



Unmet Family Needs Concerning Healthcare Services in the Setting of Childhood Hospitalization for Cancer Treatment in Mainland China: A Qualitative Study

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ARTICLE INFO

Article history:

Received 6 June 2018

Revised 9 November 2018

Accepted 9 November 2018

Keywords:

Unmet needs
Childhood cancer
Family care
Hospitalization

ABSTRACT

Purpose: The focus of this paper is to identify the unmet family needs during children's hospitalization for cancer treatment.

Design and Methods: Qualitative interviews were carried out with five fathers and fourteen mothers purposively sampled from four pediatric oncology departments in Mainland China from September 2013 to March 2014. Audiotaped interviews were transcribed verbatim, and data in transcripts were coded and analyzed by qualitative content analysis.

Results: The identified unmet family needs pertaining to healthcare service during a child's hospitalization for cancer treatment were unmet need for warm and supportive attitudes; competent care; adequate information; a comfortable environment; and catering support.

Conclusions: The results showed that families with children hospitalized for cancer treatment have a variety of unmet needs related to healthcare service. These identified unmet family needs have already shed light on areas for healthcare service improvement.

Practice Implications: This study have reminded nurses' to become more concerned about unmet family needs instead of only focusing on the hospitalized child in clinical settings. Healthcare professionals can assist in promoting family adaptation to children's hospitalization by satisfying their unmet family needs.

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Introduction

Improved childhood cancer survival rates are often accompanied by 2–3 years of repeated and prolonged hospitalization (Long & Marsland, 2011; Wiener et al., 2017). In China, the practice of family members accompanying patients in hospitals is common. At least one relative typically stays together with the child patient providing much of the basic nursing care (i.e. feeding, etc.) required. Nurses typically have heavy workloads and family members feel obliged to care for the sick (Kong, 2010).

Repeated, prolonged hospitalization of a child places heavy strain on the whole family (Long & Marsland, 2011; Wiener et al., 2017). Since the care of hospitalized children has shifted to a more family-centered model (Hill, Knafel, & Santacroce, 2017), the family has become more

closely involved in a child's cancer treatment. In the past, pediatric nursing care in China has primarily focused on care of sick children themselves, ignoring the fact that the illness also leads to changes within the family system (Lee, Chien, & MacKenzie, 2000). While there was once a belief that children 'settled' better without disturbance by familiar faces, from the 1960s, a child-focused approach of care changed the philosophy of pediatric practices (Iversen, Shimmel, Ciacara, & Prabhakar, 2003). Parents gradually became increasingly involved in the care of hospitalized children. As the role that family played in integrated care gained recognition, the focus of pediatric healthcare delivery shifted from being primarily child-centered to the current family-centered model (Hill et al., 2017).

In 2010, the Chinese Ministry of Health proposed the "Setting High-Quality Nursing Care" project to improve the quality of nursing services as well as patient satisfaction (Ma, 2010). The concept of family-centered care (FCC) during a child's hospitalization has gained recognition only over the course of recent years, when it was first proposed at the China National Pediatric Nursing Conference in 2010. Even though this concept is now widely used in China, the application of FCC during

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a child's hospitalization for cancer treatment is still in the early stages of adoption. Effort dedicated towards improving the quality of FCC is thus still needed.

Effective healthcare systems should be driven by the needs of patients and their families (Foster, Whitehead, Arabiat, & Frost, 2018; Wetzig & Mitchell, 2017). Satisfying unmet family needs (i.e. inadequate assistance) is a way to drive an improvement in the quality of FCC in pediatric oncology nursing practice. Prior research has shown that families of children hospitalized for cancer treatment have specific needs which are not always met (Arabiat & Altamimi, 2013; Foster et al., 2018; Monterosso, Kristjanson, Aoun, & Phillips, 2007). For example, a study assessing the perceived needs of Jordanian parents of children with cancer reported that 22% of the parents had unmet needs. The most frequently reported unmet needs were related to possessing information concerning possible outcomes of a child's illness, what information to give to other siblings, and how to address the emotions of involved children (Arabiat & Altamimi, 2013). Another study indicated that 30–50% of Western Australian parents had unmet needs concerning information and service provision (Monterosso et al., 2007). A similar study conducted in the United States also revealed that parents reported to desire greater honesty, compassion, clarity, coordination and comprehensiveness in communication with healthcare providers (DeLemos et al., 2010).

