Preparation of Children Provided by Child Life Specialist and Japanese Pediatric Nurses:

The Professional Similarities and Differences

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Abstract

The purpose of this literature survey is to compare the preparation of children provided by Child Life Specialists (CLS) with that provided by Japanese Pediatric Nurses (JPN) and to clarify the professional similarities and differences between them. Twenty resources of CLS and thirty four articles written by JPN were examined identifying each of their characteristics of the process of preparation. Although the preparation methods and intervention were similar to each other, their focuses when approaching to children were different. CLS focused on children’s coping strategies while JPN focused on children’s ability to make a “kakugo” (decision). Those characteristics were affecting the children’s coping processes.
SECTION I : THE PROBLEM

Introduction

When children come to a health care setting, they have a lot of new experiences through seeing, hearing, smelling, touching, tasting, and feeling. The health care setting is very different from the children’s daily lives. Thus, the children need an accurate and reassuring explanation of what they will experience, including information about their illness, hospitalization, treatment, or procedures; these should be presented in a manner appropriate to the children’s developmental level of understanding. It is easier for children to process their fears if they know fully what to anticipate. The children need support that will help them to cope with different situations that they will encounter. It is not helpful to disguise the reality of the circumstances (Thompson & Stanford, 1981).

In the U.S., the Child Life profession has existed since the 1920’s. At that time, people began to realize that the culture of hospital life was causing distress, fear, and pain in children. In 1930s, the adverse effects of illness and hospitalization on children had been documented in research literature. Since then, the significance and needs of preparing children for hospital experiences has been stressed (Beverly, 1936). Thus, Child Life workers have interacted with children in an effort to normalize their hospitalization experience. They have also educated medical professionals about the developmental needs of children (Child Life Council [CLC], 2008). Child Life Specialists (CLS) are skilled in giving explanations at the developmental level of each child. They are trained to work with children and to provide a valuable service along with the health care team in preparing children and their families for illness, hospitalization, treatment, and procedures
(Stephens, Barkey, & Hall, 1999). Providing psychological preparation is one of CLS’s primary interventions with children (American Academic Pediatric [AAP], 2006). In 1984 in Europe, the National Association for the Welfare of Children in Hospitals (NAWCH) formulated A Charter for Children in the Hospital. This charter provided a comprehensive statement of children’s needs when in hospital care and stated that children have a right to be informed about their treatment and procedures (Veerman, 1992). Later, the European Association for Children in the Hospital (EACH) provided the EACH charter in 1988. The ten principles of the EACH Charter related in respects to the rights of the child, as well as to the recognition of children's different emotional and developmental needs depending on their age (EACH, 2006). The charter includes:

- Children and parents shall have the right to be informed in a manner appropriate to age and understanding.

- Children and parents have the right to informed participation in all decision involving their health care.

Many European countries have specialists who have been working on the principles of these charters, such as Hospital Play Specialists in the U. K. and Play Therapists in Sweden. It can be said that preparing children for hospitalization, treatment, and procedures is children’s rights and one of the most important parts of care for children in the U.S. and Europe.

In Japan, books and translations regarding the children’s psychological reaction to hospitalization and how to deal with such experiences were be published around 1970s. Since then, Japanese Pediatric Nurses (JPN) have been trying to provide children with preparation for their upcoming hospitalization, treatment, and
procedures in various ways. In the last decade, there has been an increased interest in how to prepare the children effectively among JPN. In the 18th conference of the Japanese Society of Child Health Nursing in 2008, there were fourteen presentations, nine poster presentations, and one theme session regarding the preparation for children. This was a remarkable improvement compared with only one presentation in 1998 and four presentations and five poster presentations in 2003. Since 2006, monthly Japanese Journals of Child Nursing have published a special issue once a year on the subject of preparation. During these academic milestones, CLS have since begun to study Child Life in the U.S. and work in a pediatric setting. There are seventeen CLS working at hospitals in Japan now (Child Life Association of Japan, 2008), and the number of CLS is increasing. They also provide children with therapeutic preparation. The ideas and practices of how to prepare children are new developing in the Japanese pediatric field, and both JPN and CLS act as vehicles for the development. It is important for professionals in a health care setting to see, assess, and interact with children from different angles and to collaborate with each other in order to provide the best support for children and families. The first step of the collaboration is to know one another. Since JPN and CLS have different educational backgrounds and roles in health care setting, each of them bring their own professional skills and strengths to assist in providing preparation.

*Educational Background of CLS and JPN*

As Child Life has been growing in the field of children’s health care in the U.S., the fundamental background of CLS has also grown. The basics for functioning successfully as a CLS are the theoretical knowledge of child and human development, the knowledge of family system, and the skills to apply the
knowledge. This knowledge base and skills are usually acquired through the minimum education of the completion of a bachelor’s degree in one of these fields: Child Life, Child, Family, or Human Development, Family Dynamics, Psychology, Counseling, Sociology, Therapeutic Recreation, and Expressive Therapies, but the education of Child Life is moving toward Masters in related fields (CLC, 2006). In addition, a CLS should have good communication skills, experience with diverse groups of patients, experience of developmental assessment, and abilities of collaborating (AAP, 2006). The credentials of a Certified CLS include the minimum of a bachelor’s degree, which has to be completed with a total of ten college-level courses. These courses include child development, coping strategies, family system, grief care, and diseases of children. The successful completion of a 480-hour Child Life internship under the supervision of a Certified CLS is also required. The final competency is the passing of a standardized certification examination (CLC, 2008b). Recently, most Child Life programs are requiring at least a 600-hour Child Life internship. CLS are also trained to recognize the developmental issues specifically related to health care experiences and to understand how to reduce fears, misconceptions, and concerns through adaptive role-play, education, and coping techniques (CLC, 2006). Since the field of Child Life continues to develop and expand, Certified CLS are required to document knowledge and skill development over a five-year period in order to ensure continued competency. Recertification encourages Certified CLS to keep current with their profession and new knowledge so that children and families receive support from CLS who have demonstrated entry-level competency and maintain the best practices in the field (CLC, 2008d).

