Objectives and posttest can be found on page 10.

Patient Education of Children and Their Families: Nurses' Experiences

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The aims of this study were to describe significant patient education sessions, and to explore nurses' empowering and traditional behavior in the patient education process of children and their families. The qualitative critical incident technique was used by interviewing 45 nurses in pediatric units. Data were analyzed using content analysis. Each starting point for patient education, educational outcome, and professional aspects was the characteristic that made patient education sessions significant. Nurses using the empowering behavior conducted the education process with holistic and multi-method need assessment, adequate preparation and objectives, patient-oriented education, and interactive communication, as well as multi-method evaluation and promotion of patient participation. Traditional behavior was described as nurse-oriented or insufficient in every phase of the process. These findings indicate that more training for nurses and administrative measures are needed in hospitals to enhance the empowering education of children and their families.

When a child becomes ill, the whole family must adjust to a new way of life involving tasks related to the illness. During hospitalization, children need entertainment, care, safety, information, and participation (Pelander & Leino-Kilpi, 2004; Runeson, Hallström, Elander, & Hermerén, 2002). The illness evokes strong emotions and expectations in parents, who desire information regarding their child's condition, treatment (Fisher, 2001), and psychological care (Hummelinck & Pollock, 2005). Parents also need familial and psychosocial support (Patistea & Babatsikou, 2003; Sallfors & Hallberg, 2003). Parents' knowledge increases their partnership in the care of their child and re-establishes a sense of control (Fisher, 2001; Hummelinck & Pollock, 2005).

Empowerment is a complex and multi-dimensional concept. People or families are empowered when they have a sense of control over their lives (Funnell et al., 1991; Funnell & Anderson, 2003). Empowerment can be divided into seven dimensions:

- *Bio-physiological* – Sufficient knowledge of the physiological signs and symptoms, and feelings of control over these problems.
- *Functional* – Ability to take functional control of the situation and daily activities.
- *Cognitive* – Enough knowledge and the ability to use that knowledge for improving their health.
- *Social* – Meaningful social interaction and contacts with others.
- *Experiential* – Attention to one's previous experiences and self-esteem.
- *Ethical* – The importance of experiencing oneself as a unique, valued, and respected individual.
- *Economic* – Ability to afford technical aids and other support available (Heikkinen et al., 2007; Leino-Kilpi, Luoto, & Katajisto, 1998).

Patient education is a key intervention for promoting family health and empowerment of families with a child with a chronic illness. The purpose of patient education is to provide knowledge, skills, and increased self-awareness so patients or their family members can use the power to act in their own self-interests (Aujoulat, d'Hoore, & Deccache, 2007; Funnell et al., 1991). Key elements of empowering education emphasize the whole person and personal strengths, learning needs of the patient, shared goals, patient-driven decision-making, and promotion of participation (Aujoulat et al., 2007; Funnell et al., 1991). Without these elements, education is provided traditionally, with the focus on the physical illness, the educator's role as an authority based on expertise, and the patient viewed as a passive recipient compliant with recommendations. Professionals identify problems and are responsible for treatment and its outcome (Funnell et al., 1991).

The patient education process includes assessment, planning, implementation, and evaluation (Bastable, 2008; Carpenter & Bell, 2002; Wingard, 2005). Studies indicate that as an outcome of patient education, knowledge and self-management capabilities of children and parents increased (Ching, Huang, Yeh, & Lu, 2004; McCarthy et al., 2002), anxiety regarding clinical actions decreased (Sutherland, 2003), and feelings of control over disease improved (McCarthy et al., 2002). However, patient education did not always fulfill the educational needs of the parents (Hummelinck & Pollock, 2005; Patistea & Babatsikou, 2003). Nurses

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considered patient education their important responsibility (Marcum, Ridenour, Shaff, Hammons, & Taylor, 2002); however, they often exhibited a lack of knowledge about the teaching process (Carpenter & Bell, 2002), and their teaching was often not based on the assessment of individual needs (Barber-Paker, 2002). Further, patient education was conducted as an ad hoc event, without setting clear goals for teaching (Turner, Wellard, & Bethune, 1999). The evaluation of patient education was limited (Barber-Paker, 2002), and the use of evaluation strategies and documentation of teaching outcomes was poor (Turner et al., 1999).