The aforementioned studies reveal unmet family needs during children's hospitalization for cancer treatment to be a global phenomenon not limited to mainland China. Nurses, however, usually perceive that they meet family needs. One study that compared perceptions of family needs from points of view of medical staff and parents revealed that more staff than parents considered at least half of family needs as adequately met during their children's hospitalization (Shields, Kristensson-Hallstrom, & O'Callaghan, 2003). Another study reported that parents were more likely to rate needs as less important, more met and more needed than staff members (Foster et al., 2018).

The perception of a family being merely an extension of a child is incongruent with the principles of FCC (Vetsch et al., 2017). Care for children and their families is the core of good pediatric oncology nursing practice (MacKay & Gregory, 2011). Nurses should always consider the needs of children and their family members; otherwise, all involved individuals are likely to suffer a decline in positive treatment outcomes (Cantrell, 2007; Crespo, Santos, Tavares, & Salvador, 2016). In recent years, several attempts have been made to explore the needs of families of pediatric oncology patients, but very few have investigated the phenomenon as pertaining to available healthcare services in mainland China. This population is an important target group requiring great attention as detailed investigation of unmet family needs related to pediatric oncology healthcare services would provide insight into improving the quality of FCC. This study aims to explore the perceptions of mainland Chinese parents concerning unmet family needs related to healthcare services following admission of a child with cancer to a pediatric oncology unit. This study was one part of a major project investigating experiences of families during their children's hospitalization for cancer treatment (Lyu, 2016).

Method

Study Design

A qualitative inductive content analysis approach was used in this study (Sandelowski, 2010). Ethical approval was obtained from all relevant ethics committees of university institutions and hospitals. Data were collected through semi-structured interviews from September 2013 to March 2014 at four pediatric hematology/oncology departments of four Grade III Level A hospitals in mainland China. One parent from each family was invited purposefully as a proxy when s/he met the following sample inclusion criteria: 1) had a child aged less than 14 hospitalized for cancer treatment in an oncology ward and 2) was primarily responsible for the child's care during hospitalization. Parents of

children 1) hospitalized for less than 24 h or 2) who suffered an emergency (e.g., massive hemorrhage) were excluded from our study. Data collection continued until no new information was being generated from the interview.

Data Collection and Analysis

The researcher conducted 19 face-to-face interviews with 19 parents according to a semi-structured interview guide. The guide included questions to capture family experiences during their child's hospitalization. This article focuses on participant responses to questions related to their perspectives concerning healthcare services. Questions asked were "What are some of the things that have happened in the hospital that have been distressing/upsetting/stressful to you and your family?" and "What would you like the nurses to do when you and your family are distressed?" Because of the nature of semi-structured interviews, questions were rephrased based on responses or understanding of the question. Each interview lasted between 45 and 90 min. All participants agreed to audio recording of their interview.

Recordings were transcribed verbatim in Chinese within 24–48 h after the interview and transcripts were analyzed using qualitative content analysis (Graneheim & Lundman, 2004). Responses were first open coded, word-by-word and line-by-line. The researcher and the supervisor read and re-read data in order to become familiar with what they entailed. Meaning units were subsequently extracted independently and encoded. Codes were sorted into subcategories based on their inter-relatedness and linked. Depending on relationships between subcategories, the larger number of subcategories was reduced into a smaller quantity by combination or reorganization.

Several strategies were used to ensure the rigor of this study. First, a comfortable space was used for the interview and participants were informed that their information would be treated with confidentiality. Second, at the end of each interview, the researcher restated or summarized answers provided and then asked the participant to determine accuracy. Third, the researcher and supervisor coded transcripts independently. Upon completion of coding, a 3-day meeting was arranged to discuss the codes and resolve any disagreements with consensus. We did member check in our research team. Once the categories were identified, we discussed in the research team until consensus was achieved. Finally, an audit trail was applied to provide evidence that recorded raw data had gone through a process of analysis, reduction and synthesis that lead to the findings.

Ethical Considerations

Ethical approval was obtained from relevant ethics committees of university institutions and hospitals. Written consent from interviewed parents was obtained.

Demographics

Altogether, 5 fathers and 14 mothers from different families participated in this study. All children were in active chemotherapy at the time of parent interviewing; 16 families had children diagnosed with acute lymphoblastic leukemia while the remainder were diagnosed with either malignant lymphoma or neuroblastoma. The duration of hospitalization ranged from 21 to 800 days; readmissions ranged from 1 to 50 times. One child has been hospitalized for about 800 days. Her mother reported that the treatment was not effective and the child was experiencing repeated infections. The child had been readmitted to the hospital immediately because of uncontrolled infection after she returned home. She had previously been in the hospital for 6 months prior to this recent admission. Table 1 presents the profiles of the 19 families.