Nurses in Japan have the skills of caring for people with injuries and/or illnesses with the basic
knowledge of science and the human body. The licensing system for modern nursing professionals in Japan began in 1889. In order to work as a registered nurse in Japan, one must study at an educational institution that provides curriculums for the applicable qualifications stipulated by law, complete those curriculums, pass the standard government examination, and obtain a license from the Minister of Health, Labor, and Welfare (Japanese Association of Nursing [JNA], 2006). The subjects of the curriculums include:

- Introduction to the Scientific Approach
- Understanding Humans and Human Living
- Structure and Functions of the Human Body
- Disease Mechanism and Recovery Promotion
- Social Security System and People’s Health
- Basic Nursing
- Adult Health Nursing
- Home Health Nursing
- Gerontological Nursing
- Child Health Nursing
- Maternal Nursing
- Mental Health Nursing
- Clinical Training in those nursing fields (JAN, 2006)

The total units of the curriculums are ninety-three. Child Health Nursing requires a minimum of four units
with two additional units spent in Clinical Training (JNA, 2006). The subject of concentration for Child Health Nursing consists of child development, characteristics of childhood disease and injury, nursing techniques for children and families, and pediatric training. JPN are also trained to respect the child’s rights, understand the laws and systems of children’s health care, and realize the cultural and social environment surrounding children (JNA, 1999). With the arrival of the 21st century, there is a deepening awareness in life, health, and quality of living. The Japanese government has taken on the tasks of enhancing nursing education through establishing university courses on nursing improving the quality and content of nursing services. Also, the Japanese Nursing Association extends certification as Certified Nurse Specialists to nurses who have in-depth knowledge and skills in a specific area of specialization. The Certified Nurse Specialists in the field of child health nursing can effectively provide a high level of nursing care to each child, family, and group that faces complex and difficult nursing issues (JNA, 2006).

Where a CLS has a strong knowledge of child development and understand children’s and families’ responses and coping strategies to stressful life events, a JPN has the knowledge of a wide range of nursing techniques as well as the knowledge of basic science and the human body. The JPN’s knowledge of children and child development are part of their expertise.

*Standard of Practice in the field of Child Life and Pediatric Nursing*

The Child Life Council emphasizes on child development in their mission and states the following:

We, as child life professionals, strive to reduce the negative impact of stressful or traumatic life events and situations that affect the development, health and well-being of infants, children, youth and families.
We embrace the value of play as a healing modality as we work to enhance the optimal growth and development of infants, children, and youth through assessment, intervention, prevention, advocacy, and education (CLC, 2008c).

The Child Life Council established criteria such as the Standard of Clinical Practice, for child life services with infants, children, youth, and families in circumstances where stress may occur. “To this end, the standards: promote psychosocial care at the highest professional level, define the function of child life services in the provision of psychosocial care, establish professional expectations for the administration and implementation of child life service, and provide guidance for organizations and individuals in developing child life programs and services” (CLC, 2002, p.9). Interpretation of child life services includes the following:

- Opportunities for a variety of play, activities, and other interactions which promote self-healing, self-expression, understanding, and mastery
- Care plans for individuals or groups based on assessment of the child’s development, temperament, coping style, culture, spirituality, potential stressors, family needs, and social supports
- Developmental assessments based on formal or informal techniques
- Therapeutic play
- The practice of family-centered care
- Orientation to the setting where care will occur
- Psychological preparation for potentially stressful experiences
- Support during identified stress points
- Stress reduction techniques to facilitate adaptive coping
- Normalization of the environment
- Consultation regarding the unique needs of children and families to promote healthy coping with potentially stressful events and circumstances
- Provision of prevention, health maintenance and lifestyle information
- Education of child life care that is delivered to children and families based on trusting relationships
- Follow-up care with children and families, where necessary and appropriate (CLC, 2002, p.9)

The roles of CLS are to address children’s developmental needs and the psychosocial concerns that accompany hospitalization and health care settings. CLS provide support, information, and guidance not only to children but also to their family members. In addition, CLS play a vital role in educating medical staff, administrators, and the general public about the needs of children under stress (CLC, 2008a). Unlike the other medical professionals, CLS are never in a position of causing physical or emotional pain to children (Rothenberg, 1982). The American Academy of Pediatrics states in their Policy Statement that Child Life is “an essential component of quality pediatric health care” (AAP, 2006, p.1760). The Child Life services have become a standard in most pediatric hospital settings in the U.S.

As for JPN, the Japanese Nursing Association defines a registered nurse as a person who engages in providing nursing care or assists in the medical treatment of people with injuries and/or illnesses or postnatal women. In 1999, the Japanese Nursing Association issued the Standard of Pediatric Nursing Practice. Interpretation of Pediatric Nursing Practice includes the followings:
• Nursing care for individuals, families, or groups physically, mentally, socially in an environment where children and caregivers are together, children’s development improvement, and children and families with access to social supports

• Support for children’s caregivers to interact with their children for promoting the children’s resilience and self-care ability

• Support of children’s daily life and development without unnecessary limitations of their health condition

• Preparation for changes of children and families in their life

• Explanation and understanding for illness, treatments, and procedures in the ways of minimizing fears and anxieties

• Assessment of family members regarding the effects on their child’s health condition

• Provision of prevention through the continuous observation

• Emergency nursing care

• Medical practice under a doctor’s supervision

• Methodical approach based on the assessment of children’s and families’ development, health, and life style

• Documentation of the nursing practice

• Cooperation with the other professionals

• Advocacy for children and families (JNA, 1999).
JPN take a medical perspective on the issues of children and families. Since JPN are there for children and families all day long, they are involved in every aspect of the children’s and families’ life. JPN assess children and families continuously and need to be carefully aware of their physical and emotional changes in order to provide appropriate care at the right time.

Summary

It can be said that CLS are experts in child development who promote effective coping through play, preparation, education, and self-expression activities. JPN are experts in taking medical care of children who have illnesses or injuries from all aspects of children’s life. Being aware of the contribution and limitations to preparation for children and families, both CLS and JPN must collaborate with each other to provide high-quality preparation. Successfully realizing the similarities and differences of the methods and process of preparation between JPN and CLS will help both professions to understand, respect, support, trust each others’ expertise, and perform their skills more effectively for children and families.

Statement of the Problem

- There are two professionals, JPN and CLS in Japan, providing preparation for children in health care settings.

- Clarifying professional similarities and differences of the methods and the process of providing preparation between JPN and CLS is needed for performing their skills effectively for children and their families in health care settings.
Purpose of the Literature Review

The purpose of this literature review is to compare the preparation for children provided by JPN with the preparation methods of CLS to clarify the professional similarities and differences between them, and to suggest recommendations for how to collaborate with each other in order to perform their professional skills more effectively for children and families.

Importance of the Literature Review

This literature review is important for JPN and CLS to realize each others’ expertise and to cooperate on preparation for children by clarifying their own roles. The collaborative preparation programs help children and their families in health care settings to go through their experience efficiently.

Scope of the Literature Review

The clarification of the professional role of JPN and CLS in providing preparation will help find out how to collaborate not only between JPN and CLS but also among the other health care professionals in Japan. The collaborative preparation improves the quality of care for children and families in health care settings.

