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'If I didn't trust Swedish Healthcare Direct, I would never call' – views of making pediatric health calls

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Abstract

The focus of the presented research is parents' expectations and experiences of calling Swedish Healthcare Direct (SHD) regarding pediatric health issues. Telenursing is a rapidly expanding service and SHD handles up to 2.4 million pediatric health calls yearly. Mothers make the majority of the calls and reportedly receive self-care advice more than fathers. Parents' views are important for the development and safe use of telenursing health services. The study is qualitative, with an exploratory and descriptive design. Twenty-one interviews with parents were analysed using content analysis. According to the interviewees, the decision to contact SHD or not is influenced by their degree of worry or trust in the service. Calls are carefully prepared, and who will call is often predetermined and affected by gender. Parents want to be given a chance to speak first in their communication with telenurses. They want to be listened to carefully and to be accorded respect, to have their needs fully explored and to have their concerns relieved. Most parents follow telenurses' recommendations, a few exclusively. Some primarily trust their own intuition. Learning is frequent, implying the public health potential of calls, not least for foreign-born callers. Exploring parents' expectations provides insight into parents' worries, potential to increase parents' learning and may develop their trust in telenurses' recommendations. Telenurses' awareness of gender impact can further develop the telenursing health service in providing safe care on equal terms for a vulnerable patient group, children.

Key words

Children, Communication, Gender, Interviews, Parents, Pediatric, Primary care, Telenursing

1 Introduction

As in many other Western countries, telenurses are the first line of health care in Sweden [1, 2]. The Swedish national telephone health service, Swedish Healthcare Direct 1177 (SHD), was implemented in 2003 and is now available to the whole Swedish population (9.4 million people). The yearly prognosis is approximately six million calls, answered by more than a thousand telenurses employed at the service. Due to reports that at least 40% of health calls deal with children [2-5], the estimation for pediatric health calls is above 2.4 million calls a year. Children are hence frequent patients but generally not frequent callers, as most pediatric health calls are made by parents. For the telenurses, this means second-hand consultations, reported to be problematic [6], and also dealing with a vulnerable patient group [7]. There are various opinions

as to whether pediatric health calls are safe [8-10] or not [11]. Moreover, parents have reported both high [12, 13] and low [14] satisfaction with the telephone service. Examples of dissatisfaction include parents who felt they were not treated with respect [15], and fathers who rated service quality lower than mothers [16]. To date, however, parents' expectations and experiences of calling SHD seem to be sparsely researched, in contrast to the numerous reports on telenursing work [6, 17-20]. Parents' views and inherent knowledge [21] are important, as they can contribute to and influence service and safety development.

Mothers have previously been found to make a majority (73%) of the pediatric health calls in Sweden [22], congruent with other countries [23-25]. This suggests a possible gendered pattern in pediatric health calls, which may be due to greater trust in a mothers' ability to talk to a telenurse [26]. This in turn may reflect gendered roles in the family and gender norms in society [27]. These gendered roles can be looked upon as a set of social and behavioural norms which govern what is considered to be socially appropriate for individuals of a specific sex [28]. Being a woman or a man is contextually and relationally constructed [27]. Hence "doing gender" [29] is a continuous ongoing process. Motherhood is strongly associated with femininity in most societies. As such, making pediatric health calls may be included in the construction of femininity [27]. In this view, contacting health services is not included in fathers' construction of masculinity to the same extent [30]. Goode et al. [25], however, indicate diverse roles for male callers, with both traditional masculinity and models of a 'new man/dad'. They argue that fathers' involvement in their children's contacts with health services will increase as it becomes more socially acceptable and expected for fathers to do so. It seems, however, that this involvement is developing slowly [22, 31, 32].