Table 1
Participant characteristics (n = 19).

No	Interviewees/age (Y)	Family structure	Diagnosis	Total days of all admissions (ds)	Number of readmissions (ts)	Age of child (Y)
1	Mother/36	Nuclear	ALL	100	4	11
2	Father/40	Nuclear	ALL	21	1	12
3	Mother/32	Nuclear	ALL	360	9	7
4	Mother/36	Joint	ALL	180	11	9
5	Father/35	Joint	ALL	35	2	2
6	Mother/35	Nuclear	ALL	350	12	9
7	Father/36	Joint	Malignant rhabdomyoma	150	13	4
8	Mother/32	Nuclear	ALL	22	1	3
9	Mother/32	Joint	ALL	150	2	7
10	Mother/30	Nuclear	ALL	100	6	4
11	Father/32	Nuclear	ALL	120	10	4
12	Mother/38	Nuclear	ALL	127	1	10
13	Mother/41	Joint	ALL	800	50	13
14	Father/39	Joint	ALL	260	8	10
15	Mother/36	Joint	Neuroblastoma	35	2	3
16	Mother/32	Nuclear	ALL	61	3	4
17	Mother/31	Nuclear	ALL	108	6	3
18	Mother/30	Joint	ALL	163	4	4
19	Mother/42	Joint	Malignant lymphoma	350	15	12

ALL: acute lymphoblastic leukemia.

Findings and Discussion

Most parents interviewed spoke highly of the care their children received in the pediatric oncology departments. They praised the health care professionals who paid meticulous attention to every aspect of their children's needs and endeavored to stabilize their fluctuating health status. However, parents also voiced a number of unmet needs including the concerns for: warm and supportive attitudes, competent care, availability of adequate information, a comfortable environment and catering support. These five categories will be elaborated below with the subcategories explained.

Unmet Need for Warm and Supportive Attitudes

Parents desired to be treated in a warm, fair and friendly manner during their child's hospitalization. Of the 19 parents, 10 complained that their need for warm and supportive staff attitudes were unmet. These included work attitudes and interpersonal communications.

Unmet Need for Good Working Attitudes

Parents expected nurses to take an active role in establishing contact because families sometimes did not know how to, nor did they believe they had the right to, get help from staff. One father expected nurses to take most initiative.

"Nurses never offer help actively, but they will answer my questions when I ask them. They seem very busy and occasionally not taking care of my child. As you know, they have to comply with task allocation. Sometimes, I am not sure who I should ask for help when I need some. I hope nurses can take the initiative."

[(A father, 40 years)]

There were some situations where family members felt disappointed or offended when staff did not show respect for their needs or requests. One mother reported an incident in which she felt upset when a doctor ignored her desire to protect her daughter from receiving negative information:

"Sometimes the attending doctor asks me to sign the 'Critical Condition Notice'. I ever asked the doctors to give the 'Notice' to me directly instead of put it on the bedside table. However, the doctor put this notice

on the bedside table several times. If my daughter reads it, it will affect her mood. I am really angry about that."

[(A mother, 41 years)]

Unmet Need for Sympathetic Communication

Medical professionals occasionally displayed unsympathetic attitudes when communicating with parents. Parents often felt that they were treated unfairly and in an unfriendly manner, leading to this issue becoming a sore point over the course of their child's hospitalization.

One mother complained as follows about the unsympathetic demeanor of nurses:

"One nurse scolded me loudly: 'Why do you wash your hands here?' I wanted to cry at that moment. The expression in her eyes, coldness in her voice and attitude, made me feel ... that she looked down on us because we come from a rural area, we are not as rich as other families and our clothes are not as good. That is why she looked down on us. If it were a fashionably dressed mother who washed her hands as I did, the nurse would not treat her in such a way."

[(A mother, 36 years)]

One mother stated that they were treated unfairly:

"The families who come from Guangzhou are entitled to enjoy many advantages and privileges. For example, they can choose the ward and get what they want. We have lived in the lobby for several months. Ah! Therefore, I feel aggrieved."

