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Health-Related Internet Information Both Strengthens and Weakens Parents' Potential for Self-Care—A Mixed-Methods Study on Parents' Search Patterns

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Abstract

Background: Today's parents belong to the digital generation and regularly use the Internet as a source of information. Parents' quests for health-related online information comprise an effort to manage symptoms of illness or address questions about child development which may be an expression of self-management or self-care. **Purpose:** This study aims to describe health and child development related Internet search patterns used by parents of children ages zero to six, and further, how the obtained information was used in contacts with Child Health Care. **Design and Methods:** A two-step mixed-method approach is used in this study, comprising both a quantitative and a qualitative approach. First, a questionnaire was distributed to parents (n = 800) at 13 health centers in a medium sized county in Sweden. Second, one narrative interview with two parents total was conducted. Descriptive and non-parametric statistics were calculated, and qualitative manifest content analyses were performed. **Results:** A total of 687 completed the questionnaire, which corresponds to a response rate of 86%. The results show that 97% used the Internet for health-related and developmental child issues. The results show that parents often look at basic tips and the Internet is seen as a fast and accessible forum to obtain information. Parents often initiated their Internet searches using Google search for the specific subject, but the most common and most used website (used by 95% of parents), was the Swedish health site 1177.se. 98.4% of parents evaluated the general information searches they made on the Internet as reliable despite only 31% of the parents checking to see if the websites they used were scientifically based. Parents

(81.7%) stated that they wanted their Child Health Nurses (CHN) to give them recommendations for valid websites. **Conclusions:** The results in this study show that, on the one hand, the Internet could strengthen parental knowledge (support self-care capacity), but, on the other hand, the found information could worry them and increase their anxiety—negatively affected self-care capacity. The parents suggested that the information should be double-checked to establish trust and develop self-care knowledge. Having a good resource to rely on, such as personal contact with a CHN, or using reliable websites seems to strengthen and reassure parents.

Keywords

1. Introduction

The European Union [1] states that at least 250 million Europeans (88%) use the Internet every day. In 2011, Seybert [2] found 56% of European citizen used Internet, so that's a significant increase in Internet usage since then. Those who grew up with the Internet right from childhood are called the Digital Native generation, and they have learned to multitask with the information and communication that Internet technologies offer/require [3]. People born after 1980 and of fertile age today, now comprise most parents. Whyte and Hunter [4] observed that parents frequently used the Internet to obtain information about their child's conditions, but at the same time are unaware of the potential pitfalls that Internet information can present. Plantin and Daneback [5] describe that the Internet is an obvious choice for both communications and information retrieval. In the USA, parents of children under the age of five use the Internet through Facebook, e-mail, and smartphones to search for nutrition information, and 70% of them do this on a weekly basis [6]. A majority (65%), view health information published on the Internet as reliable and they differentiate the level of trust in the Internet health information sources [7]. Many studies published on the topic show that most of the research focuses on parents of chronically sick children [8] [9] [10] [11]. Parents in the Walsh *et al.* [9] study used online information to increase their understanding of the child's diagnosis or treatments. Paterson, Brewer Leeseberg Stamler, [11] found that when parents are engaged in online social support, they experienced a sense of being empowered. The aim was to meet parents who shared a similar reality for obtaining information from them and communication to cope with their child's situation. Glenn [10] reinforces the overwhelming need to share experiences with others in similar situations in the use of online communication. Skranes *et al.* [12] found that among Norwegian parents the Internet was the primary source of child health information when the child was just little bit sick or not sick.

2. Theoretical Framing

Parents' quest for health-related online information comprises an effort to manage illness symptoms or to question child development, which can be expressed as self-management, or self-care. Nurse theorist, Dorothea Orem; formulated the theory of self-care, the theory of self-care deficit, and the theory of nursing [13] [14]. Self-care is the activities that individuals initiate and perform to maintain life, health, and well-being. Self -care deficit is when there is a need for nursing to guide, support, and promote personal development to meet future demands and self-care needs. It is suggested that nursing is a form of action to help and support self-care, built as an interaction between two persons or a family [13]. The Internet can reinforce parents in their parenthood but, as previously observed, the Internet can also be viewed as a distressing factor for parents and contribute to the creation of a self-care deficit [15]. An aspect of very high relevance to self-care and online information is *health literacy* which refers to "the degree to which individuals has the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions" [16]. When parents have the proper knowledge (health literacy), they have a better capacity to make relevant choices and decisions about their child's health (self-care) [13].