SECTION II: LITERATURE REVIEW

Introduction

Health care professionals have long been concerned that children’s emotional status may be negatively affected by hospitalization. Emotional problems encountered during children’s hospitalization might be
avoided if children are prepared for upcoming events in the hospital. In fact, research showed that preparing children for stress regarding illness, hospitalization, treatment, and procedures decreases their anxieties, promotes their cooperation, and supports their coping skills. Preparation also facilitates a feeling of mastery in experiencing a potentially stressful event (Rollins, Boling, & Mahan, 2005). It becomes important for health care professionals to understand how children best understand and absorb information in order to provide effective preparation for each child. The important elements of preparation are: “imparting information to the child, encouraging emotional expression, and establishing trusting relationship with the hospital staff” (Thompson & Stanford, 1981, p.113).

The preparation event is also a safe method of obtaining children’s informed consent or assent to the potentially stressful events. Since it is difficult for younger children to have informed consent because of their limited cognitive development, assent is an ethical requirement to protect the right of younger children (Narakino et al., 2006). Assent, usually verbal agreement, requires that children to be informed about the proposed treatment and procedure, agreement, and cooperation. Assent includes: “helping children achieve a developmentally appropriate awareness of the nature of their condition, telling children what they can expect, making a clinical assessment of children’s understanding, and soliciting an expression of children’s willingness to accept the proposed procedure” (Hockenberry & Wilson, 2007, p. 1084).

In the child health field in Japan, the practice of preparing children for hospitalization, treatment, and procedure is rapidly developing in the last decade. In 2000, less than 20% of Japanese Pediatric Nurses (JPN) knew the concept and the meaning of “preparation”, but after a brief lesson on its significance, about 70% of
them went along with the idea of preparation. (Yamazaki, Ogawa, Ikeda, Yamamichi, & Gouma, 2004). When asked what was the benefit of preparation, 30% of JPN rated the smoothness of the procedures, 22% of JPN rated the positive psychological effects for the children, and 20% of JPN rated the rights of children. In contrast, the survey about recognition of preparation conducted in 2006 showed that all JPN felt the necessity of preparation for children who would come to hospitals. The reasons for providing preparation included: 84% of JPN reported reducing children’s fears and anxieties while about 70% of JPN reported the children’s rights, psychological readiness, and smoothness of the procedure. The researchers also mentioned that although JPN understood the needs of preparation, about half of them were not sure whether preparation was reducing children’s fears (Katsube & Matumori, 2006). Ebina (2005) also reported that children and their parents sometimes felt that they had not received an explanation even though doctors and JPN thought they had explained to children and their parents. There might be a possibility that JPN sometimes provide a one-sided explanation (Kamata, Takahashi, Naragino, Suzuki, Akagawa, Ebina et al., 2004).

These surveys showed that JPN made efforts in seeking a more effective way of preparation. At the same time, the importance of preparing children for diagnosis, hospitalization, and procedure/surgery has been well known to the field of pediatrics. Ebina’s research group (2008) has been trying to develop and establish “the Care Model for Informing and Reassuring Children Undergoing Medical Examinations and/or Procedures.” This care model consisted of checklists that give medical professionals a clear model for intervention with children and families for the procedure (Appendix B). The researchers have been conducting intervention studies regarding how to help children realize their strengths during procedures. In
addition, Child Life Specialists (CLS) also started working in children’s hospitals and pediatric units in Japan in recent years, and have been providing preparation with children and families as the part of their jobs. CLS are experts in child development who promote effective coping through play, preparation, education, and self-expression activities. The roles of CLS are gradually coming to be accepted by JPN and pediatric doctors. Efforts have also been made to collaborate between JPN and CLS in order to prepare children for upcoming events in the hospital and support them effectively throughout their hospitalization.

Both JPN and CLS have tried to notice the similarities and differences of how each other prepares children, however, its similarities and differences have not been made clear yet. The purpose of this literature review is to compare the JPN’ preparation with CLS’s and to clarify the professional similarities and differences between them, focusing on how to look at and interact with children in a six categories: definition, goals, assessment, plan, intervention/interaction, and evaluation/outcome. It is helpful for JPN and CLS to understand, respect, support, and trust each others’ expertise and to collaborate with each other more effectively for each child and family.

Method

A search in the Medline databases was performed on June 2008 for receiving the literature on CLS’ preparation of a child. Descriptions used in the search were the terms “preparation”, “child”, “children”, “pediatric”, “surgery”, “procedure”, “child life”, and “child life specialist”. The inclusion criteria for this review are “preparation of a child” and “written by authors including at least one CLS in the U.S.” in order to focus on the point of view of CLS. A total of 14 literatures met the criteria, including three research reports,
Preparation by CLS and JPN

one case study, five reviews, and five case reports. Four books regarding Child Life and two online case reports were added. It totaled to 19 resources for CLS. Literature on JPN’s preparation of children were also searched in the Medline in July 2008. Descriptions used “プレパレーション/プリパレーション (preparation),” “オリエンテーション (orientation),” “こども/小児 (child/children),” “対処 (coping),” “手術 (surgery/operation),” “処置 (procedure),” “検査 (medical examination),” and “チャイルドライフ (child life)/child life.” One of the criteria for this review were “preparation of children” and “the latest case studies/reports from 2006 to 2008” in order to focus on the latest preparation provided by JPN. A total of 29 literature met the criteria including seven reviews, seven research reports, nine case studies, six case reports. These sources appear in Appendix A.

The kinds of gathered literature were different between JPN and CLS. CLS reported their preparation as a part of their interventions or as a part of multidisciplinary preparation program. There were no case studies focusing on only preparation that CLS provided for children and families. On the other hand, the topic of all literature of JPN focused on preparation of children. More than half of them reported practical interventions of preparation. The reviews of JPN were based on the same theory as the CLS’s reviews used. Thus, the literature of CLS was first examined in order to identify and categorize the characteristic of CLS’s viewpoints and interaction along with the following classification: definition, goals, assessment, plan, interventions, and evaluation/outcome. After the preparation of CLS was examined, the preparation JPN was compared to the characteristic of the CLS’s preparat
Result

Definition of Preparation of Children

Child Life Specialists

The CLC defines psychological preparation that psychological preparation provides children and parents with assistance in making stressful events or situations as predictable as possible, and helps by planning with children and families what they can actively do to make these as manageable as possible (CLS, 2004). Preparation is performed with an accurate and reassuring explanation of what children will face, such as diagnosis, hospitalization, or procedure/surgery, presented in a manner appropriate to the children’s level of understanding (AAP, 2006). Thompson and Stanford (1981) also state that efforts for preparing children need to be continued throughout the children’s hospital stay.