Empowering patient education is not new, but few studies describe patient education provided by pediatric nurses. Counseling of children and their families is challenging and differs from adult education because nurses working with children are required to understand the world of children, recognize effects of hospitalization, and teach whole families (Gibson, Fletcher, & Casey, 2003). Further, when teaching children, communication may involve the use of dolls, play therapy, and photo books (Mansson & Dykes, 2004); as well as videos, computer-aided educational programs, demonstration or role play, and group teaching (Llahana, Poulton, & Coates, 2001). To understand the developmental needs of patient education, an understanding of how nurses provide their patient education in practice is important. The aim of this study was to describe significant patient education sessions and explore nurses' empowering and traditional behavior in the patient education process of children and their families.

Methods

Participants and Data Collection

Data were gathered from different pediatric wards and outpatient departments at a Finnish university hospital providing care for a population of 1.5 million people. Hospital management and its research ethics committee approved the study. Nursing supervisors informed the nurses and requested their voluntary participation. Inclusion criterion was a minimum of six months' working experience in pediatric nursing. Interviews took place over a two-month period. Of the 135 female nurses, 47 participated in tape-recorded interviews during their work shift in the hospital. The interviews, supervised by the first author (MK), lasted from 10 to 40 minutes and were conducted by nine graduate nursing students completing their final semester who were trained in the critical incident technique. The students' first interview was a pilot that did not differ from the other interviews, and therefore, was included in the data. The interviewers informed the participant of the study, and anonymity and confidentiality were assured. All participants gave written consent for their participation. The interviewers transcribed the interviews verbatim.

Table 1.
Topics of Critical Incident Interviews

1.	Context of the patient education session
2.	Nurse's knowledge of the family
3.	Nurse's knowledge of the child
4.	Assessment of educational needs
5.	Planning of patient education (preparation and objectives)
6.	Implementation of patient education (content, methods, and interaction)
7.	Evaluation of patient education

Data were gathered using the critical incident technique, a qualitative technique for collecting observations of human behavior (Flanagan, 1954; Schluter, Seaton, & Chaboyer, 2008). The method places emphasis on describing a phenomenon in natural settings (Kemppainen, 2000). In nursing research, this method has been used to explore how nurses respond to patients' needs (Narayanasamy & Owens, 2001), to examine health care quality (Kemppainen, 2000), and to evaluate nursing interventions (Bormann et al., 2006). A "critical incident" refers to a certain event in which the reporting personnel's behavior is either outstandingly effective or ineffective (Flanagan, 1954). When interviewing nurses, the notion of a significant event, rather than a critical incident, provides a better description of the types of examples required (Schluter et al., 2008). This method was selected because it aimed at identifying significant patient education incidents and helped nurses be as specific as possible when describing the patient education process.

Demographic information, including age, workplace, and working experience as a nurse, was collected. The opening question asked the participant to recollect, as accurately as possible, one significant patient education session of a child and the family over the past month. The incident could be positively or negatively significant. In addition, a series of topics (see Table 1) was designed to help the interviewers focus on the details of the patient education process. The topics were based on patient education research (Carpenter & Bell, 2002; Funnel et al., 1991; Wingard, 2005) and reviewed by a panel of patient education experts.

Altogether, 47 critical incidents were described, but two cases were excluded because they did not fulfill the inclusion criteria. All voluntary informants were interviewed. During two interviews, it was revealed that the nurse had less than 6 months' working experience; those two interviews were not interrupted. Because they did not fulfill inclusion criteria, they were excluded from data analysis. Hence, data contained 45 interviews from nurses, whose ages varied from 24 to 60 years. Their mean age was 42.6 years. The nurses' working experience ranged from 6 months to 37 years, and their mean working experience was 15.9 years. More than half of the nurses (n = 25) were working in pediatric wards, and one-third were specially qualified nurses for pediatric nursing.

Data Analysis

First, inductive analysis was used (Elo & Kyngäs, 2008; Kain, 2004). One researcher (MK) read the descriptions of the sessions several times to familiarize herself with the data. The circumstances and characteristics of the incidents were identified as Flanagan (1954) stated. The identified incidents were categorized, and incidents with the same type of characteristics were placed together. At the end of the analysis, three significant main categories emerged: 1) starting point