[(A mother, 35 years)]

Two parents complained about the unfriendly attitudes of nurses:

"The attitude of nurses is bad and cold. For example, last time I asked a nurse to give me a cotton bud because my child was bleeding. I knew there were some in her bag. She said: 'No!' I then asked the nurse leader to give one to me. I feel some nurses are simply not friendly."

[(A mother, 32 years)]

"Most nurses are kind. Some are indifferent and cold. However, we have no choice. We have to hand our child's life over to them now. I have to be tolerant."

[(A father, 39 years)]

A previous study similarly reported that parents with children hospitalized in a pediatric intensive care unit perceived hostility from

the medical team when they were excluded and slighted (Coa & Mandetta Pettengill, 2011). Another study exploring the perspectives of parents concerning the quality of care offered to them during their child's hospitalization found that families reported uncompassionate attitudes from medical staff (Abib El Halal et al., 2013). Family health was likewise found to be affected by actions of medical staff, whose inappropriate attitudes or behaviors added additional stressors to the psychological burdens of families (Arber & Odelius, 2018; Hopia, Tomlinson, Paavilainen, & Astedt-Kurki, 2005; Tomlinson & Hall, 2003). Therefore, in some situations, families may consider interactions with health care professionals as either a source of assistance or one of stress. It is thus vital to address the needs of patient relatives with warm and supportive attitudes, thus avoiding possible psychological harm.

Unmet Need for Competent Care

Only two of the 19 parents complained about incompetence in healthcare delivery they observed during their children's hospitalization:

"Some nurses take a long time to complete a task and they are awkward. Some other skilled nurses are responsible and finish tasks quickly. New nurses often make mistakes. Sometimes, they leave several needles in the bed. They appear very awkward. Anyway, sometimes, I do not feel safe to leave my child to them."

[(A mother, 38 years)]

"What I dislike most is the drawing of blood from my child. The nurse takes a long time to finish. It is painful for the child. I understand that some nurses are newcomers, but this also describes senior ones."

[(A mother, 32 years)]

Incompetent care not only led to very negative experiences but also shattered trust families likely had for medical professionals. Staff competence has always been one of the most important indicators of the quality of healthcare (Kieft, de Brouwer, Francke, & Delnoij, 2014). Competency of medical and nursing staff has likewise been identified as being important enough to affect parent satisfaction with pediatric healthcare services (Rhodes, Morris, & Lazenby, 2011). Provision of competent care is fundamental to the establishment and maintenance of both confidence and trust in health professionals by patients and their relatives.

Unmet Need for Adequate Information

Of the 19 parents interviewed, 12 mentioned their unmet need of adequate and honest information, including knowledge about the disease, management decisions and prognosis, information about childcare, as well as information related to hospital surroundings.

Parents expressed pressing demands for information concerning decisions made about their children's management by health staff:

"We should be given some information at the beginning of the child's hospitalization. The information should include why the child's behavior is as it is, what kind of side effects may emerge during treatment, why the child becomes irritable and why some symptoms recur, and so on..."

[(A mother, 35 years)]

One parent reported that they often felt insecure and helpless at the beginning of their children's hospitalization due to an unfamiliar environment which often brought about lots of difficulties in managing daily life at the hospital:

"We knew nothing at the beginning of our child's hospitalization. Staff should provide adequate information, such as detailed treatment-related, management and nutrition information. Nurses should explain where to take a bus, buy food, where a restaurant is, and where to dry clothes."

[(A mother, 36 years)]

Additionally, parents expected healthcare professionals to honestly explain their children's conditions instead of merely providing superficial information. Parents also complained that doctors delayed answering their questions:

"The doctor is not willing to tell us too much information about my child. He just mentions something superficial. I asked the doctor some questions about the therapeutic regimen several days ago. He said he would explain it to me when he was available. Until now, I have not got any explanation."

[(A mother, 32 years)]

As reported in a previous study, family's need for information is not always met (Abuqamar, Arabiat, & Holmes, 2016). Access to illness-related information was additionally reported to be among the most important coping means available for parents during their children's hospitalization (Hopia et al., 2005; Jee et al., 2012). Parents viewed adequate medical information as an important foundation from which they could face the crisis of their children's serious illness and gain some sense of stability (Arabiat & Altamimi, 2013). Ensuring that adequate information is delivered in an understandable, non-jargonistic way during a child's hospitalization is thus one of the vital components of health service delivery in pediatric oncology settings.