Japanese Pediatric Nurses

When JPN define their preparation, they emphasize preparing children psychologically by minimizing a child’s emotional confusion and fears and bringing out the children’s capabilities to overcome a difficult situation related to his/her diagnosis, hospitalization, and procedure/surgery. To this end, JPN help children to prepare for upcoming medical services and support the children’s abilities that they have already acquired by allowing the child to react on their own initiative to a health care experience in a developmentally appropriate way (Ebina, 2007; Oikawa, 2002).

Goals of Preparation

The same goals of preparation by both CLS and JPN fall into five categories: to enhance children’s and
families’ understanding, to reduce children’s and families’ fears and anxieties, to normalize a health care setting, to build trust and supportive relationships with medical professionals, to enhance the medical success of children’s care, and to respect the children’s rights. In addition, the goal of preparation by CLS is to facilitate children’s and families’ coping. The JPN’s goal of preparation is to promote children’s and families’ emotional/psychological readiness.

To Enhance Children’s and Families’ Understanding

All CLS and JPN literature mention “to reduce children’s and families’ fears and anxieties” as a goal of preparation. CLS and JPN provide children and families with correct and accurate information and help them to understand what happened, what is happening, and what will happen to them in a health care setting. CLS and JPN attempt to make the events as predictable as possible so that the children and families thoroughly understand their past, current, and upcoming experiences. In addition, all literature written by CLS and JPN concern how the children’s development affects the process of understanding. Thus, CLS and JPN inform the children in a developmentally appropriate manner. The information that CLS and JPN would provide to the children and families includes not only upcoming events for them, but also the reasons for the hospitalization and procedure/surgery, what the roles of the children, doctors, and nurses are, how to get resources, and the daily schedules and rules in a hospital.

To Reduce Children’s and Families’ Fears and Anxieties

All literature suggests that “to reduce children’s and families’ fears and anxieties” is one of the goals of preparation. CLS and JPN try to reduce and minimize emotional disturbances of children and families
throughout preparation. They attempt to achieve this goal by supporting the children and families to understand their situation so that they do not encounter any uncertainty. At the same time, CLS and some JPN attempt to assist the children and families in expressing what they think and feel, including their fears, anxieties, discomforts, and distresses, so that the children and families are able to manage those feelings and stressors (Bandstra, Skinne, LeBlanc, Chambers, Hollon, Brennan, & Beaver, 2008; Christian & Thomas, 1998; Desai, Ng, & Bryant, 2002; Gaynard, Wolfer, Goldberger, Thompson, Redburn, & Laidley, 1998; Rollins et al., 2005; Schat, 2007; Akiyama, Sato, Obata, Iwamoto, Aida, & Watanabe, 2006; Aoki, Ishizaki, Seki, Kasahara, Yamazaki, Tajima et al., 2005; Matsumori, & Kamasita, 2006; Monma, Ishikawa, & Someya, 2007; Okada, Mitsuda, Yamamura, Nagase, Nishii, & Hurukawa, 2007; Takahashi et al, 2006). However, some other JPN believe that knowing what will happen might increase the children’s fears and anxieties. Since that might cause them to express negative emotion or behavior, such as screaming or refusing others, these JPN stress the need to have a plan to deal with that possibility (Isaka, 2006; Oikawa, 2002; Tanaka, Fujita, & Matsumoto, 2003).

To Normalize a Health Care Setting

The other goal set by CLS and JPN is “to normalize a health care setting”. CLS and JPN undertake the role of familiarizing and normalizing the circumstances, which children and families may encounter. Through creating a comfortable and familiar environment for the children, the children and families will have an increased a sense of belonging, control, and security in a new experiences and procedures/surgery that seem strange to them (AAP, 2006; Brennan, 2000; Brewre, & Lambert, 1997; Desai et al, 2002; Gaynard et al,
To Build Supportive Relationships with Medical Professionals

CLS and JPN report that successful preparation allows children and families to build supportive and trusting relationships with medical professionals. Through understanding the role of each professional correctly, children and families learn how to get an effective support from them (Brewer, & Lambert, 1997; Gaynard et al., 1998; Rollins et al, 2005; Desai et al., 2002; Schat, 2007; Oikawa, 2002; Handa, 2000; Matsumori, & Kamoshita, 2006;). Gaynard et al. (1998) report that preparation by CLS fosters not only trusting relationship between children and professionals in a hospital but also between the child and their parents/caregivers in a new environment for them. Oikawa (2002) mentions that positive communication between JPN and children during daily nursing care is one part of preparation and help the children to develop trusting relationships.

To Enhance the Medical Success of Children’s Case

Some literature of CLS and JPN reports that successful preparation might also help children to cooperate with the nurses and doctors. This will result in a smooth procedure/surgery and nursing care for the children, faster medical recovery, and smooth transitions throughout their medical experiences (Brewer & Lambert, 1997; Gaynard et al,1998; Handa, Ninomiya, Nishihira, & Hirai, 2008; Katsube & Matsumori, 2006; Kozono, 2006; Nishihira, Hirai, Kobayashi, Kura,as, & Sugano, 2006; Takahashi et al., 2006).

To Respect the Children’s Rights
One piece of literature on CLS and five on JPN refer to the theory of preparation and emphasize the rights and ethics regarding children. The literature states that children have the rights to receive an explanation, be involved in decision-making regarding their health in a developmentally appropriate manner, and receive the most comfortable care possible (Stephens et al., 1999; Ebina, 2005; Oikawa, 2002; Okada et al., 2007; Tanaka et al, 2003; Suzuki, 2006).

To Facilitate Children’s and Families’ Coping

CLS indicate “to facilitate coping” as one of the goals of preparation by CLS. CLS attempt to facilitate children’s and families’ learning and use of coping strategies for adjusting and dealing with diagnosis, hospitalization, and procedure/surgery. In order for children and families to manage and get through a new or difficult experience, CLS provide them with various coping techniques, strategies, and behaviors and encourage them to choose and develop their own coping strategies. CLS support the children and families in rehearsing and recreating their coping skills throughout preparation (AAP, 2006; Bandstra, Skinner, LeBlanc, Chambers, Hollon, Brennan et al., 2008; Christian, & Thomas, 1998; CLC, 2006; Desai et al., 2002; Gaynard et al, 1998; Herwald, 2004; Justus et al., 2006; Kain, Caramico, Mayes, Genevro, Bornstein, & Hofstadter, 1998; Rollins et al., 2005; Schat, 2007; Stephens et al., 1999).

