent, Isa has always slept restlessly and now the parent feels exhausted.</i></p> <ul style="list-style-type: none"> <li>- Can you describe how you would assess the interaction between Isa and the parent?</li> <li>- What do you look at/after?</li> </ul>
3.	<p><i>Kim, 1.5 years, and parent comes to child health care center to make the development assessment for the current age. The parent sits on a chair and the child plays independently with toys. The child does not seek contact with the parent and does not listen to the parent. The parent says resignedly that it is Kim who decides everything.</i></p> <ul style="list-style-type: none"> <li>- Can you describe how you would assess the interaction between Kim and the parent?</li> <li>- What do you look at/after?</li> </ul>
General questions	
<ul style="list-style-type: none"> <li>- How do you determine if the interaction is satisfactory?</li> <li>- How do you follow-up the relationship between child and parent when you suspect that the interaction is deficient?</li> <li>- What opportunities/difficulties do you experience when it comes to talking about interaction with parents?</li> <li>- How do you describe the interaction in your documentation?</li> <li>- What do you do to promote responsive interaction?</li> <li>- What support measures do you use?</li> </ul>	
Concluding questions	
<ul style="list-style-type: none"> <li>- Could you share an example from your own experiences with interaction problems?</li> <li>- Is there something you would like to add?</li> </ul>	

**Trustworthiness**

It is always up to the reader to judge the quality of a study, an author's mission is to present the study in a way that convinces the reader about its trustworthiness (Graneheim et al., 2017). To ensure the reader of the transparency in the process of the present study, the procedure was described as clear and concise as possible, and strengths and limitations were openly discussed. To achieve credibility, nurses with at least one year of experience in encountering families with young children within the child health care services were recruited, and vignettes were included in the interview guide to facilitate the participants to reflect about how they act in diverse authentic situations. Furthermore, to enhance the transferability of the results, nurses from

**Table 3**  
Example of coding process.

Interview	Meaning units	Condensed meaning units	Code	Subcategory	Category
A	The communication is most important, and then the closeness, I think. If you cannot talk to your child then you can't be near your child either, then they have already got distance. Sometimes a hug says more than thousands of words, it is very important and that I also highlight.	Communication and closeness to their child is important. If you cannot talk to your child, it will be a distance. It is important to have body contact and give the child a hug.	Communication and physical contact promote a good relationship between parent and child.	Informing about the essence of responsiveness	Reinforcing the parents in their role
C	Usually I don't take the child away from them - I never do. Instead I try to give advice how to get the child calm.	Usually I try to support the parents how they should do to be able to comfort their child themselves.	Support the parents how to comfort their child  (Near the text encoding)	Affirming and supporting the parents	Reinforcing the parents in their role

**Table 4**  
Categories and subcategories describing child health care nurses' experiences of assessing and promoting responsive interaction between parents and children.

Categories	Subcategories
Interpreting signals in parent and child behaviour	Indications of deficient interaction Signs of satisfactory interaction
Reinforcing the parents in their role	Informing about the essence of responsiveness Affirming and supporting the parents
Feeling inadequate as professional	Not having enough knowledge The balance of communicating clearly without infringing on integrity Perceived practical and structural barriers

several child health care centres in a geographically dispersed area, both small and large cities, were invited to participate. To ensure the dependability of the study, the analysis process was described as clear as possible, the coding process was illustrated in a table (Table 3), and quotations from several nurses were presented to illustrate the results. Furthermore, to enhance the confirmability, the context of the Swedish child health care services was clearly described, and the results were discussed in relation to previous research in the field. The objectivity was enhanced by all the three authors participating in the data analysis and by explaining the authors' pre-understandings of the topic.

**Ethical considerations**

The study was conducted in accordance with the Helsinki Medical Declaration (World Medical Association, 2013) and Swedish law (SFS, 2003:460) on ethical review of research involving human subjects. According to the Swedish Ethics Review Act, ethical approval is not required when staff are interviewed about their work, but ethical standards should always be followed. The child health care nurses received oral and written information and were given opportunity to ask questions before providing oral consent. They received information about anonymity and confidentiality as well as assurance that participation was voluntary and that they could cancel their participation at any time without explanation. To avoid the risk that participants could be identified, the interviews were encoded and all materials were unidentified, stored, and locked without unauthorized access.