Unmet Need for a Comfortable Environment

This refers to the unmet needs to have a better environment with good hygiene, adequate facilities and a comfortable ward.

Parents reported an unmet need of having access to an environment with good hygiene, adequate facilities and a comfortable ward. Of the 19 parents interviewed, 10 expressed that they were often placed in noisy wards without comfortable lighting or neatness. They indicated that they and their children were exposed to excess noise, poor lighting and unsanitary hospital conditions. Such uncomfortable hospital environments were often linked to burnout:

"The ward environment is not good. We parents just keep our own areas clean. There are many bacteria in the air-conditioning. The wall is dirty (pointing to the wall). The ventilation is very poor here."

[(A mother, 31 years)]

"The lighting is the worst. The alarm is ringing all the time. It would be better if some lamps can be turned off. We have to live in the lobby because there are no unoccupied beds in the ward. We are so exhausted, unable to sleep well at night after tiring for a whole day ... we are very tired here. This is really an urgent problem that should be addressed."

[(A mother, 32 years)]

Since nearly all parents take their children to larger cities when seeking the best cancer treatments, room for pediatric oncology patients is limited as available hospital beds cannot meet demand. Parents expressed that their children were forced to live in crowded wards without adequate beds or that they needed to wait outside the hospital for several days due to lack of available beds. While outside the hospital, children were at heightened susceptibility to infections. Some children were housed in corridors or overcrowded wards. Parents expected that their children would be allowed single rooms, especially those who were seriously ill:

"Sometimes, beds in the hospital are not available. We have to wait outside the hospital for several days. Last time we waited for half a month. There was no remission after treatment in the outpatient clinic, and then the child had to be hospitalized in the ward."

[(A father, 36 years)]

Some parents (6 of 19) voiced an unmet need for supportive hospital rules. They complained of too many restrictive rules in place which added to their stress. They also expressed desire for hospital

administrators and healthcare providers to be especially committed to providing a supportive environment for families:

“We are not allowed to hang the towel here (bedside). Nurses ask me to hang it inside, where it is dark. So, it is difficult to dry the towel. We also are not allowed to hang the towel on the window. There are too many requirements here.”

[(A father, 32 years)]

“The nurse leader has so many requests. We can change the sheet only once a week. What shall we do if the child wets the bed? It is too unreasonable. We have only two kettles of water per day. The child drinks more water during intensive chemotherapy. We have no idea where to get more once we run out of water. We have so much stress already, and yet we have to tolerate these hospital rules.”

[(A mother, 36 years)]

Several parents voiced their dissatisfaction with hospital facilities. Factors such as a lack of proper cooking areas and no place for parents to stay overnight at the hospital while their children were being treated were noted as major frustrations:

“There is no way to cook food here, not even a microwave oven. I have told the nurse leader and it has not been solved until now. To be honest, a microwave oven is necessary because the child eats frequently. He is not allowed to eat cool food.”

[(A mother, 30 years)]

Parents interviewed in our study complained about noisy wards, poor hygiene, a lack of facilities and equipment, as well as restrictive hospital rules. Hospitalized children were previously reported to experience sleep disturbances resulting from uncomfortable environmental stimuli, such as noise and lights (Hinds et al., 2007). The physical hospital environment should ideally be quiet, clean, and comfortable, with adequate space and privacy (Abuqamar et al., 2016; Kieft et al., 2014).

Our findings revealed the discrepancy between the needs of parents and the reality of their actual experiences in hospitals. Our findings implied the need for managerial interventions in the establishment and maintenance of quiet, clean, well-equipped clinical care environments with supportive policies for pediatric patients and their families.

Unmet Need for Catering Support

Meals are an integral part of hospitalization and the consumption of a balanced diet is crucial to recovery. Only 3 of 19 parents in our study complained about hospital food. They, and their children, were not satisfied with hospital food because it was too bland and lacked variety. Most parents preferred to cook themselves rather than buy hospital food:

“We are not used to hospital food. The child hardly eats it because the porridge has too much water and there is such a limit in meal choice. Last week they served pork for lunch on which we found a few mushrooms. This provided evidence that the meal was the same as the day before. Anyhow, the hospital food does not satisfy my child's appetite.”

[(A father, 35 years)]

“The hospital food is clean. However, the child does not like it because it is too light. We never eat the hospital food. I heard from other parents that it is very expensive. For instance, two dishes for our family cost 40 RMB, which may not be enough to cover one meal for three people in the hospital.”