To Promote Emotional/psychological Readiness

In articles regarding JPN, “to promote emotional/psychological readiness” is discussed as a vital goal of preparation of children. Through preparation, JPN attempt to bring out the children’s potential to prepare for and overcome a difficult situation. JPN encourage the children to make a decision about having the
procedure/surgery, which is called “kakugo,” and then support their “kakugo” and effort during the procedure/surgery; this effort is called “ganbari.” In addition, JPN believe that through effective preparation, children realize their strengths, gain self-esteem and self-efficacy, and develop their identity (Akiyama et al., 2006; Hayashi, Morishita, & Matsukuma, 2006; Isaka, 2006; Kokabu, Rugo, Fujii, Kitou, Oonishi, & Azuma, 2007; Kanda, Yata, Kato, Nagase, Hayashi, & Takahashi, 2007; Kozono, 2006; Matsumori, & Kamoshita, 2006; Matsukura, Takayama, Geka, Nakahara, & Matsunami, 2006; Nakamura, Uenomachi, Yamanaka, & Nomaguchi, 2006; Nishihira et al., 2006; Ohike, 2006; Okada et al., 2007; Tannai, Yamada, & Ishida, 2007).

Summary

The main goal of preparation by both CLS and JPN is “to reduce children’s and families’ fears and anxieties” for the past, present, and upcoming events in a health care setting through “enhancing their understanding.” By providing accurate and developmentally appropriate information and making information accessible, the understanding of the children and families is clarified and misconceptions are corrected. Since uncertainty can limit the ability of children and families to develop effective control, a correct and accurate image and understanding might help the children and families adjust to the situation increasing their sense of control. In order for children and families to prepare for and overcome the difficult situation, CLS attempt “to facilitate the children’s and families’ coping”; by comparison, JPN try to “promote the children’s and families’ emotional/psychological readiness” by bringing out their own strengths. CLS try to support children and families in determining which coping techniques can apply to the children or creating effective coping strategies for the children. JPN encourage children and families to use their own strengths for promoting their
emotional/psychological readiness and support their strengths and abilities, “kakugo” and “ganbari” during preparation. Both CLS and JPN believe that successful preparation will “bring about a trusting and supportive relationship with medical professionals” and “have a positive medical effect on treatment and procedure/surgery.” Achieving those goals also respects the rights of children. Throughout preparation, CLS and JPN attempt to support children and families in successfully adjusting not only to the current health care settings, but also the transition from the hospital to the children’s normal life, and helping them to prevent later developmental disturbances or adjustment problems.

Assessment of Preparation

There are five articles on CLS and six on JPN that have the list of assessment for preparation (Brewer, & Lambert, 1997; Brewer, Gleditsch, Syblik, Tietjens, & Vacik, 2006; Desai et al., 2002; Justus et al., 2006; Kain et al., 1998; Hayashi et al., 2006; Isaka, 2006; Matsumori et al., 2006; Nishihira et al., 2006; Shimizu, 2008; Suzuki, 2006). The items of assessment are divided into three categories: important to the child, important to the family, and important to the health condition. Appendix B is one of the checklists that Ebina (2007) provides called “the Care Model for Informing and Reassuring Children Undergoing Medical Examinations and/or Procedures”. That checklist has been developed to help medical staff perform effective preparation.

Important to the Child

The items that both CLS and JPN list are: developmental and chronologic age, developmental level and needs, prior experiences regarding a health care setting, knowledge of the upcoming procedures/surgery,
coping styles/strategies, and personality/character. The items that only CLS list are: stress and vulnerability, expressed fears and concerns, temperament, and body images. The items that only JPN lists are: what the child wants to know.

JPN’s case studies without the list of assessment highlight the child’s level of stress and fears for procedures/surgery, even though CLS do not have the list of assessment (Kozono, 2006; Hayashi et al., 2006; Yoshitani, Tashiro, & Tomoda, 2005; Monma et al., 2007). Monma et al. (2007) also report the importance of careful observation and assessment of the reasons for the child’s fears and anxieties.

Important to the Family

The items that both CLS and JPN list are: expressed concerns and feelings, knowledge of the upcoming procedures/surgery, availability of support systems, and socio-economic concerns – job and financial. The items that only CLS list are: concerns for the well-being of the child, availability of the parents to the child, life experiences, socio-economic concerns – present life change, culture, religious, ethnic, educational needs, family composition and dynamics, and parenting style. The items that only JPN lists are: requests of the child and medical staff, how well the child’s parents understand the child’s procedure/surgery, how parents explained hospitalization, procedures, or surgery to the child, how well parents think their child understood, the parents’ expectation of the child’s reaction to the procedure/surgery, the reaction of the child when he/she heard about the hospitalization, surgery, or procedures.

CLS also pay attention to how a parent explains hospitalization and procedures/surgery without the list of assessment. For example, Justus et al. (2006) report the interaction between the child’s father and the
members of a preparation program. In the report, the CLS assessed how the father explained the surgery to his child and then the CLS interacted with both the father and his child.

*Important to the health condition*

Only CLS list these criteria including: type of surgery, diagnosis, procedure, health care factors, diagnosis, prognosis, and medical history, anticipated procedure, pain, and anticipated length of stay. The reason JPN do not have this category as one of the assessment items of preparation might be that those criteria are including the fundamental nursing information that JPN obtain when a child is admitted to a hospital.

*Others*

Listening to the child is essential for the assessment of CLS and JPN because children often have helpful suggestions for effective methods of preparation and ways to prepare for and manage their discomfort (Justus et al., 2006; Stephens et al., 1999; Isaka, 2006; Kanda et al., 2007; Nishihira et al., 2006). However, JPN sometimes provide procedure or nursing care immediately. Ebina (2007) reports that although it is important to assess each child and family carefully, it would be possible for JPN to start preparation without assessment as long as a JPN meets the child at eye level, talks with the child, and confirms the child’s positive attitude toward the procedure.

*Summary*

When CLS and JPN assess each child, they focus on the child’s age, developmental level, prior experiences, knowledge and understanding, coping styles/strategies, personality/character, and stress levels.
At the same time, CLS and JPN assess the child’s family members by focusing on their concerns, support system, and socio-economic situation. Although there are no significant differences between CLS and JPN when they assess the child, there are several differences between CLS and JPN when they seek information from the child’s family. CLS tend to see the family’s situation while JPN try to get further information from the family about the child regarding his/her understanding and views of procedure/surgery. The JPN’s interests toward the child’s understanding can be also seen in the checklist of “the Care Model for Informing and Reassuring Children Undergoing Medical Examinations and/or Procedures” (Ebina, 2007).

The assessment of each child is one of the most essential parts of preparation in order to meet the needs of the child and family. Since a child’s cognitive, physical, emotional, and psychosocial skills emerge based on individual, developmental, and environmental factors, it is important to customize any preparation to each child. Both CLS and JPN value talking with each child and family, which in turn the plan of preparation that applies to the individual child.

Plan of Preparation

Based on the assessment of each child and family, CLS and JPN design a plan of preparation of each child. CLS and JPN plan when, what information, which methods, and how children and families should be prepared for diagnosis, hospitalization, and procedure/surgery.