**Results**

A total of eleven child health care nurses participated in an individual interview (Table 1). All nurses had a specialist education as a district nurse; the total work experience in child health care amounted to 172 years. The results gave three main categories and seven subcategories (Table 4). Promoting responsive interaction was highlighted as a central part of the child health care nurse's work and a task that was included in every encounter with the families. Assessing the responsiveness in the parent-child interaction was described as a delicate matter but crucial for promoting a responsive interaction. Therefore, assessing and promoting responsive interactions were perceived to be strongly

intertwined. As in every part of child health care nurse's work, establishing a trustful relationship with the parents was described as fundamental. Assessing the parent-child interaction embraced interpreting signals in both the parents' and the child's behaviour and promoting a responsive interaction embraced to reinforce the parents in their parenting role. However, a feeling of inadequacy was prominent in the child health care nurses' accounts. Table 4 provides an overview of the categories and sub-categories capturing child health care nurses' experiences.

#### *Interpreting the signals in parent and child behaviour*

The child health care nurses described that in order to assess a responsive interaction between parent and child it was foremost important to interpret signals in parent and child behaviour, as these signals serve as both signs of deficient interaction and satisfactory interaction. This was experienced as a challenging task that required the nurses to evaluate the behaviour of parents and children in different situations and their verbal communication and body language. This was experienced as a holistic idea of how the interaction worked. They described various signals in parents' and children's body language and tone of voice that indicated whether they were satisfied and feeling good.

#### *Indications of deficient interaction*

Not responding to signals from their child was experienced as the most distinct indication of deficient interaction. During the visit, this non-response could be expressed as parents putting down their crying child to change a diaper or starting to put on the child's clothes before raising the child as to comfort him or her. Similarly, a non-response was noted if the parents did not notice their child crying, expressed difficulties enduring the crying, or could not interpret whether the child was hungry or sad when crying. Further indications of deficient interaction were described: parents not focusing on the child during the visit but were easily distracted by, e.g., their mobile phones; parents handling the child in a harsh way; or parents using a harsh voice. Other indications of deficient interaction were described as children clinging to their parent and not taking time to explore the toys in the room. Likewise, if children had no eye contact or showed no need for physical contact with their parents, this was noted as deficient interaction:

When a mom does not respond to the child's attempt to make contact, [mom] is instead uncommunicative [...]. I then think quite simply that there is something that is not right. That she isn't feeling well and is at the end of her rope, sort of [...]. (Int. E)

Being attentive to potential underlying problems contributing to the parents' unresponsiveness such as exhaustion or depression was highlighted as crucial since such problems must be properly addressed to promote a responsive interaction.

#### *Signs of satisfactory interaction*

The child health care nurses identified some satisfactory interactions. For example, when parents were calm and secure, their children often were calm and secure. This type of interaction was especially apparent during a challenging situation such as a vaccination; if the parents were calm and secure, holding their children in their arms, the children became calm and secure:

Some moms are very calm and secure and sit with them in their arms, hugging them. And then the child is calm too. (Int. E)

In addition, when parents were eager to tell the nurse about their children and were attentive to what they did, the nurses considered this a sign of satisfactory interaction. The child health care nurses also described how some parents had a natural ability to "see" their children and really be present with their children and talk about their needs. For

example, when a child fell during the visit in the nurse's office, the child naturally sought the comfort of the parent:

If the child falls down in here and hurts itself, that it doesn't come to me for comfort, but rather goes to its mom. Then I see that this is a parent who cares about their child. (Int. I)

#### *Reinforcing the parents in their role*

The child health care nurses described that reinforcing the parents in their parenting role was central to promoting a responsive interaction as this was crucial for establishing a good relationship with the parents. They did this by conveying the positive aspects of parenthood and by supporting the parents when facing the challenges of parenthood. The nurses found it important to inform the parents about the essence of responsiveness and to be responsive to parents need for support.