[(A mother, 35 years)]

“They could at least add some flavorings to foods, taking into account the advice of physicians, so it would be palatable. This would mean a lot to us as children have poor appetite during chemotherapy. When I

cook a meal I add some simple things like carrots, and other vegetables, and then my son will eat more”

[(A mother, 36 years)]

Due to a sense of obligation to care for the sick in Chinese culture (Lee et al., 2000), many parents in this study would bring extra food for patients during visiting hours. No other culture is as food-conscious as that of the Chinese, who regard food as of fundamental importance (Shek, 2005). As the Chinese saying goes, bread is the staff of life (Shek, 2005). Food is also regarded as a form of medicine in China (Shek, 2005). Previous studies have revealed that meal presentation, taste and quality of food were major predictors of patient satisfaction in hospital settings (Hwang, Eves, & Desombre, 2003).

Hospital staff should acknowledge the catering service as an important part of clinical treatment and patient care (Kim, Kim, & Lee, 2010; Theurer, 2011). A catering committee, including dietitians, catering managers, chefs, nurses, and support staff, should be established as the first step towards improving catering services in a hospital. The committee should arrange meetings with children and parents regularly for patient and family input concerning meal quality and options. Certain activities can help develop effective measures to improve hospital catering services, such as the provision of themed plates for children to stimulate their appetites, development of menus together with children and their families (including pictures, portion sizes and prices), and improvement of food taste to meet patient preferences. The implementation of such measures has previously been found helpful in improving family satisfaction with hospital catering services as well as the appetite of children (Houlston, Buttery, & Powell, 2009).

Practice Implications

Our findings provide initial direction for quality improvements to care associated with unmet family needs. With the implementation of appropriate intervention, the establishment of high-quality services can be facilitated for greater possibilities regarding family bonadaptation during their children's hospitalization for cancer treatment. One important intervention is the development of a “supporting partnership” between families and professionals based on good communication with sympathetic attitude. From the perspectives of parents, hospital staff with, at least, warm and supportive attitudes were characterized by their active assistance, maintenance of promises they made to families, treatment of families in a friendly manner, and being empathic, thoughtful and considerate. A previous study suggested that open and supportive dialog between nurses and families helps reduce negative interactions (Franck & Callery, 2004; Hasanpour, Alavi, Azizi, Als, & Armanian, 2017).

Continued communication between health care professionals and parents will be vital to ensure information is delivered in an understandable, non-jargonistic way. Additionally, a number of hospital physical environment can be implemented, including the use of adequate single rooms with good hygiene to control cross infection, the provision of adequate facilities and private space for families. Furthermore, cooperation between different hospital management levels attempts to reduce food costs and provide high-quality food will promote parents' and children's satisfaction with catering service. Parents, children and professionals will benefit from these interventions designed to improve the quality of health-care services.

Limitations and Directions for Future Research

There were some limitations in the present study that should be acknowledged. First, parents as the sole respondents included in our study may not have completely reflected the perspective of the entire patient family. Nevertheless, the views of parents should be valued and are vital for the initial assessment of families in clinical settings. Future studies can interview more family members for a more complete view of their

experiences in-hospital. Secondly, as this study was limited to families having children hospitalized for cancer treatment in mainland China, our findings may be generalized to a mainland China context on the basis of medical practices and data context.

Conclusion and Recommendations

We conclude that families with children hospitalized for cancer treatment sometimes experience unfriendly and cold attitudes of medical professionals, incompetent care of some nurses, inadequate information support, uncomfortable hospital environment and poor meal catering support. Our findings clearly indicate the need for a change of care from an exclusively disease-oriented model to a family centered care, and from individualized care to family-centered management. We hope that our findings will motivate nurses to reflect on their practices and expand their roles in caring for the entire family of ill children with compassion and non-judgmental understanding.

CRedit authorship contribution statement

Qi-Yuan Lyu: Project administration, Conceptualization, Data curation, Formal analysis, Writing - original draft, Writing - review & editing. **Frances Kam Yuet Wong:** Methodology, Formal analysis, Supervision, Validation, Writing - review & editing. **Li-Ming You:** Supervision, Methodology. **Xue-Zhen Zhou:** Data curation, Validation, Writing - review & editing.

Acknowledgement

We would like to thank all the parents who participated into the study. We gratefully acknowledge The Hong Kong Polytechnic University and Sun Yat-Sen University for supporting this study through the Joint PhD program.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Declarations of Interest

None.

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