Why mothers make the majority of pediatric health calls may be connected to power relations [27, 28, 33], as mothers may exclude fathers from calling SHD. According to the gender order, women possess less power than men [27], particularly in public contexts [34, 35]. However, in relation to the private sphere, e.g. caring for children and family, women instead commonly possess more power than men [27]. It may thus be a double deprivation for mothers to pass on the responsibility of calling SHD to fathers, as it is not probable they would gain power in exchange. Furthermore, since 90% of the telenursing workforce in Sweden is female, it is also possible that fathers' feelings of not being treated respectfully [15] and lower ratings of the service [16] can be due to observations that some female telenurses find it more complicated to communicate with men than women [36], and find it easier to convince women to "wait and see" [26]. This may explain why the likelihood for a father to receive a referral as the result of a call was almost twice as great as for a mother (despite no signs of the 'father' calls being more urgent), with the opposite regarding self-care advice [22]. Consequently, the possibility exists that telenurses contribute to the construction of femininity and masculinity in pediatric health calls. In fact, power has also been highlighted as a central aspect of telenursing [37], with telenurses guarding the 'health care gate' [38]. Perspectives of gender and power can be intertwined with social differentiations such as ethnicity, class, sexuality, age and dis/ability, often denominated intersectionality [27]. For example, having a deprived socioeconomic situation, belonging to a minority ethnic group [39-41] or being aged above 65 [40] play a part in decreased use of telephone health services (the latter in contrast to 65+ patients' increased use of general practice care services [40]).

Research about what precedes parents' decisions regarding pediatric health calls is lacking. Parents' viewpoints are needed to supplement the prevailing knowledge in telenursing. These standpoints can be used to contribute to the development of telenurses' communication with parents and support for telenurses [42, 43], all in order to provide the best possible safe care for children, a vulnerable patient group in telenursing [7, 44].

Aim of the study

This study explores and describes parents' expectations and experiences of calling SHD regarding pediatric health issues and discusses findings in the light of gender theory.

2 Method

2.1 Design and study participants

The study has an exploratory and descriptive design and is of qualitative character, which is a useful way to investigate people's thoughts and experiences [45]. A maximum variation sampling technique was used, involving purposive selection of 21 participants [46] based on gender, ethnicity, age (children and parents), number of children, education, occupation, city or provincial living and civil status. The intention was a purposive sample of 20 parents [46]. Inclusion criteria for participation were: parents who had called SHD for their children, aged 0-16 years, within the past six months. The recruitment process was performed through advertisements in local newspapers, and bill-posting and personal enquiries at a primary healthcare waiting room, a day-care centre and a city mission's centre. When 20 parents had agreed to participate, a highly educated father and a single father were lacking. The recruitment process ended after successful recruitment of a father who was both single and highly educated. Participants' demographic characteristics are described in Table 1. Their reported usage of SHD was 1-20 times a year (m 4.38).

Table 1. Demographic characteristics of the participating parents, n = 21

Participant	Origin	Gender	Age (parent at age)	Children n	Civil status	Education	Residence	Occupation	Calls/year n
1	Sweden	Male	30 (21)	2	Single/joint*	Upper sec. school	Urban	Working	6
2	Sweden	Female	38 (35)	2	Cohabiting	University	Urban	Working	2
3	America	Female	52 (36)	1	Cohabiting	University	Urban	Working	1
4	Sweden	Female	40 (30)	3	Cohabiting	University	Urban	Working	4
5	Sweden	Female	32 (29)	2	Cohabiting	University	Urban	Working	3-4
6	Sweden	Female	32 (30)	1	Cohabiting	Upper sec. school	Rural	Studying	6
7	Sweden	Male	46 (25)	3	Cohabiting	Upper sec. school	Urban	Working	2
8	Asia	Male	40 (37)	2	Cohabiting	University	Urban	Unemployed	4
9	Sweden	Female	38 (25)	4	Cohabiting	Upper sec. school	Rural	Working	1-2
10	Asia	Male	42 (39)	2	Cohabiting	Upper sec. school	Urban	Disability Pension	20
11	Sweden	Male	46 (31)	3	Cohabiting	Secondary school	Rural	Working	4
12	Asia	Female	40 (24)	4	Cohabiting	Secondary school	Urban	Studying	1
13	Sweden	Male	32 (31)	1	Cohabiting	Upper sec. school	Urban	Working	4-5
14	Sweden	Male	37 (30)	2	Cohabiting	Upper sec. school	Rural	Working	2
15	Sweden	Female	35 (34)	1	Cohabiting	Upper sec. school	Rural	Working	4
16	Africa	Female	50 (32)	2	Single/single#	University	Urban	Working	2-4
17	Sweden	Female	39 (27)	2	Cohabiting	Upper sec. school	Urban	Working	6-7
18	Sweden	Female	35 (29)	3	Single/single#	University	Urban	Working	4-5
19	Sweden	Female	18 (17)	1	Cohabiting	Secondary school	Rural	Unemployed /Parental leave	10
20	Sweden	Female	20 (15)	2	Single/single#	Secondary school	Rural	Studying /Parental leave	3
21	Sweden	Male	41 (32)	2	Single/joint*	University	Urban	Working	1-2