#### *Informing about the essence of responsiveness*

The child health care nurses found that conveying to the parents that they were the most important source of comfort for their child, was crucial for promoting a responsive interaction. In other words, toys or candy cannot serve as the major source of their child's comfort. They emphasised the importance of discussing how the parental role was new and unknown and that children were unique persons who the parent would successively get to know and whose signals they would learn to interpret:

It is one thing to learn, to interpret. I usually talk about this just in general terms, the first child is a new human being. It's the first time that one is a parent. Everything is new and different. (Int. D)

The child health care nurses found that first-time parents were especially susceptible to information and therefore easily influenced in a positive way. Explaining and discussing how the children's self-esteem, sense of security, and trust in other people develops was considered important for the parents to understand with respect to being responsive to their child's signals. The nurses perceived it an advantage to bring up the issue of responsive interaction when they were discussing other concrete things such as diet or sleep as this made the discussion of responsive interactions seem natural. Talking about responsive interaction with parents mostly was perceived as uncomplicated. If parents had difficulty interacting, the child health care nurses described how they demonstrated what parents could do to get in touch with their child:

If I see that someone has difficulties with interaction and so on, I actually demonstrate what to do. I can show them what I usually do. Think about how it feels to do this. Do you see that you get a response? (Int. F)

Furthermore, the nurses found it important to point out to the parents that closeness was important to make their children feel safe and that there was no risk of spoiling them through body contact.

#### *Affirming and supporting the parents*

Affirming and supporting the parents was described as central to promoting responsive interaction. For example, because parents initially could be insecure in their parenting role and ability to promote a responsive interaction, the nurses found that it was important to reassure the parents about that their feelings of insecurity were normal and that it could take some time to adapt to their new roles as parents. Furthermore, the child health care nurses described how they affirmed the parents by highlighting all the positive things about the child, reinforcing the parents' feelings of joy and pride. If parents felt inadequate in their parenthood or showed signs of deficient interaction, the nurses more actively offered support and help, for example, by offering more

frequent visits to the child health care centre or initiating family groups where parents could meet other parents and exchange experiences. When the nurses by themselves could not help the family with a problem, they referred the parents to other professionals in the child health care team – e.g., a psychologist – for further support. If the parents did not themselves realize they had problems with interaction, a creative and subtle approach was required to avoid making the parents feel guilty and sad:

To the mom I say that he might not be giving her such clear signals, and he doesn't really show [...]. And it can be really hard to interpret, and one can get help with this and see how you can function better together. (Int. D)

#### *Feeling inadequate as professional*

The feeling of inadequacy as a professional was related to a scarce knowledge or experience, the risk of infringing on the parents' integrity, and perceived practical and structural barriers. The child health care nurses described how they often needed to use their intuition and their own experiences as a parent when they made assessments and responded to the parents' questions. They further described it especially challenging when parents spoke another language or had communication difficulties. In addition, practical and structural barriers such as lack of time for in-depth individual conversations and an unsuitable environment were described as contributing to a feeling of inadequacy.

#### *Not having enough knowledge*

Even nurses with extensive experience in the profession felt that there was much left to learn since observing, assessing, and promoting interaction were delicate and often abstract concepts. The child health care nurses often needed to rely on their own experiences as a parent or use their intuition when assessing the interaction:

I sort of see the whole situation and observe. But most often I cannot quite put my finger on anything in particular. You have a gut feeling. (Int. B)

Child health care nurses who were new to the profession described this aspect of care as even more challenging since they were overwhelmed with everything that had to be done during one visit. Sometimes problems with interactions could involve several things, which were difficult to sort out. For example, the problems could begin with sleeping problems, which then developed into eating or speech problems or the children beginning to bite people. Promoting responsive interaction was described as difficult and complex and much more advanced than monitoring children's physical development. It was often difficult for the nurses to identify and describe the concrete signals of deficit interaction:

I feel that it is hard since there is, as I say, a lot that you see and you look at but you sort of [...] You take it in and in some way process it without putting it into words. (Int. K)

#### *The balance of communicating clearly without infringing on integrity*

The child health care nurses found it challenging to balance communicating clearly without infringing on the parents' integrity when assessing and promoting responsive interaction. The challenges could have to do with communication related to language barriers, intellectual difficulties, and general worries about infringing on the parents' integrity. Assessing and promoting the interaction was highlighted as especially challenging in the case of language barriers, even when an interpreter was used. In addition, the nurses found it challenging to communicate with intellectually challenged parents in ways that would not

make the parents feel inadequate or feel as if they are being accused of something:

It can be a parent who, for example, is low-gifted [intellectually] – then it can be a little more difficult to explain to that parent so that they do not feel that they are not [adequate] enough. Or that they take it as an accusation [...]. (Int. C)

A consistent challenge was communicating with parents when the interaction was deficient since the nurses often were afraid that parents would perceive it as a message about them not being good enough. When the parents were quiet and uncommunicative and the interaction was deficient, it was even more difficult to talk about it. Likewise, when parents did not understand that there were problems and instead stated that everything was really good was a challenge. Another challenge was to document interaction problems in the journal; there was a fear that parents might be offended by what was written.