Table 2.
Example of Inductive Analysis

Description of Incident	Subcategory	Main Category
The doctor suddenly decided to discharge a 2-year-old girl with asthma symptoms, and right after lunch, the mother informed that her husband had come to take them home. The child received medication administered through a baby haler (note: inhaler) that was new to the family. The medication and baby haler education were to be given immediately without any preparation. I should have had time for preparation.	Challenges with resources	Starting point for patient education
I was the primary nurse to a premature who had been in the hospital for a long time. During the hospitalization, the mother was educated step by step on how to take care of her child. Then, the baby was discharged, and I gave the mother final instructions for home care. I encouraged her to find out the baby's individual rhythm and gave her feedback about her ability to respond to her child's needs. It was evident the mother had gained self-reliance concerning her own abilities, and she left the hospital with confidence.	Empowerment of the family	Educational outcome

for patient education, 2) educational outcome, and 3) professional aspects. During continuous categorization, each main category was assigned a number of subcategories (see Table 2).

Second, descriptions of the patient education process were examined in relation to previous theoretical knowledge. Data were analyzed using a deductive content analysis (Elo & Kyngäs, 2008). The structure of the analysis was based on the knowledge of the patient education process (Bastable, 2008; Carpenter & Bell, 2002; Wingard, 2005), as well as the features of empowering and traditional education (Funnell et al., 1991). The nurses' empowering and traditional behavior formed the two rows of the matrix. The columns represented the phases of the education process: assessment, planning, implementation, and evaluation. Coding was conducted independently in every phase of the process. Words, phrases, or sentences related to each other and describing nurses' empowering or traditional behavior were coded unconstrained to the cells of the matrix. Thereafter, each cell was reviewed, and the content was divided into categories and subcategories that were named to illustrate their content. The first author (MK) analyzed the data. During the analysis, she was in close contact with the research team that reviewed the coding process.

Results

Characteristics of Significant Patient Education Sessions

The background information of the sessions is presented in Table 3. One-third of the children were under 1 year of age. The children represented a variety of different diseases or problems. Most often, both parents attended patient education with their child. The duration of the sessions varied from 15 to 90 minutes, but two sessions lasted throughout the nurse's shift. One-fifth of the education comprised several sessions.

Nurses described 32 positive and 13 negative incidents (see Table 4). The starting point for patient education contained two subcategories: challenges with children and their parents, as well as challenges with resources. Informants provided cases in which different culture, state of the illness, or family situation was challenging. In addition, lack of human, material, or organizational resources emerged. An informant described a session:

> *I educated an 8-year-old girl with diabetes, in bad control, and her mother on how to use an insulin pen. The girl had fear of injections and did not inject herself without her mother's supervision. However, the mother could not always help with the injections because they had many children in the family. The education room was crowded and noisy because telephones were ringing and other people were popping in. Another handicap was that we had little educational material for school-age children.*

The category of educational outcome was composed of two subcategories: empowerment of the family and deficient outcome. In an example, the informant stated that education did not result in a successful outcome:

> *I explained to the father of a 5-year-old girl with epilepsy the dosage changes of the medication. I also gave him written instructions. After a week, they came back, and it was evident that he had not understood the dosage correctly.*

The professional aspects category contained three subcategories: professional success, professional development experience, and professional learning. In an example, the informant stated how the patient education enhanced her professional development:

> *It was the first time I educated parents with a premature baby when they were being discharged. I had to think about what they wanted, what was important to them, and which themes were most important. I could practice counseling and had positive feedback from the parents.*

Nurses' Empowering and Traditional Behavior

Assessment. Nurses practicing empowering patient education used holistic need assessment and multimethod need judgment (see Figure 1). They assessed the situation using all empowerment elements, excluding the economic area. The nurses examined the child's disease and treatment, as well as participants' learning capabilities or challenges. They discussed the family's background, social

networks, previous experiences of fear or anxiety, and ethical issues, such as hopes and rights. Moreover, parents' needs to learn to respond to their child's basic needs were stated. To assess educational needs, the nurses used a combination of different methods. They observed the child and parents, and verified their observation by reviewing hospital documents, interviewing patients, and receiving information from other sources. A nurse expressed the content and methods as follows:

> *She was a 15-year-old girl with problems with overweight. I read the referral and asked about her family affairs. She told me she had a sister and she lived with her mother. We talked about her life: eating habits, sports activities, school, and friends. I took some measurements, such as weight, height, and blood pressure. … Studying the weight curve the second time, it revealed that the increase on weight had started last fall. Then she told me she was abused and was afraid to go out, staying mainly at home and trying to overcome her trauma by eating.*

Nurses using traditional education conducted partial need assessment and insufficient information gathering. The need assessment concentrated on two empowerment areas: the bio-physiological and cognitive area. Some nurses reported they had not clarified the experiential or ethical issues as well as they should. The social and functional areas were limited, and no economic needs emerged. Observation was the primary method of insufficient information gathering used in needs assessment. One nurse stated: "I was going to teach the parents to bathe their firstborn, who was premature and needed special treatment. I was not familiar with the family and only observed how they handled their baby."