In Sweden, Child Health Care (CHC) is supported and enforced by the National Board of Health and Welfare [17]. CHC is a voluntary health service for all families with children between the ages of newborn to six years old. To be eligible for the health care system in general, and for a child to belong to the CHC, individuals need to be registered in a health center thereby counting as a "Listed" person. CHC is led by registered nurses who specialize in primary health care and/or pediatric care known as child health nurses (CHN). CHC aims to promote children's health and development, to identify problems and illnesses at early stages, and to support parenting [17]. CHC has played an important role in Swedish public health since beginning in the 1950s [18]. To the best of our knowledge, there is a lack of studies describing the health and child development related Internet search patterns of parents of healthy children.

3. Aim

This study aims to describe health and child development related Internet search patterns of parents of healthy children and, how the information was used in contacts with Child Health Care.

Research Questions:

1) *Do parents use the Internet for advice and information about their children between* 0 - 6 *years old, and if so, why and how*?

2) *Do parent use the information found on the Internet when contacting the child health nurse*?

4. Methods

A mixed-method approach [19] was used to respond to the research questions.

As a first step, a questionnaire was distributed to parents at 13 health centers in a medium size county in Sweden [20]. As a second step, one narrative interview with a set of parents was made. To gain a deeper understanding of the survey related results, a qualitative interview was completed with first-time parents from one of the healthcare centers. The interview was added to the data to sequentially explain the quantitative data [21].

4.1. Sample and Research Context

The descriptive survey was conducted to obtain an understanding of how parents use the Internet for advice and information regarding their children between zero and six years of age. CHC covers all of Sweden through CHC units situated in virtually all Health Care Centers in each municipality. The CHC is regulated by the Swedish Healthcare Act SFS 2017:30 [22]. In the CHC, each full-time CHN has between 300 to 360 children to assess and monitor their development and general health. In 2013, when the present data were collected, 675,283 children were listed at CHC (in Sweden). In the county (the geographical area of Västernorrland) that was chosen for the study, 14,722 children were listed [23]. In the 13 health care centers that participated in the study, 8632 children were listed.

4.2. Procedure

A total of 20 Child Health Nurses (CHN) working at 13 different health centers cooperated with the research team inviting a total of 800 parents to participate, which corresponds to approximately 10% of the listed children in the area, see Table 1. Each of the CHNs was instructed to consecutively approach the first 40 parents that were scheduled for a visit and met the inclusion criteria in the study. These parents were invited to respond to the questionnaire which had a cover page with an introduction explaining the study and the procedures if they elected to participate. If the parent chose to participate, the completed questionnaire was put in a locked box outside the CHN office. If the questionnaire was incomplete, the participants were regarded to have dropped out.

The parents received an introduction letter informing them of the study's purpose and that the interviews and data would be treated confidentially in line with the current national research ethical legislation/standards of Sweden and the Helsinki declaration [24]. The participants were informed that participation was voluntary and that they could withdraw at any time without having to specify the reason. The parents that were interviewed had offered to participate when they saw a written offer written on their CHC. They were chosen because they represent a typical example of a modern Internet-using family, in Sweden today.

4.3. Participants

The inclusion criteria for participation were:

Table 1. Descriptive information about included health centers with child care center.

Health centers (HC)	Children listed at unit	Number of CHN	Questionnaire completed	% of number of children registered at HC
1	1467	3	40+ 39+ 39	8%
2	338	2	21 + 22	13%
3	600	2	37 + 40	13%
4	942	1	40	4%
5	501	2	33 +32	13%
6	805	1	35	4%
7	318	2	30 +30	19%
8	225	1	30	12%
9	1445	2	36 + 40	5%
10	399	1	32	8%
11	358	1	40	11%
12	746	1	40	5%
13	459	1	39	8%
total	8603	20	687	8%

- Parents who had a child between 0 - 6 years old, listed in child health care at a child health clinic in primary care, in a predefined county in Sweden and the parents could read and express themselves in both written and spoken Swedish.

Exclusion criteria were:

- Parents who did not understand Swedish and who were unable to answer the survey questions in written form.

Participants in qualities Interview

The two invited parents were invited to participate in the interview by the first author at the health care center, and the interview was conducted in their home a few days later.