When Should Children and Families be Prepared?

There is no literature that recommends the exact timing for preparation. Instead, Gaynard et al. (1998) states that the process of CLS’s preparation of children should involve continuous interaction with children
and families. Likewise, Oikawa (2002) and Narakino (2006) mention that preparation by JPN should be provided whenever children and families face a difficult situation with constant assessments. CLS and JPN attempt to provide preparation right after they realize the preparation needs of the child and family (Hasenfuss, & Franceschi, 2003; Matsumori, & Kamoshita, 2006; Yoshitani et al., 2005). However, there are some suggestions; Robertson (1958) suggests that preparation for hospitalization should begin no earlier than a week before admission (as cited in Thompson, & Stanford, 1981). Kain et al. (1998), Tanaka et al. (2003), and Matsumori et al. (2006) recommend that children between the ages of 2 and 4 should be prepared one or two days before surgery and that older children should be prepared from five to ten days before. In one case study reported by Brewer and Lambert (1997), a CLS provides preparation for surgery at the day of preadmission visitation in a week before surgery. In the other preparation program, preparation begins when the children’s surgery are scheduled (Justus et al., 2006). Some cases/reports on JPN provide pre-operative preparation a day before surgery (Isaka, 2006; Kamoshita, 2006; Kanda et al., 2007; Matsumori et al., 2006; Matsumori, & Nishihira et al., 2006; Ohike, 2006).

*What Information should be Provided for Children?*

The details of information in CLS’s preparation of children are divided into four categories: overviews of diagnosis, hospitalization, or procedure/surgery, sensory information, how to cooperate with nurses and doctors, and coping techniques/strategies. Those in JPN’s preparation of a child are divided into only the first three categories of CLS’s.
Overviews of diagnosis, hospitalization, or procedures/surgery. Both CLS and JPN attempt to inform children and families what they will experience in order to help them become familiar with the aspects of diagnosis, hospitalization, or procedure/surgery (CLC, 2006; Rollins et al., 2005; Thompson, & Stanford, 1981; Stephens et al., 1999; Handa et al., 2008; Isaka, 2006; Okada et al., 2007). CLS and JPN are honest and tell the truth in a developmentally appropriate manner at the time that the children and families feel safe and comfortable (Gaynard et al, 1998; Brewer & Lambert, 1997; Desai et al, 2002). CLS try to provide information focusing on what the children will directly feel through the experience rather than technical details or too much cognitive information. Thus, CLS value sensory information that the children will explore (CLC, 2006; Rollins et al., 2005; Thompson, & Stanford, 1981; Stephens et al., 1999). Since JPN are directly involved in the children’s care, the contents of JPN’s information are more detailed than CLS’s information. JPN plan to explain what and why JPN will do each procedure for the child, such as the process of the procedure, which part of the body the doctors and JPN will work with, the process of the procedure, what position the children need to take, the limitation of movement, if any, and the reasons for all of them (Akiyama et al., 2006; Isaka, 2006; Matsumori et al., 2006; Yoshitani et al., 2005).

Sensory information. For the details of sensory information, please see the paragraph below, “Emphasis should be placed on the sensations a child is likely to experience” (Page.37).

Coping techniques стратегии. Coping techniques/strategies are the characteristic of CLS’s plan of preparation. Literature regarding preparation by CLS shows the importance of coping techniques/strategies and providing children and families with suggestions on how to learn and use them (AAP, 2006; Stephens et
al., 1999; Thompson, & Stanford, 1981; CLC, 2006; Rollins et al., 2005; Gaynard et al., 1998; Bandstra et al., 2008; Kain et al., 1998 Desai et al., 2002; Herwald, 2004; Christian, & Thomas, 1998; Justus et al., 2006; Hasenfuss, & Franceschi, 2003). Gaynard et al. (1998) and Hasenfuss (2003) report that suggesting coping strategies that could work best for a child and family is essential information because key elements of the preparation process by CLS includes helping the child to select, rehearse, and effectively implement his/her coping behavior. Some of the readings provide suggestion about several different kinds of coping technique/strategies which appear in Appendix C. By comparison, JPN do not mention much about providing coping strategies in preparation. Only one article introduces concrete coping strategies (Ebina, 2007). Instead, JNP provide information how to cooperate with nurses and doctors during procedure/surgery.

*How to cooperate with nurses and doctors.* JPN plan to inform children about how to cooperate with nurses and doctors, such as what the nurses and doctors want/do not want the children to do as well as what the children will or will not be able to do during and after procedure/surgery. For example, JPN would tell children who are going to have a cardiac catheter procedure that it is important not to move one of their legs after the procedure in order to heal better. However, JPN add the positive aspects, such as being able to play game because it would be okay to move their head and arms (Akiyama et al., 2006; Handa et al., 2000; Isaka, 2006; Narakino, 2006; Nishihira et al., 2006; Tanaka et al, 2003). On the other hand, CLS attempt to gain the children’s cooperation by suggesting “jobs” that the children can adopt as a member of the medical team (Rollins et al., 2005; Gaynard, Goldberger, & Laidley, 1991; Stephens et al., 1999). For example, a CLS may say to children that their job will be drinking water and telling their mother or nurses if they are
uncomfortable. This is done in order to help children to understand what they need to do after surgery. For older children, CLS may ask what they think of helping nurses and doctors or themselves during and after procedure/surgery so that they are able to find out how to cope with the situation (Rollins et al., 2005).

*Which Methods Should be Used for Preparation?*

There are six methods for preparation in case studies/reports: giving a tour of a hospital, explaining through visual aids, providing opportunities to play with actual/models of medical equipment with dolls, playing games, offering doctor’s kits, and telling information verbally.

*Giving a tour of a hospital.* In all case studies/reports regarding pre-operational preparation by CLS, CLS plan to take children and families on a tour, as well as provide verbal explanation. CLS usually arrange the tour of all the relevant areas of surgery, such as the waiting area, the location of the surgery room, and where/when the separation from the parents/caregivers will occur (Brewer, & Lambert, 1997; Brewer et al., 2006; Justus et al., 2006; Kain et al., 1998). One case study reported by JPN has a tour for the surgery area. In that case, a child rides on a gurney to see the route from the pediatric unit to the surgery room, the room where the child’s parent/caregiver would be waiting for finishing the surgery, and some photos of surgery areas hanging on the wall by the entrance door of the surgery room (Isaka, 2006).