Planning. Nurses using empowering education prepared for it adequately and stated objectives based on their patient's educational needs (see Figure 1). The concrete preparation involved scheduling the education and reserving a room for it, as well as supplying appropriate materials and equipment. When preparing cognitively, the nurses studied the family background, considered the content and methods in advance, and

Table 3.
Background Information on Patient Education (*N* = 45)

Background Information	*n*
Child's age (years)	
Under 1	15
1 to 3	9
4 to 6	6
7 to 12	10
13 to 15	5
Child's Disease or Health Problem	
Prematurity	8
Epilepsy	7
Diabetes	5
Infection	5
Diagnosis still unclear	5
Asthma or allergy	4
Other	11
Persons Participating in Patient Education	
Both parents with the child	19
Mother with the child	16
Father with the child	2
Mother with the child and an interpreter	2
Child alone	2
Other	4
Place for Patient Education (Mentioned in 34 Cases)	
Peaceful patient room at hospital	13
Nurse's quiet room	10
Other tranquil place at hospital	7
Home	1
Small room at hospital with many disturbing factors	1
Patient education occurred in several different places	2

Table 4.
Description of Significant Patient Education Sessions

Starting Point for Patient Education
Challenges with children and their parents
Child's condition was worsening.
Child had learning difficulties.
Child had fear of injections.
Family had different culture or language background.
Parent had negative attitude or was not involved.
Parent had difficulties managing with the treatment.

continued on next page

Table 4. (continued)
Description of Significant Patient Education Sessions

Challenges with resources
Lack of nurses, but average amount of doctors and patients.
Lack of experience.
Education was not provided step by step before discharge.
No time for preparation.
No quiet room for counselling.
Not enough time for providing education because of large number of patients to care for.
Educational Outcome
Empowerment of the family
Parents expressed that they managed with the treatment.
Parents left hospital with confidence.
Parents' fears had subsided.
Problem was solved unusually quickly and family continued their life normally.
Family was not dependent on professionals as they managed the medication themselves.
Deficient outcome
Parents could not manage with the medication.
Adolescent neglected the management.
It was uncertain if the parent understood the regimen and managed at home.
Professional Aspects
Professional success
Education was successful because of concrete practical training.
Confidential relationship with the child and parents gave the nurse great pleasure.
Parents were completely satisfied with the care.
Parents noticed the changes in their child's condition.
Professional development experience
The nurse realized she could support the parents in their pain and anxiety.
It was the first patient education for the nurse when the parents with a premature baby were discharged and she practiced discharge counselling.
The nurse had trained using the motivational interview technique and was able to use it.
The nurse was capable of handling children in different age groups.
The nurse had to consider ethical issues, offer all options, and not to state her own opinion.
One could not declare oneself an expert, but had to be on the same level with the parents.
Professional learning
The nurse learned that with individuals from some cultures, nodding the head does not mean they have understood the instructions.
The nurse learned that she had to consider the education methods carefully to ensure that clients understood the counselling.
The nurse learned that the most simple matters needed to be explained to patients because they were not familiar with the management.

broadened and updated their own knowledge of the treatment. A nurse explained:

> *A 7-year-old girl and her father attended growth hormone injection education. I was familiar with them. I considered beforehand what would be the easiest injection equipment for the child. I fixed an appointment with the family and reserved a quiet room for the education.*

Cognitive, capability, experiential, and attitude objectives were established based on educational needs. The cognitive objectives expressed what the child or parents should understand after patient education. The capability objectives described the management of the treatment, such as managing the medication. The experiential objectives emphasized trust and security, and the attitude objectives' content was related to motivation. In some cases, the objectives were set together with the family. A nurse stated:

> *When I educated parents and a 6-year-old boy with enuresis, the objectives set were that the family generated motivation for the treatment, they understood what it included, they were capable of using the bedwetting alarm at home, and they felt comfortable using it.*

Nurses using traditional education described insufficient preparation for patient education or deficient objectives. Insufficient preparation was composed of cases with no preparation, or cases with no cognitive preparation. Situations changed rapidly, leaving no time for preparation, or the nurse relied on previous competence and did not consider the preparation necessary. Some nurses reported they lacked a quiet room and time for education, as well as developmentally appropriate material for children. This was expressed: "Actually, I did not prepare for the epilepsy medication counseling because of my experience. I was familiar with those dosages and the medicine." The patient education objectives were deficient, and only a few cognitive, capability, or experiential objectives were mentioned. In most cases, no objectives were stated or documented in the nursing plan.