4.4. Data Collection in Two Steps

1) *Questionnaire*

The first (LV) and the third author (KS) created a questionnaire, which included 21 questions with both open-ended and closed response alternatives. To test the questionnaire, it was first piloted with 40 parents who agreed to participate at one of the health centers. The pilot questionnaires were not included in the analysis as they led to some changes in the final questionnaire.

The final questionnaire contained two main sections. The first part of the questionnaire aimed to find out whether the parents used the Internet, and if so, how the Internet was used to find information and advice related to their children and then if the information was perceived as useful. The second part aimed to ascertain if the advice they found on the Internet was perceived as reliable and

if they used the information when contacting the CHN. In the questionnaire, some of the questions were open-ended where parents could fill in explanations for the answer they selected. The open-ended questions and open fields for giving optional explanations were analyzed separately. Two of the questions were fully open-ended; "What sites do you use on the Internet" and "If you have any further comments on this topic we would be grateful if you could express them here". Extracts/quotes from the open-ended questions are presented in the results as citations marked with P+ number X, which means that this is written by the person who completed the questionnaire number X.

2) *Interview*

To complement the information of the survey results one interview was conducted with one family adding to the sequential explanatory design to deepen the understanding of the results of the quantitative data [21]. The qualitative interview with the two parents contained the same topic areas as the questionnaire; How do you use the Internet? Why do you use the Internet? Is the Internet reliable? Have you used the information you found on the Internet when contacting your CHN? The interview lasted one hour and 16 minutes and was recorded and subsequently transcribed into 16 pages single-spaced text with 12.5 font size. In the text, the mother is referred to as Interview Mother (IM) and the father as Interview Dad (ID).

4.5. Statistical Methods and Data Analysis

Descriptive statistics with frequencies and proportion was used to (IBM SPSS version 24) present the quantitative data. In the study, adequate samples were applied, meaning that participants who met established inclusion criteria were asked to participate, a total of 800 parents [20].

The open-ended questions from the questionnaire and the interview were used to complement and support the topics of the questionnaire. The text was analyzed on a manifest level and sorted with the topics of the questionnaire as a guide [25].

4.6. Ethical Considerations

Participation was voluntary, and the participants were guaranteed confidentiality, as the completed questionnaires were placed in a closed box. The questionnaire respondents are entirely anonymous. The study was approved by the Regional Ethical Review Board at Umeå University (Dno-2011-446-31M).

5. Results

The results from both the quantitative and the qualitative analyses are presented intertwined. Of the 800 parents who were invited for participation, a total of 687 completed the questionnaire, which corresponds to a response rate of 86%. The majority of the respondents were female 535 (78%). Respondents age ranged from 18 to 69 (mean 31.87, SD ± 6). The youngest parent was a mom, and the oldest was a dad.

The 687 parents who completed the questionnaire reported having 838 children between 0 - 6 years of age. See Table 2 for more details.

To what extent is the Internet used?

Nearly all parents reported using the Internet (97 %, n = 666) and of the parents who completed the questionnaire, 94% (n = 646) answered that the Internet was useful, whereas six percent (n = 40) reported that they did not think the Internet was useful. The interview provided additional information about the usefulness of the Internet. In response to a question about the usefulness of information found on the Internet the mother replied:

IM: yes, it's useful those times you get… I mean when it feels like you can rely on the information you've found, that it's reliable… because the Internet is so huge and you might get too many answers, answers you could ignore, but instead you sit there and scare yourself… so, yes it's useful, but rather scary too.

Why Internet searches?

Most parents searched for information related to their child's health (n = 542.79.9%) and development (n = 443, 65.3%). About half of the parents' (n = 347, 51.2%) turned to the Internet to learn from other parents' advice written on different forums, but only ten percent (n = 69) asked questions related to their children. In addition to information searches, parents took part of news regarding children's health and development in general (n = 217, 32%), and read blogs that other parents wrote (n = 189, 27.9%). Parents also turned to the Internet without a specific objective, but only to search for something useful or interesting (n = 261, 38.5%). See Table 2 for a full list of topics. Often parents searched for basic tips and looked for insight into other parents' experiences. The Internet is seen as a fast forum to retrieve information. In Table 3, examples are shown of the kinds of questions that were searched for on Internet:

Trustworthiness of retrieved information

The information parents retrieved from the Internet was assessed as reliable by most parents (n = 676, 98.4%) and only 1.5% (n = 10) evaluated the information as not trustworthy.