Foot note: **Single/joint*** =single-living parent with joint custody of child, living with other parent every other week. **Single/single#** = single-living parent with sole custody of child.

2.2 Interview process

The study was performed in a county in mid-Sweden, at one SHD call-centre. One pilot interview was performed to test the interview guide and timescale. This interview was transcribed and discussed at a research seminar to prepare the interviewer for the approaching interviews. Except for changes in the order, no questions were changed in the interview guide after the pilot interview. The following 21 individual interviews were carried out from September 2010 to February 2011. The places for the interviews were chosen by the participants *(university office (n=10), participant's home (n=6), community centre (n=3), day-care centre (n=2))*. The interviews were all audio recorded and conducted by author EK. They were semi-structured (see Table 2) and lasted 37-76 minutes.

Table 2. Questions used in the interviews

Interview guide
1 Please tell me about a situation when you called SHD for your child.
2 How did you and your partner reason before you called?
3 What were your expectations and were they fulfilled?
4 What did you appreciate about the counselling?
5 Was there anything that could have been better?
6 What happened after the call?
7 What did you think of the telenurse's recommendation?
8 Did you follow the recommendation? If not: What did you do?
9 Did you learn anything from the call?
10 Is there anything you want to add that I haven't asked about?

2.3 Data analysis

The interviews were transcribed verbatim and analysed using qualitative content analysis [47], a useful method for analysing unstructured texts [48]. The analysis did not start until all 21 individual interviews were completed. The analysis process included 6 steps, as shown in Table 3.

Table 3. Steps in process of analysis

Steps included in the analysing process
1. The interviews were first read through by all authors to obtain a sense of the whole. Then, the firstauthor read the interviews again, several times, continuously discussing them with the other authors.
2. Text relating to the study aim, with the same central meaning, was divided into meaning units thatwere condensed and coded.
3. The codes were sorted according to content and then grouped into seven categories according to commonalities.
4. The seven categories were further divided into three content areas: before, during and after the call.
5. When exploring similarities and differences of the seven categories, feelings of worry and trust wereemerging in all of the categories, explicitly with the words "worry" and "trust", but also more implicitly by other words and descriptions.
6. Reflection, by all the authors, on what the underlying text in the seven categories implied, led to identification of a theme.

2.4 Ethical considerations

The regional ethical review board approved the study: Dnr 2010/050. The participating parents were informed that their participation was voluntary, that they were guaranteed confidentiality, and that they could withdraw from the study whenever they wished, without giving a reason.

3 Results

The parents expectations and experiences of calling SHD are described in seven categories, and are presented under the three content areas in which they occurred: *before*, *during*, and *after* the call. Parents' recurring feelings of worry and trust appeared to be intertwined throughout the process of making the calls, according to category data [49]. Hence, this led to identification and labelling of the theme 'Intertwined worry and trust'. The theme, the content areas and the seven categories are presented in Table 4. A description of each category, illustrated by quotations from the interviews follows.