Implementation. In implementation, the nurses used a combination of different methods cooperating

Figure 1.
Description of Nurses' Behavior in the Patient Education Process

Nurses' Actions	Patient Education Process			
	Assessment	Planning	Implementation	Evaluation
Empowering Behavior	Holistic need assessment *Bio-physiological area* *Cognitive area* *Social area* *Experiential area* *Ethical area* *Functional area* Multi-method need judgment	Adequate preparation *Concrete preparation* *Cognitive preparation* Objectives based on patient needs *Cognitive objectives* *Capability objectives* *Experiential objectives* *Attitude objectives*	Sessions in quiet environment Interactive, patient-oriented education *Family-centered counseling* *Child-centered counseling* Education based on needs	Verifying learning with several methods Promoting patient participation
Traditional Behavior	Partial need assessment *Bio-physiological area* *Cognitive area* *Experiential area* *Social area* Insufficient information gathering	Insufficient preparation *Cases with no preparation* *Cases with no cognitive preparation* Deficient objectives *Cases with few objectives* *Cases with no objectives*	Noisy or busy sessions Nurse-related defects in education *Nurse as information giver only* *Nurse ignoring patient's needs* *Nurse insufficiently prepared* *Nurse not completing education* Education dominated by bio-physiological area	Cases without evaluation Evaluation relying on feeling

with other professionals. The nurses used verbal counseling combined with written materials, demonstration, play, telephone counseling, and practical training. The multi-professional patient education was dominated by cooperation with doctors.

Differences emerged from the setting, the nurse's role as an educator, and the content of the education. Nurses who used empowering education arranged a quiet setting for sessions and adopted an interactive, patient-oriented approach as educators (see Figure 1). The patient-oriented education included family- or child-centered counseling. As a family-centered educator, the nurse listened to the family, offered alternatives, and supported them. A nurse explained:

> *My task was to give alternatives to parents with a baby with skin symptoms. The basis for the counseling was the parents' capability to receive information. I had to be aware of it and not to exceed the level of difficulty.*

On the other hand, the child-centered educator's principal task was counseling the child. The nurse paid attention to the developmental stage of the child and used play, fairy tales, and demonstration. This was described: "A 2-year-old girl was sitting on her mother's lap with her bunny. At first, we put the sphygmomanometer cuff on the mother's arm, then we put it on the bunny, and lastly, we put it on the girl's arm." Education was based on the educational needs of the child and the parents. The content covered all empowerment areas, including different investigations and treatments, the child's day-to-day management, building up social networks, emotional support, and information of financial support. Informing patient's rights and discussing the child and the parents' responsibilities were included.

Traditional patient education sessions were noisy or busy because ideal conditions were not possible. Patient education was implemented in four different nurse-oriented ways. The first role was that of an information giver emphasizing the authority of the nurse giving the information, as a nurse expressed: "I was talking, and the mother was listening to me. When I finished, the mother did not ask any questions." In the second situation, the learning needs or capabilities of the child or parents were ignored. This was described: "A premature baby was discharged. In a single session, the parents were educated on feeding, medication, home care, and follow-up treatment. They were confused about the large amount of information and surprised of the quick discharge." In the third case, the insufficient preparation for the counseling revealed insufficient knowledge of the subject matter. An informant stated: "I was not familiar with the family; I had no time for preparation, and I had to ask many questions about their circumstances." Lastly, patient education finished prematurely because of the nurse's other tasks or the family's dissatisfaction. A nurse explained: "The mother could not accept that her 5-year-old daughter had delayed speech development.

She refused to listen to me, and the family marched out of the room." The bio-physiological area, especially medical treatment, dominated the content of patient education, and other empowerment areas were marginal.

Evaluation. In the empowering and traditional evaluation, the nurses self-evaluated the patient education sessions. They reflected on their role and behavior. However, the evaluation was seldom documented.