*Explaining through visual aid.* CLS and JPN frequently use albums, picture books, or picture-story shows of diagnosis, hospitalization, or procedure/surgery as one of the preparation tools (Brewer, & Lambert, 1997; Desai et al., 2002; Kain et al., 1998; Akiyama et al., 2006; Aoki et al., 2005; Matsukura et al., 2006; Nakamura et al., 2006; Ohike, 2006; Okada et al., 2007; Tannai et al., 2007). Since those visual materials are
familiar to children and describe the experience that the children are likely to encounter, CLS and JPN can easily ask children questions or allow the children to ask questions along with the stories (Brewer, & Lambert, 1997; Desai et al., 2002; Kain et al., 1998; Thompson, & Stanford, 1981; Akiyama et al., 2006; Okada et al., 2007). In addition, a preparation program by CLS provides a surgical activity book designed specifically for a hospital to reinforce teaching during preparation (Justus et al., 2006). Those visual aids provide an active preparation process for children.

Providing opportunities to play with actual/models of medical equipment with dolls. Both CLS and JPN value providing children and families with opportunities to play with actual medical equipment or models of medical equipment with dolls as medical play. CLS and JPN attempt to offer a hands-on and step-by-step explanation and encourage children to play with the equipment and dolls (Brewer et al., 2006; Kain et al., 1998; Brewer, & Lambert, 1997; Desai et al., 2002; Justus et al., 2006; Hasenfuss, & Franceschi, 2003; Handa et al., 2008; Hayashi et al., 2006; Isaka, 2006; Kanda et al., 2007; Matsukura et al., 2006; Matsumori, & Kamoshita, 2006; Monma et al., 2007; Nakamura et al., 2006; Nishihira et al., 2006; Takahashi et al., 2006; Yoshitani et al., 2005). Some articles report the benefits and positive effects of medical play, which help children to observe and handle medical equipment, to express feelings, to cope effectively, to be active and exert control, to gain a sense of mastery, and to process information and understand over their medical experience (AAP, 2006; Jessee, Wilson, & Morgan, 2000; McCue, 1988; Rollins et al., 2005). CLS focus on allowing children to express feelings (Brewer, & Lambert, 1997; Hasenfuss, & Franceschi, 2003) while JPN emphasize processing information and exerting control (Ebina, 2005; Hayashi et al., 2006;
Matsumori et al., 2006; Matsumori, & Kamoshita, 2006; Yoshitani et al., 2005).

**Others.** CLS additionally provide children and families with doctors’ kits filled with, a doctor’s hat, mask, adhesive bandages, heart monitor pads, an identification bracelet, crayons, and a program-specific coloring book (Justus et al., 2006; Rollins et al., 2005). When CLS are educating children about the illness, CLS suggest that children use the toys/games related to their illness (Brennan, 2000). JPN also make a game that shows what the children’s illness is and what experiences the children will have in a hospital (Nakamura et al, 2006)

**How Preparation Should be Provided for the Child?**


1. Both children and parents should be included in the preparation process.

2. Information should be provided to children at a level commensurate with their cognitive abilities.

3. Emphasis should be placed on the sensations a child is likely to experience.

4. Parents and children should be encouraged to express their emotions throughout the process.

5. The process should result in the development of a trusting relationship between those doing the preparation and the family.

6. Parents and children should receive support throughout the stressful points of hospitalization from a figure in whom such trust is placed (p.116).

This standard is also introduced, or actually used, in four articles on JPN (Oikawa, 2002; Narakino, 2006;
Isaka, 200; Isaka et al., 2004). When they plan preparation, both CLS and JPN are concerned about each guideline except No. 4.

*Both children and parents should be included in the preparation process.* There is no literature without the presence of children’s parents/caregivers in the children’s preparation. Instead, both CLS and JPN encourage the children’s parents/caregivers to attend in planning preparation. Justus et al. (2006) reports that since the child’s parents/caregivers are considered the experts on the care of their child, the members of the preparation program, including CLS, social workers, and nurses, always discuss the plan with the child’s parents/caregivers about what types of preparation might be appropriate for the child. JPN also state the importance of discussing with the child’s parents/caregivers what things to tell the child and how to create the preparation process (Hayashi et al., 2006; Isaka, 2006; Matsukura et al., 2006; Monma et al., 2007; Yamaguchi & Naragino, 2008; Yoshida, 2005). Suzuki (2006) adds that since the parents/caregivers are the safe place, advocates, cooperators, and understand the needs of their child throughout infancy, childhood, and adolescents, the support from the parents is a big help for the child to decide to go through the difficult situation. Including the parents/caregivers in planning preparation also allows the child to have the same, consecutive information as the parents.

*Information should be provided to children at a level commensurate with their cognitive abilities.* All literature of preparation by CLS and JPN concern each child’s developmental level. The CLS and JPN attempt to provide children with developmentally appropriate explanation regarding diagnosis, hospitalization, and procedures/surgery. In some books and articles regarding preparation of children, there are four sections
that include infant and toddlers, preschoolers, school-age children, and adolescents on how to prepare them, which focus on developmental issues (Justus et al., 2006; Rollins et al., 2005; Suzuki, 2006). JPN create their own picture books, picture-story shows, or power point slide shows for the preparation of specific age groups. Those handmade visual aids for preschoollers and school-ages have characters that are familiar to children and going to have the same experiences as the children. The characters help the children to understand what the children need to do throughout hospitalization or procedure/surgery (Aoki et al., 2005; Akiyama et al., 2006; Matsukura et al., 2006; Nakamura et al., 2006; Ohike, 2006; Okada et al., 2007; Tannai et al., 2007).

In articles and books about preparation by CLS, the sensitivity of language is noted (Gaynard et al, 1998; Rollins et al, 2005; Thompson & Stanford, 1981; Stephens, Barkey & Hall, 1999; Desai et al, 2002; Brewer, & Lambert, 1997; Hasenfuss, & Franceschi, 2003). CLS attempt to choose words carefully for each child with minimally threatening and age-appropriate language. As with CLS, JPN also mention that JPN need to use language that is familiar and understandable for children when they provide preparation (Akiyama et al., 2006; Hayashi et al., 2006; Isaka, 2006; Ohike, 2006; Okada et al., 2007; Takahashi et al., 2006; Tanaka et al, 2003). That is done because medical terminologies are unfamiliar and ambiguous to children and families. CLS and JPN also try to listen carefully and to be sensitive to the children’s use of and response to language. Although both of them carefully use medical terms, CLS pay additional attention to the meaning of sentences, and how the children feel when they hear specific medical terms. CLS also pay special attention to inflection. For example, Cutter et al. (1998) suggests that the statement, “let’s see how warm your body is,” is preferred to, “let’s take your temperature,” because children may wonder what nurses are going to
do with their temperature and if nurses are planning to give it back (as cited Rollins et al., 2005). Stephens et al. (1999) also mention that telling to children, “It is okay to cry,” before a procedure tells children what is about to happen will be bad enough to cry.