#### *Perceived practical and structural barriers*

The child health care nurses described practical and structural barriers related to assessing and promoting responsive interaction such as time constraints during the visit and long waiting lists to the maternal child health psychologist. Worried parents had many questions that the nurses tried to take time to answer. When a problem was raised at the end of the visit, which was often the case, they had to take care of it even if time was not available or book a new visit. The nurses felt they should talk much more about interaction with parents, but time constraints meant that important things like interaction could be put off. The results show that there was insufficient time for more individual conversations with parents. The child health care nurses would like to meet with some parents more often to provide extra support:

I need more individual conversations that parents can have. We district nurses, we aren't sufficient, there is not really time, rather we would like to meet with certain parents more and more often, several times, follow up with them more and so on. (Int. H)

The child health care nurses found it difficult to assess how the interaction worked between parent and child, since the situation in the examination room was perceived as unnatural. Instead, they sometimes listened to what was happening in the waiting room to get an idea of how the interaction worked in more natural setting.

## Discussion

The child health care nurses in this study were apparently committed to their work and described that assessing and promoting responsive interaction was a central part of their work and integrated in all encounters with families. They made it clear that establishing a good relationship with the parents was fundamental to their ability to support the families in their work toward well-functioning interactions. Assessing and promoting responsive interaction was experienced as a delicate matter and a complex task that required solid knowledge and experience. In accordance with theories about attachment and parental responsiveness (Ainsworth et al., 1971; Bowlby, 1982), the child health care nurses in this study experienced that interpreting signals in parent and child behaviour is central for promoting responsive interaction. Assessments of the parents' responsiveness and parent-child interaction emerged as intertwined with the promoting act, and the nurses highlighted the necessity of being very attentive to the ongoing interaction to promote a responsive interaction. The child health care nurses described how they assessed the interaction by noticing different signals that they interpreted as either indications of deficient interaction or as signs of satisfactory interactions. Their assessments clearly corresponded with the three-step process of responsiveness, which includes noticing how the parent observes the child's signals (e.g., movements and vocalization), how the parent interprets these

signals (e.g., whether the child is hungry, tired or feeling ill), and how the parent reacts to these signals to meet the needs of the child (e.g., touching or talking) (Eshel et al., 2006). Reinforcing the parents in their parenting role by informing and exemplifying the essence of responsiveness was described as an important part of promoting responsive interaction. This was done by explaining and discussing with the parents the development of the child's self-esteem, confidence, and sense of trust in others. They emphasised the importance of being close with the child, of making the child feel safe, and of being responsive to the child's signals. These concepts reflect previously described dimensions (Ainsworth et al., 1971) and the three-step process (Eshel et al., 2006) of parental responsiveness.

According to the results, promoting responsive interaction includes reinforcing the parents in their role. This is in accordance with the mandate of the Child Health Care Mission (The National Board of Health and Welfare, 2014), which highlights the importance of parenting support and proposes a structure for group-based parenting support offered to all parents during a child's first year. Previously, parent groups in child health care have been found to provide benefits to both parents and children (Guest & Keatinge, 2009). Parents obtained increased self-esteem and parenting knowledge, which benefits children since parents then interact more with the children and begin to talk and read to them earlier. These interactions directly impact children's cognitive development, mental health, and well-being (Guest & Keatinge, 2009). Furthermore, eventual initial insecurity among parents was experienced to be easily resolved by providing encouragement and positive reinforcement, which was found to enhance the responsive interaction. This finding is in accordance with previous research, which indicates that early support and resource-enhancing discussions can empower parents and prevent an escalation of problems (Tanninen et al., 2014).