Nurses using empowering education carried out evaluation, which included verifying the learning with several methods and promoting patient participation (see Figure 1). When verifying the learning achievement, the nurses encouraged families to ask questions, ensured the parents' capability to manage the child's medication by observation, or evaluated learning by follow-up calls. The nurses promoted the participation of children and their parents by using interactive conversation and asking the family to evaluate their competence. Thus, the families indicated they had a sense of control over their child's illness and its management, they experienced a sense of security and relief, and they were able to carry on. A nurse expressed: "I discussed the instructions with parents and asked them how they experienced the treatment day and the questions they had." Another nurse stated: "I checked that the mother prepared the injection successfully. She commented spontaneously that she could do it at home."

Traditional evaluation of patient education consisted of two categories. The sessions were not evaluated at all, or it relied on the feeling or perception of the session. In these cases, no verification was done to ensure the learning achievement. Occasionally, it appeared later that the parents had not managed the child's medication, and the session had to be repeated. A nurse stated: "Actually, education was not evaluated." Another nurse explained:

> *During the session, I was under the impression that they understood the dosage right, but after a week, they came back, and it appeared that the child had been medicated with a wrong dosage. Then the parents were educated once more.*

Discussion

Three different categories describing significant patient education sessions were identified: the starting point for patient education, the educational outcome, and professional aspects. Challenges with clients or resources, successful or deficient outcome, professional success, professional development experience, and professional learning were considered elements of significant sessions. These results revealed that patient education of children and their parents could be challenging in several ways, as Gibson et al. (2003) stated, but it could also be very rewarding and educating to nurses. Further, the outcome of the education seemed important to the educator.

Nurses' Empowering Behavior

Previous studies have shown that children and their parents have a wide spectrum of learning expectations. Children expected entertainment, education, care, and safety (Pelander & Leino-Kilpi, 2004), and they needed information and participation (Runeson et al., 2002). The parents desired information regarding their child's condition, treatment (Fisher, 2001), and day-to-day care (Hummelinck & Pollock, 2005), and they needed support (Patistea & Babatsikou, 2003; Sallfors & Hallberg, 2003). In this study, nurses using empowering education assessed the educational needs of the child and their parents widely, and all empowerment areas, excluding the economic area, were covered. The absence of the economic area was surprising; many children with a chronic illness needed special equipment, therapies, and home care support (Meleski, 2002). To assess the learning needs, nurses used multi-method need judgment. This indicated they had knowledge of educational need assessment as Gibson et al. (2003) required of children's nurses.

In this study, nurses used empowering education and described adequate preparation and objectives based on individual needs. The preparation was composed of practical arrangements and accounting the background of the participants. Wingard (2005) suggested that patient education objectives should be specific, achievable, and measureable. In this study, these requirements were primarily met. According to Fisher (2001), the needs of parents with a child with a chronic illness are the need for normality and certainty, the need for information, and the need for partnership. In this study, these needs formed the basis of the individual cognitive, capability, experiential, and attitude objectives.

When the preparation was done adequately, the sessions were implemented in a tranquil environment. The key feature of implementation was the active participation of the whole family, which was carried out by providing education based on the patient's needs and interactive, patient-oriented education. Lee (2007) found that positive attitude, respect for the child and the family, effective communication, and parental understanding were prerequisites for a partnership in care. Partnership in pediatric care enables shared decision-making, which is part of empowering education as Funnell et al. (1991) and Aujoulat et al. (2007) reported.

The nurses who carried out empowering evaluation verified the learning achievements with several methods. However, they did not use any knowledge or skill tests, which could have been useful. Patient education of children and parents increased knowledge, self-care capabilities, and feelings of control over the disease (Ching et al., 2004; McCarthy et al., 2002), and helped reduce feelings of anxiety linked to clinical actions (Sutherland, 2003). This study confirmed these results. Ultimately, the patient education of nurses practicing empowering methods was comprehensive. It used multiple methods and was patient-oriented in every phase of the process.

Nurses' Traditional Behavior

The assessment included two dimensions: partial need assessment and insufficient information gathering. Educational needs of some empowerment areas were ignored, and the emphasis was put on the bio-physiological and cognitive needs. When judging educational needs, nurses relied much on their observations. This confirms the previous results of Barber-Paker (2002), who claimed that patient education was based on nurses' assumptions of patient needs rather than the assessment of individual needs. In this study, no need assessment instruments were used. To obtain a deep insight of patients' knowledge expec-

tations, instruments, including assessment tools (Houston & Cowley, 2002), could have proved useful. In planning, the preparation for patient education was insufficient, and the objectives were deficient. Turner et al. (1999) also indicated that patient education was not planned, and no clear goals were set for it.