"*Depending on what I am looking for, for example regarding illness, then I want to know if it is scientifically trustworthy*" P 126.

In the question, "do you find out if the information from the Internet is scientifically based?," 31% (n = 214) parents answered yes they did and, 33% (n = 225) answered that they did not try to confirm that the information they found was scientifically based, 36% (n = 248) of the parents answered that they sometimes did. A quarter (25%, n = 171) of all parents who replied also supplemented their answer with an open answer.

Table 2. Children age when parent answered the questionnaire.

Age of children	<3 month	3 - 5 month	5 month - 1 year	- 3 year	>3 year	Totally
Number of Children	170 (20%)	93 (11%)	151 (18%)	192 (23%)	232 (28%)	838*

*Parents gave ages of more than one child.

Table 3. Topics for parents' Internet searches.

Alternative	n/(%)
Health	542 (79.9%)
Development	443 (65.3%)
Read forum advice	347 (51.2%)
Looked without purpose	261 (38.5%)
Read news about children	217 (32%)
Read other parents blogs	189 (27.9%)
Asked questions on forums	69 (10.2%)
Something else	39 (5.8%)
Chatted-written on the Internet with other parents	35 (5.2%)
Total number of answers	2142
Number of answers per person (mean)	3.12

Many of the parents explained in the open answers that if they did not find that the site was reliable, they looked for more pages with the same opinion and then they could feel confident about that information. Others said that when they feel insecure about the source of the advice, they can turn to the CHC to confirm that this is the right advice to follow. One of the parents who had provided an open-ended answer to the questionnaire expressed:

"It is great that the Internet exists, and it is simple to use, but it is better to have physical contact, and nothing could replace the support she (CHN) gives through both her knowledge and her human contact. The Internet is a fast and good tool, but also, a very cold, anonymous tool that cannot replace human contact" P 209.

A problem parents mentioned in the open-ended answers was that there was so much information on the Internet, and it is time-consuming to sort through. Parents also felt that it was difficult to know if they missed important information because of searching the wrong field. Parents mentioned that they wanted to find information on the Internet but did not always have the capability. Some parents indicated that the information that came up first in the Internet search was location-based and not based on the trustworthiness or scientific basis. As one parent wrote:

"As a new parent, the flow of information is enormous. All the information nearly makes you drown, it would be helpful to be given tips of reliable sites by the CHC" P 622.

Reasons for using the Internet

The parents that used the Internet stated that they used the Internet for information and advice for their children because it was easy (n = 510.74%) and readily available (n = 539, 79%).The Internet was the first choice when searching for information for 41% (n = 278) of the respondents. The fourth highest percentage answer to the question came from parents who used the Internet as a

complement to the information they gained at the visit at the CHC (n = 264, 39%). At the time of day when only acute care was available 37% (n = 254), parents used the Internet for advice as a substitute. Some parents found comfort in online discussions (n = 189, 28%), others felt safe in being anonymous (n = 94, 14%), and 9% (n = 63) trusted in previously used Internet sources. When the interviewed parents answered the question "What their reasons were for using the Internet" they answered:

IM: *Well, yes, it's always available*

ID: *And it's quick to find out information…*

IM: *yes, exactly*

ID: *Information is just a few minutes away.*

IM: *Yes, most of the times if you dare to take the chance*

ID: *And I think it's part of our time and generation… we have grown up with the Internet as a natural choice, you have it on the cell phone… at the dinner table, on the car trip or when you're in town… you can go ogle anywhere.*

The conclusion is that parents used the Internet because it is almost always available and is a quick way to find information and basic tips.

Where-What sites were used?

Information about which sites the parents used most for information retrieval is presented in Table 4. Parents more randomly (0.1% - 5%) mentioned sites related to pharmacy, poison information center, blogs, medicine pages like fass.se, practical medicine and other child facts and children related pages in single pages numbers and are therefore not included in the tables. In the open-ended questions, parents mentioned that it was often basic tips they searched for, as well as to get an insight on other parents' experiences. In addition, the Internet was experienced as a fast way to reach news, information and other things parents were looking for concerning their child. An example in the citation below:

IM: *I think it depends what web page you're visiting, when I was pregnant I often read the page "Familjeliv"… and if you start to discuss something there, all conversations ended up in miscarriage. It didn't matter if it was about a spot on the stomach, well, it will probably lead to a miscarriage. So, I stopped using this "Familjeliv," because it was just worrying me.*

Contact with CHN

The parents had varying experiences of getting recommendations from the CHN regarding valid Internet sites that provide secure and reliable information about children's health and development. 59.2% (n = 407) of the parents claimed that they were not given recommendations by a CHN, whereas 40.8% (n = 280) claimed they had been provided a recommendation by a CHN.