Table 4. Overview of content areas, categories and theme that revealed during the analysis

Content area	Category	Theme
3.1 *Before the call*	3.1.1 Hesitation and/or determination	
	3.1.2 Preparation for telenurse's questions	
	3.1.3 Predetermined reasons for being the caller	
		Intertwined
3.2 *During the call*	3.2.1 Individualized and professional dialogue	
	3.2.2 Impact of worry and trust	**worry and trust**
3.3 *After the call*	3.3.1 Following telenurse's recommendations or not 3.3.2 Parental learning reduces need for future calls	

3.1 Before the call

3.1.1 Hesitation and/or determination

According to the participants, when parents are worried about their sick child they either trust SHD as their first instance of health care, or go straight to other health services without calling. The final decision to call can be associated with hesitation (worry about bothering health services unnecessarily for trivial complaints) and critical consideration (when to call after being recommended by a telenurse to wait a certain number of days):

> *"We consider, should we call or not, should we call or not." (10)*

Some children's complaints, for example stomach problems, difficulty in breathing, poor general condition, are regarded as more urgent, and thus can trigger parents' intentions to call. First-time parenting, a child's earlier history of illness, symptoms at night, or a constantly crying child can increase parental worry and hence promptness to call:

> *"At night … she cried more than an hour. Then I thought: well, now I'm going to call SHD." (2)*

Some parents described how they use SHD without hesitation, as they seem to be strongly determined to call for all kinds of questions. This can be influenced by telenurses' encouragements to call anytime, particularly appreciated by foreign-born parents:

> *"Even if I have … a little problem, I call immediately." (12)*

3.1.2 Preparation for telenurse's questions

When the decision to call is finally made, parents prepare themselves for questions commonly asked by telenurses regarding their child's general condition, number of days with illness symptoms, medication and fever:

"You have to know … the temperature, before you call." (8)

This active preparation for the telenurses' questions appeared to calm the parents and decrease their worry.

3.1.3 Predetermined reasons for being the caller

How parents reason before they call varies. Who will call, however, appears to be predetermined in most families. This can range from one parent making all the calls to equal sharing of the calling. Both mothers and fathers said that they call because they are worried, and that they can be asked by their partner to make the call. Only mothers, however, stated that they prefer to call and speak to the telenurse as they felt it was easier for them, than for the fathers, to explain the child's condition and ask for help. Some mothers admitted they need to feel a sense a control, and permit the fathers to call only when they are occupied:

"I wouldn't have let him call, because I want to hear myself what a nurse says and what advice she gives … need for control maybe … I probably have better control of the kids also." (9)

"If I'm busy, then of course he calls." (5)

When a mother has made the family's first contact with SHD she often continues to call, as she feels familiar with the service. Fathers' explanations for being the caller were that they are more verbal, or have better language skills:

"She isn't as strong in the language as I am … She isn't as verbal as I am." (13)

Fathers might also be asked to call as they are often regarded as more assertive, e.g. when a doctor's appointment is desired. However, even mothers can be assertive, good at getting a doctor's appointment if necessary:

"If my husband calls, he always gets an appointment." (17)

"She's somehow more assertive in getting a doctor's appointment." (11)

In situations where parents share calling SHD equally, the parent who first becomes aware of the child's symptoms, is at home and is most concerned makes the call. If both parents are at home, the choice is random. However, as some mothers noted, they, to a greater extent than fathers, take parental sick leave, stay home and in this way take the main responsibility for sick children:

"It might be connected to parental leave … it's the mothers who take almost all of it." (10)

Some mothers believed that children need their mothers more and that mothers instinctively understand their children better than fathers and worry more:

'The mother's heart, that's where the worry lies. I'm 32 and my mother still worries about me– "do you eat properly, do you sleep well" – and so on.' (6)

For some fathers, calling SHD is not a masculine thing to do, as they want to manage on their own, without help. Other fathers, however, appreciate SHD as an easily accessible service, and a gateway to many health services:

"Otherwise SHD 1177 is quite a male thing … you dial that number and use it to get answers for all healthcare needs." (21)