Patient education sessions were noisy or busy, and bio-physiological issues dominated them. Moreover, the implementation of patient education was conducted in nurse-oriented ways and with defects. The educator's authority was emphasized when providing information, the needs of children or parents were ignored, the level of knowledge was not always high enough, or the educational session remained incomplete. Previously, Patistea and Babitsikou (2003) and Hummelinck and Pollock (2005) noted that the information parents received centered primarily on the bio-medical aspects of the child's condition, and the nurses dominated giving advice during health care visits (Baggens, 2002). In other studies, Barber-Paker (2002) listed the most frequently identified barriers to the delivery of patient education to be insufficient knowledge, insufficient time, ineffective teaching capabilities, and poor communication. Marcum et al. (2002) added to this inadequate staffing and patients unreceptive to teaching.

In this study, the evaluation included cases without evaluation and evaluation relying on the nurse's feelings. Barber-Paker (2002) also stated that the evaluation of patient education was limited, and Turner et al. (1999) demonstrated that the use of evaluation strategies and documentation of outcomes was poor. As a whole, patient education of nurses using traditional education was described as nurse-oriented and insufficient in every phase of the process. This study confirmed the results of previous studies (Baggens, 2002; Barber-Paker, 2002; Turner et al., 1999). Results also indicated that lack of knowledge about the patient education process might exist, as established by Carpenter and Bell (2002).

Limitations of the Study

Some factors limited trustworthiness during data collection. Several interviewers conducted the data collection, and the interrater reliability of the interviewers was not established. The interviewers used the same main open question and the same topics, but the interviews would have been more standardized if the same interviewer had conducted all of them. However, trustworthiness of data collection was strengthened by training interviewers to apply the critical incident method, requiring pilot interviews, and having the first author guide the interviewing process systematically. All interviewers had studied and trained in pediatric nursing, patient education, and research methods increasing the trustworthiness of the results. Further, trustworthiness of data collection, analysis, and reporting was ensured by listening to all interview recordings and having the first author review that transcripts had been reliably managed. An interviewed nurse verified the coding of one interview to ensure the researcher's correct coding. For the same reason, the results were presented to a panel of experts after the completion of the entire data analysis. The panel judged the results and concluded that they represented patient education of a family with a sick child. Presenting representative quotations from the transcribed text also enhanced the credibility of the research findings (Graneheim & Lundman, 2004).

The interviewed nurses could describe a positive or negative patient education session, and positive incidents dominated data. The concept of empowering and traditional patient education is complex, and traditional education is defined and used in different ways depending on the context. These limitations may weaken the trustworthiness of the study (Graneheim & Lundman, 2004). Nevertheless, the critical incident technique was suitable for obtaining rich variation of patient education sessions, and data could be reflected on previous theoretical knowledge. An advantage of the critical incident method is that it relies on the description of actual events rather than descriptions of matters as they should be (Narayanasamy & Owens, 2001). Similarly, observations from memory are satisfactory when the incidents reported are recent (Flanagan, 1954), and therefore, the described patient education sessions could not be older than a month. The participants were required to have some working experience in pediatric nursing to be familiar with patient education.

Clinical Implications

The current study suggests that the significant patient education sessions of children and their families consisted of cases with a challenging starting point for patient education; successful or deficient outcome; and professional success, professional development experience, and professional learning. The features of empowering and traditional nurses' behavior were identified in the patient education process. These findings suggest there is room for improvement in patient education of children and their families. The basis for education is the learning needs of the child and the family, which must be assessed with multiple methods using the instruments available. The participation of the child and parents is another prerequisite for empowering education. The patient participation in practice refers to stating the objectives together with the child and the family, implementing child- and family-centered as well as interactive methods and using various evaluation methods.

If nurses are to occupy a significant role in facilitating empowerment of children and their families, they should understand patient education as a process and adopt an empowering way of education. Empowering education could be enhanced by training. Adequate resources and the quality of care could be assured with administrative measures. The development of standardized education process descriptions for patient education could help nurses to focus on the critical parts. The evaluation of patient education forms the basis for development. More studies are needed to evaluate the efficiency of need assessment instruments and learning outcome measurements. Finally, studies should also adopt the client's perspective to improve the quality of care.

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