Even though so many parents didn't get recommendations from the CHN, only six percent (n = 47) self-asked the CHN for recommendations when needed. Many parents wanted the CHN to recommend valid websites. Almost 81.7% (n = 561) wanted a supportive source as the CHC to recommend websites to search on, but 18.3% (n = 126) did not think recommendations were necessary. In the open answers, parents claimed that the Internet functioned as a good

Table 4. Sites that parent use for information retrieval.

Specified web page	Briefly about the content	Scientific or evidence based website*	Number of parents who provided this site as useful	Percent of total questionnaire
1177.se National governmental owned and recommended site.	Facts and advice on diseases and disorders, development, and guidance. Contains explanatory and supportive movies, links to contact with healthcare, as both links and e-health	Yes	655	95 %
Google.se	Internet search engine which helps guide users to other sites with relevant information	Not relevant, depended on popularity, No	261	38 %
Familjeliv.se "family life site"	Website containing news about children and families, base facts, blogs, chats, forums and also offers from advertises and sponsors of the websites.	No	172	25 %
Libero.se Pampers.se "Diaper manufacturer"	Websites about the chosen diaper with news about child development and differing ages. Shops with benefits depending on collected points through diaper purchases and also chat rooms for parents	No	92	13%
Viforaldrar.se Vi föräldrar "Us parents newspaper"	Website from a newspaper about parenting and children containing articles, newsletters, blogs, forum and professional advice chat	Yes, partially	34	5 %

*as evaluated by the research team.

first encyclopedia or medical advice support source, and sometimes parents contacted the CHC after the search because of uncertainty and for confirmation and useful for information. The Internet was also an information source when the CHC was closed, and the parents needed to address something that had happened.

Internet Opinions, in contact with care.

Contact with CHC through email was an appreciated feature through the Internet. An opinion and a wish parents shared in response to the question "If you have any further comments on this subject or the questions, we would be grateful if you would like to express them here," was that an Internet chat option with CHN as a complement to the voluntary meetings that already exist through CHC would be helpful. Many parents summarized that they wanted a CHN who stayed up to date in their profession and who was knowledgeable.

"It would be great if there were a chat that was open some hours a day, like for example, as at the insurance fund. There, you as a parent I could ask questions about my children and get advice and tips. Being able to contact CHN for most of the day in this way" P 268.

6. Discussion

This study aims to describe health and child development related search patterns on the Internet, by parents of healthy children. Parents responded to questionnaires, and one qualitative interview was conducted.

It was observed in both the quantitative and the qualitative part of the study that the Internet can provide security when parents find the same answer on

several Internet sites, supporting the answers of credibility. Amajor result of the study was the vast amount of ambivalence that appeared to exist among the parents. Although they seemed to have found "correct" answers through the Internet, they still expressed a need to have the answer confirmed either by other web pages expressing the same or through personal contact via the CHN.

Our results show 98.4% of the parents found information and evaluated it as trustworthy. Despite this, only 31% evaluated the retrieved information from the Internet as scientifically based. In a study by Valan *et al.* [15] where Child Health Nurses were interviewed, an expressed opinion was that worried parents could become even more concerned or anxious caused by the multitude and complexity of the retrieved information, as it can be difficult to understand and decipher. Our study partly confirms the above-mentioned issue, mentioning that it is both difficult and time-consuming to decipher the enormous volume of information provided on the Internet. Lee, Hoti, Hughes, and Emmerton [26] identified extrinsic barriers such as the inconsistency of information between diverse online sources. Sometimes the parents' concerns, in our study, were based on parents' insecurities about searching in the wrong field or sites on the Internet.