3.2 During the call

3.2.1 Individualized and professional dialogue

The parents stated that they prefer to be given a chance to speak first in their communication with telenurses. In the beginning, they want to be able to repeat themselves, if necessary, without too many interruptions. They then hope for a communication process which is individualized and adjusted to their needs. The parents understand the importance of the telenurses' questions, and want to be given plenty of time to answer. They emphasized that they know their child best, stress the importance of their own intuition, and want telenurses to explore their worry and individual needs:

> *"It's really important, that when you sit at that end of the telephone where the nurse sits, that you're able to … speak the customer's language." (14)*

The foreign-born parents believed they communicate differently compared to native Swedes, and that this can affect how and to what extent they describe illness symptoms or private information. They also expressed the need for the telenurse to listen carefully and speak slowly, as this can calm their worries and facilitate communication:

> *"A functioning communication, both ways. That I understand what this person wants to tell me… that the person understands what I want to say."(3)*

3.2.2 Impact of worry and trust

Worry and anger can block parents' thinking and descriptions, which possibly results in increased demands for a doctor's appointment. Compared to calling SHD for oneself, the parents felt that calling for their children is more urgent, generate more worry, and require more advanced nurse competence. This is partly due to the difficulty of interpreting second-hand information regarding their child's condition:

> *"You know your own body, you know exactly where the pain is, … but a child, there you're really worried , because it isn't your body. You don't know where the pain is, you sort of, try to read the child … as well as you can." (1)*

The parents highlighted that the more they experience a telenurse's caring, the less worried and vulnerable they feel, which can lead to increased trust, and a reduced desire for a referral. This means, for example, a good first impression of telenurses' commitment to solve their problems, or hearing her say their child's name. Other examples are telenurses' empathic listening, confirmation, patience, calmness and interest. For some single parents, confirmation and verification of their own speculations are particularly important.

The parental trust increases when parents feel they are speaking to knowledgeable telenurses, or telenurses with experience of pediatric issues. This can be due to previous bad experiences of questioning telenurses' competence in pediatric care:

> *"It was so strange when I called because….the one I talked to was ….as if she didn't understand that I was talking about a child." (18)*

Besides social skills and conversational competence, the parents appeared to value telenurses who are considerate and truthful.

> *'Then she said: "take him to the emergency room because he needs help breathing… but you're not in a hurry … you have time to peacefully pack a bag … bring some things, yes, prepare for some hours at the emergency room."' (15)*

Telenurses' auscultation of children via the telephone is valued for supplementing parental descriptions. Similarly, the parents expressed increased trust when telenurses consult their colleagues, for example to acquire support for a referral decision or as an alternative in the case of miscommunication.

The parents' trust for the telenursing service can increase when they receive questions regarding their satisfaction and certainty about following given advice or recommendations at the end of calls. Furthermore, 'safety netting' advice [50], for example telenurses' invitations to call back if in doubt, or encouragement to contact emergency services if necessary can decrease their worry. In contrast, the parents dislike being interrupted, trivialized or disrespected. This discontent can make them feel bad and increase their need for second opinions or visits to emergency services. The extent to which parents trust the service seems to influence their future use:

> *"If I didn´t trust Swedish Healthcare Direct, I would never call." (1)*

3.3 After the call

3.3.1 Following telenurses' recommendations or not

The parents' reactions to the telenurses' recommendations were divided. Some of the parents do not always trust given recommendations and do not follow them. Instead, they prefer to listen to themselves:

> *"If something makes me feel as if this isn't right, if it doesn't feel good, nothing would stop me from going to emergency care." (13)*

Among the parents who said they follow recommendations, a few (five) do so exclusively, regardless of their own intuition and worry. Others can feel conflicted, which can lead to first postponing a visit to the doctor, then undergoing many anxious hours before finally following their original wish.

To be hindered from a desired referral can be hard for a parent to accept, but this can be seen as acceptable in hindsight if the child gets well. Occasionally, telenurses hand over the decision to the parent, for example by giving them a specialist's phone number or Internet address.