Important results of the present study are the feelings of inadequacy experienced by the child health care nurses and their need to rely on intuition when promoting responsive interaction. Promoting responsive interaction was experienced as difficult and complex and much more advanced than monitoring children's physical development. The perceived inadequacy was described as related to insufficient knowledge, a finding in line with previous research that shows that nurses feel they lack the knowledge needed to assess mother-child interaction even though it is one of their most important tasks (Appleton et al., 2012; Fraser et al., 2014; Johansson et al., 2011; McAtamney, 2011; Wilson et al., 2008). They express the need for more education and training in assessing the interaction between mother and child so they can provide the necessary support to parents. Nurses need extensive knowledge about children's needs and development and good communicative skills. It also appears that especially newly trained nurses feel poorly equipped for their roles (Wilson et al., 2008). Furthermore, practical and structural barriers such as time constraints and not meeting the families in their home environment were experienced as contributing to the feeling of inadequacy. Edvardsson et al. (2011) confirmed that nurse's feel a sense of inadequacy when the parents found visits to the child health care centre to be standardised (i.e., not meeting their particular needs) and under time constraints. These constraints resulted in the parents not raising issues and feelings of insufficient engagement with the child health care nurses. Previous studies have also shown that nurses can better observe and assess the interaction between children and parents during a home visit (Staal et al., 2015; Wilson et al., 2008).

Maternal depression negatively affects the mother-child interaction (Rocha et al., 2019) and increases the risk that the child develops mental health problems (Batten et al., 2012). Furthermore, paternal depression can adversely affect the development of children and adolescents (Sweeney & MacBeth, 2016). Being attentive about potential underlying problems contributing to the parents' unresponsiveness, such as exhaustion or depression, and properly addressing such problems were highlighted as crucial aspects of nurse-parent interaction. Similarly, previous research has found that identifying and treating parental

depression is fundamental for promoting responsive interaction (Rocha et al., 2019) and positive development of children and adolescents (Pilowsky et al., 2014). Screening for maternal depression using the Edinburgh Postnatal Depression Scale (EPDS) is included in the Swedish child health care program (The National Board of Health and Welfare, 2014), which is an important step for early identification of potential problems and can counteract responsive interaction.

### Practice implications

Targeted education and training might remove the need for child health care nurses to rely on their intuition when promoting responsive interaction. Furthermore, sufficient time for each visit at the child health care centre should be allocated to facilitate the important work on parenting and child interaction and to enhance nurses' feelings that they can manage their work.

### Strengths and limitations

A main strength of this study is the extensive experience of the participants — 172 years in total. Moreover, one of the child health care nurses was a man; few men work in this area. The interviews were conducted in 2016, but the results are still considered valid since the context and conditions of the Swedish child health care services are unchanged. Although the results reflect the experiences of the participants in this particular study, they might be transferred to other child health care nurses in similar contexts. Nevertheless, it is important to bear in mind that a number of the invited nurses rejected participation due to, for example, lack of time, which may have contributed to inclusion of mainly those who were particularly interested in parent-child interaction, reflecting a selection bias. The research team consisted of nurses with extensive experience working with families with young children, either within the context of child health care services or pediatric care. This naturally influenced our choice of topic since we are very aware of the importance of parent-child interaction, and our accumulated experiences enabled the formation of authentic vignettes. However, these preunderstandings could have biased our approach and interpretation. To address the influence of our preunderstandings, we attempted to conduct all steps of the analysis and the writing as neutral as possible, independent from our own experiences. The purpose of using vignettes was to encourage for the participants to reflect on how they act when they assess and promote responsive interaction in diverse authentic situations. The vignettes provided a valuable approach that evoked important insight into the participants' experience of promoting responsive interaction between parents and children. The purpose of using vignettes, open-ended questions, and the participants' own examples in combination was to optimise the possibility of collecting as rich data as possible.

### Conclusion

Assessing and promoting responsive interaction is an important but challenging task that embraces the ability to interpret signals in parent-child behaviour and to reinforce the parents in their role. This requires extensive knowledge about children's needs and development and good communicative skills, but according to the results of the present study child health care nurses express feelings of inadequacy in this regard. Access to adequate knowledge together with practical and structural prerequisites within the child health care services should be ensured to enable the delicate task of promoting responsive interaction.

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All authors have seen and approved the last version of this manuscript, and are aware of and agree with the submission to Journal of Pediatric Nursing.

## Declaration of competing interest

The authors declare no conflict of interest.

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