In Dorothea Orem's [13] notion of self-care deficit, the feeling of deficit does not refer to a specific type of limitation in humans (in this case parents), rather, to the relationship between the parent's capabilities and the need for action. The real problem with the parents is, therefore, their insecurity or doubt in their ability to validate the information and decide to act accordingly. So, even if the parents in this study wrote that they found the information trustworthy, it came with a touch of insecurity, making them double-check to feel safe, or rely on their own judgement—they do not have the capacity to decipher the information, a lack of health literacy [16]. Our study confirms this and shows that the obtained information highly depended on the first hit on the Internet search engine. Initially, they described increased anxiety until they learned which sites were reliable and felt more secure about their choice. To support health literacy and self-care, it is necessary for health care to develop strategies that support parents' knowledge of online health information. In Sweden, it could become a natural part of the national Child Health care program, and internationally, similar initiatives have started to support parents in "Good Googling" [27].

This study shows that the primary reason parents chose to use the Internet for health information is because of ease of use and availability. Platin and Daneback [5] likewise claimed that Internet is an obvious choice for both communication and information retrieval, especially for those of the digital generation [28].

Parents in this study most commonly used Internet sites with health related information. This is similar to studies of parents of chronically ill children [8] [9] [10] [11]. These studies put forward that the parents appreciate knowing more about the illness and also appreciate using the Internet to contact other parents in the same situation. Further, parents get recommendations for other websites from parents whose children have the same disease patterns. An inter-

pretation is that parents of chronically ill children develop a high level of health literacy (Nielsen-Bohlman, Panzer, and Kindig, 2004) because of prolonged time to "train" their skills in validating information. In our results, a cautious assumption is that due to a low degree of health literacy parents [16] become worried when faced with the massive amount of information available on the Internet, whereas parents with diagnosed children have an easier to decipher and get help from the information.

Parents describe different experiences in how they perceive and use information and recommendations from reliable sites. Still, as much as eighty-two percent want the CHN to confirm and recommend valid websites. The "confirmation" serves perhaps as a way to reduce parents' concerns and anxiety. A way to support parents' self-care capacity could be to offer a wider and safer selection of evidence-based or scientifically proven knowledge on Internet sites. Dorothea Orem [13] [14] was, in a sense, before her time when in 1971 she formulated the self-care deficit theory long before the Internetage. In Orem's sense, being a CHN means tost and next to parents, identify concerns and inabilities, guide, and raise their self-confidence so that the parents make adequate self-care decisions [13] [14]. Through guiding parents towards reliable Internet sites, the CHN can work in line with the self-care deficit theory by giving direct advice regarding websites.

Parents wanted to meet with an up-to-date and knowledgeable CHN, preferably, someone they had a relationship and a personal connection with. They also ask for quicker forms (on-line) of communication such as chat functions and email. In a previous study [15] this aspect was also appreciated by CHNs and seen as a time-saver and resource at work. Personal contact (in person or on-line) seems to be appreciated by parents because the advice came from a person that they knew and trusted, thus providing an added sense of security.

7. Methodological Considerations

The strengths of this study were the large number of completed questionnaires and the mixed-method design where the parent interview augmented the understanding of the results of the surveys. It is rather unusual to just conduct only one qualitative parent interview, but as it added deeper information to the quantitative findings, our judgment is that it supports the trustworthiness of the full study.

Although this study has a fairly large sample, which is representative of this geographical area, generalization to a larger population such as all parents, is limited.

One weakness of this study could be that the authors designed the questionnaire, but on the other hand, no tested and validated questionnaire existed. The questionnaire was tested by giving it to 40 parents as a pilot study. This test yielded minor changes to the final version but supported the validity of the questionnaire. Another aspect that may affect the possibility of drawing firm conclusions is that we are unaware health status of the children of the participating

parents at the time that they completed the questionnaires.

8. Conclusion

First-time parents having a child are like going on a lifetime expedition of discovery. As a parent, you need to develop the courage to dare to rely on your own ability, to always make the right decision, and to be totally responsible for another person [17]. The results in this study show on one hand that the Internet could strengthen parents with new knowledge (support self-care capacity), and on the other hand, worry them, thereby, increasing their anxiety—negatively affected self-care capacity. It is not entirely surprising that this may create uncertainty that makes the new parents insecure in their role. The result of this study shows that parents, to a very high degree search the Internet for health-related topics, and the results also highlight the question of determining the trustworthiness of sources. It was suggested, by the parents, to double-check information to gain trust, and develop their own self-care knowledge. To have a base to lean back on, such as personal contact with a CHN, or using reliable websites seems to strengthen parents. Based on the results of this study we suggest further developing this supporting function in child health care to increase parents' security. One option is to directly educate parents in "consumer health literacy," but we propose to start with in-depth studies on what is needed from the parents' perspective.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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