3.3.2 Parental learning reduces need for future calls

Many parents stated that they learn from the calls, and that what they learn can be important. For foreign-born parents, who stated they have few or no relatives at all in Sweden, the learning components were particularly important:

> *'They've become a teacher in medical knowledge … for our family, "Take the child's clothes off", we didn't know that … we, who are from foreign countries … we cover the child properly, to provoke sweat … and the child recovers from fever … But here in Sweden they said that, "no, take all the clothes off, only diaper … if possible, open the window also" … and it helped, the temperature went down … such things, I got to know by calling 1177.' (10)*

The parents noted that this knowledge can help reduce worry in the future, as it can be used on new occasions of illness or for the next child, with increased parental confidence. They expressed a need for the telenurses' teaching to begin at their level of knowledge, where they are most receptive to learning. Some parents had strong memories of what they had learned, which contributed to their increased trust in the telenurses' recommendations.

4 Discussion

The findings give insight into the intertwining feelings of worry and trust which can be experienced by parents before, during and after their calls to SHD. Whether to contact SHD or not appears to be influenced by their degree of worry or trust for the service. The participants' hesitations to contact SHD confirm the results of Neill et al [51]. Worry is universal to parents [52]. Mothers and fathers are likely to worry more when their child is sick, but one reason mothers may be the more frequent callers to SHD is that this coincides with societal gender norms [27, 28]. Mothers' statements of preferring the role of being the caller, wanting control, permitting fathers to call "only when occupied" can be connected to exertion of power and power relations [28, 33]. Expressions such as "women have an easier time asking for help" and "men want to manage things on their own" [53] point to constructions of femininity versus masculinity [25, 27, 30]. Assertiveness, however, is shown to be used to obtain desired appointments with doctors regardless of parent gender. This contradicts stereotyped societal expectations of gendered roles and descriptions assigning assertiveness as a paternal quality, even though it may not yet be accepted to the same extent among mothers [25]. Even when not assertive, fathers seem to receive referrals, confirming the results of an earlier study [22]. In contrast to what Cariello reports [16], there is a general appreciation of the telenursing service among both mothers and fathers in this study. As the sample only includes fathers who have used the service, the possibility exists that some of these eight participating fathers were the 'new dads' described by Goode [25]; and that their status as 'lone' dads was significant for the two fathers in the sample who were single parents.

The importance of a good first impression, also reported in face to face encounters [54], is where the collaboration between telenurses and parents begins. Trust presupposes that parents receive the telenurse's full attention and respect during calls. In addition, for telenurses to evaluate, and then strive to reduce parental worry, is important. This may be necessary to help parents describe their child's symptoms, and may also increase parents' trust in given advice. Like telenurses [6], parents regard second-hand calls to be worrisome. The quotation, on page 9, where a telenurse equates a child with an adult makes the parents' request for pediatric competence very relevant.

In contrast to reports of declined telephone health service use among minority ethnic groups [39-41], the foreign-born participants in the present study seemed to be using the service frequently and had contacted SHD without hesitation. The desires of the foreign-born participants regarding a pronounced dialogue are likely to benefit all callers and increase service accessibility. The emphasis on a telenurses' social competence points to the importance of recruiting telenurses based on factors beyond their formal competence. Telenurses need personal skills, for example conversing with children, calming a worried or angry parent, or knowing when to transfer a call to a colleague (in case of miscommunication or need for support).

In contrast to 'parents know their children best', five of 21 parents report trusting telenurses' recommendations more than their own intuition. This can be due to earlier contentment with the service or linking the telenursing power [37] with a trust in telenurses' correct assessment. However, telenurses are not infallible, and parents' blind adherence to a telenurse's recommendations may in some cases delay children's treatments and possibly lead to adverse events [55]. In these situations, minority ethnic groups are possibly at higher risk due to reports of ethnic disparities in access to timely, high-quality emergency care [56]. To ensure safe care, it is hence important for telenurses to encourage parents not to hesitate to call back or contact emergency services if or when something does not feel right.

Participants' appreciation of safety netting advice is in line with Maguire et al. [50], as this type of advice can reduce the risk for adverse events. They value being asked at the end of the call if they are satisfied, or if they are certain about how to follow recommendations. Questions like these can strengthen positions of parents and promote shared decision-making, in line with Greenberg [44].

As noted by Neill et al. [51], most parents report learning from their calls, pointing to the public health potential of the service. The extent to which public health promotion is applied [57] in the telephone health service assignment is a subject for future studies. The need for learning might possibly differ, depending on parents' age, ethnicity, social network and

level of knowledge. However, foreign-born parents in the present study explicitly look upon the telephone health service as their teacher in medical knowledge. Learning from calls can increase knowledge and confidence among parents using the service, which can result in decreased worry and a reduced need to call SHD in the future.

4.1 Strengths and limitations

That two authors, EK and IH, have telenursing experience from contexts outside SHD, while the other authors do not, strengthens the study. This enabled emic and etic perspectives.

As regards recruitment, ads in newspapers mainly attracted highly educated women. Thereafter, the first author recruited participants at a primary healthcare centre. All approached parents agreed to participate, and we could choose among them to assure the strategic sample we strived for. The successful recruitment of a diverse and intersectional sample, including five 'foreign born' callers, a population group reported by the literature as having a low overall usage [40] of the telephone services, is another strength. In spite of the diversity of the participants, feelings of worry and trust were described by all the participants.

Recall bias needs to be taken into consideration, as the study includes participants who had called within the past six months. Most parents, however, gave detailed examples from both past and recent calls. Regarding social desirability bias, the interviewer emphasized to the participants her university association, and no commitments to the telephone service. It was also beyond the scope of this study to explore the expectations and experiences of parents who do not use the service at all, since the study sample consisted of people who had contacted SHD at least once.

To meet the quality criteria commonly used in qualitative studies, concepts of credibility, dependability, transferability [47] and confirmability were applied in the present study. These are concepts that enhance trustworthiness [58]. Credibility was achieved through a thoroughness of data collection and analysis, using a carefully selected sample [59] and presenting the findings using quotes. Dependability was created through describing the research process in a transparent way, as easy for readers to follow as possible [60]. Transferability deals with the extent to which the findings can be transferred to other settings [47]. As this study is qualitative and the inclusion of subjects purposive, more studies in different locations could be conducted in order to reveal the extent to which the findings in the present study are transferable to other settings. Finally, confirmability was achieved through findings well-grounded in data, maintaining interpretive awareness and holding back our personal theories and prejudices. This was achieved through discussions at research seminars.

4.2 Conclusion

Parent callers expressed that they want to be listened to carefully and to be accorded respect by telenurses. Exploration of their needs and understandings by telenurses can help reduce their worry, increase their learning and result in increased trust and concordance with telenurse recommendations. Telenurses' awareness of the impact of gender in pediatric consultations can further develop the telenursing health service in providing safe care on equal terms for a vulnerable patient group, children.

4.3 Relevance for clinical practice

This study gives insight into how the parents think and feel throughout the process of making pediatric health calls, and the impact of gender on these calls. Telenurses need to understand the depth of parental worry for their sick child, and the necessity of gaining parents' trust. Telenurses should thus strive for an equal relationship with parent callers. Since the participating parents reported to have learned from their calls to SHD, it is possible that the more parents use the telephone health services, the less they will need it in the future. This has however not been explored in the present study. To assure safer pediatric care and avoid the risk of malpractice claims [55], telenurses' usage of safety netting advice, that is to encourage parents to call back or contact emergency services whenever necessary, is specifically important.

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Authors' contributions

EK, MC and IKH were responsible for the conception and design of the study. EK performed the data collection. EK, MC and IKH analysed the data and drafted the manuscript. All authors (EK, MC, MR and IKH,) participated in the interpretation of the findings, critical revisions for important intellectual content, and the approval of the final manuscript version.

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