*Emphasis should be placed on the sensations children are likely to experience.* CLS and JPN address the significance of communicating with children about what they will feel through all his/her senses including seeing, hearing, touching, smelling, tasting (CLC, 2006; Desai et al., 2002; Gaynard et al., 1998; Herwald, 2004; Rollins et al., 2005; Thompson, & Stanford, 1981; Ebina, 2005, 2007; Kanda et al., 2007; Matsumori, & Kamoshita, 2006; Narakino, 2006; Oikawa, 2002; Takahashi et al., 2006). CLS and JPN also communicate how long the procedure will take. To achieve this, CLS and JPN attempt to use actual equipment that children will encounter during hospitalization and procedure/surgery (Brewer et al., 2006; Brewer, & Lambert, 1997; Desai et al., 2002; Justus et al., 2006; Kain et al., 1998; Hayashi et al., 2006; Kanda et al., 2007; Matsumori et al., 2006; Matsumori, & Kamoshita, 2006; Nakamura et al., 2006; Takahashi et al., 2006; Yoshitani et al., 2005). In addition, CLS’ preparation programs plan a tour of the relevant areas of surgery and attempt to explain not only what the rooms and the machines are like but also what the children will hear, see, and smell. CLS also try to share other sensations, such as the room temperature (Herwald, 2004). On the other hand, only one case of preparation reported by JPN plans a tour of surgery (Isaka, 2006). Instead, JPN attempt to explain those sensory information through medical play. Takahashi et al. (2006) suggest encouraging children to imagine procedure/surgery through using imitative words of the sounds that machines or equipment will make, such as, “gotton, gotton” and “gara gara.” The
other JPN state that it is important for children to have the sense of just “what it would be like” and encourage
the children to have an image of procedures/surgery in their mind (Handa et al., 2008; Nishihira et al., 2006;
Shimizu, 2008). In addition, JPN attempt to make children realize that there is something that they need to
face so that the children could make a “kakugo” (make a decision) in order to prepare for it (Ebina, 2007;
Shimizu, 2008).

*Parents and children should be encouraged to express their emotions throughout the process.* CLS
and JPN try to encourage children and families to express their emotions. Through medical play, CLS help
children to feel free to demonstrate children’s feelings by encouraging them to take control, make choices,
and become active learners (Brewer et al., 2006; Brewer, & Lambert, 1997; Desai et al., 2002; Hasenfuss, &
Franceschi, 2003; Justus et al., 2006; Kain et al., 1998). JPN also allow children to see themselves in the doll
and to express their feelings, concerns, and fantasies (Handa et al., 2008; Hayashi et al., 2006; Isaka, 2006;
Kanda et al., 2007; Matsukura et al., 2006; Matsumori et al., 2006; Matsumori, & Kamoshita, 2006; Monma
et al., 2007; Nakamura et al., 2006; Nishihira et al., 2006; Yoshitani et al., 2005; Takahashi et al., 2006). Jessee
et al. (2000) report that medical play is an interactive playing technique, including modeling and rehearsing
with real or facsimile equipment; this allows children to express what they think and feel. Also, play itself
brings children to feel safe and creates the environment where children can be as he/she is (Matsumori, &
Kamoshita, 2006). In such a safe condition, it would be easy for the children and families to express their
emotions and understanding and clarify misconceptions (Brennan, 2000; Gaynard, Goldberger, & Landley.
1991; Gaynard et al, 1998). In addition, CLS and JPN are able to add information addressing the children’s
and families’ expressed concerns, fears, and stresses.

*Parents and children should receive support throughout the stressful points of hospitalization from a figure in whom such trust is placed.* CLS attempt to keep coming back to the same child and family, as well as to develop collaboration among a health care team through sharing information that CLS have gained through preparation (Brewer, & Lambert, 1997; Hasenfuss, & Franceschi, 2003; Herwald, 2004; Justus et al., 2006). On the other hand, since children have different nurses in each shift or each place, JPN try to promote cooperation among the nurses in order to continue the preparation and relationship that are already made with children (Isaka, 2006; Kanda et al., 2007; Matsukura et al., 2006; Matsukura et al., 2006; Nishihira et al., 2006).

Both CLS and JPN mention the importance of continuity of preparation and plan preparation of children and families throughout hospitalization (Brewer, & Lambert, 1997; Gaynard et al., 1991; Gaynard et al., 1998; Hasenfuss, & Franceschi, 2003; Herwald, 2004; Justus et al., 2006; Rollins et al., 2005; Thompson, & Stanford, 1981; Akiyama et al., 2006; Ebina, 2005, 2007; Handa et al., 2008; Hayashi et al, 2006; Isaka, 2006; Kanda et al., 2007; Matsukura et al., 2006; Mastumori et al., 2006; Matsumori, & Kamoshita, 2006; Narakino, 2006; Nishihira et al., 2006; Ohike, 2006; Tanaka et al., 2003). CLS and JPN usually give or lend the medical equipment, dolls, or books that they have used in preparation and try to provide additional explanation with the same materials. In addition, sharing the experience of medical play allows children to remember what they would experience or have experienced, helping them to gain mastery over the events in the hospital setting (Gaynard et al., 1991; Thompson, & Stanford, 1981; Handa et al., 2008; Hayashi et al,
Summary

CLS and JPN organize preparation of children throughout, even before and after, hospitalization while considering the developmental level of each child. The main point of planning preparation is how to convey accurate information that is unfamiliar and uncertain for children and families in the circumstance where the children and families feel safe and comfortable. CLS and JPN provide children and families with opportunities to have a tour of the hospital, play with medical equipment and dolls, and look at picture books regarding health care experiences depending on each child’s situation. The child’s parents/caregivers welcome to discuss the contents of the child’s preparation plan with CLS and JPN.

There are some difference between CLS and JPN the type of information they provide for children and families and how to approach to them. Those differences are in accordance with the characteristic of CLS’s and JPN’s goals: to facilitate children’s and families’ coping for CLS and to promote the children’s and families’ emotional/psychological readiness for JPN. CLS suggest various coping strategies to children and families in order to find which strategies could work for the children and families for each different situation. The information CLS attempt to provide children and families is focusing on sensory information, and CLS try to help them to understand what the children will actually sense and feel. CLS also give children jobs in procedure/surgery so that the children may have senses of membership in the team. In order to allow children to have an accurate understanding in a minimum threatening manner, CLS pay special attention to language that CLS use during preparation. In addition, CLS try to listen to the children’s feeling through medical play.
Regarding JPN’s plan, JPN attempt to inform children and families what the JPN will do as nursing care for children and suggest how to cooperate with the nurses and doctors in the process of the nursing care or procedure. JPN try to enhance children understand the reasons for the care or procedure and the limited movement that the children may face. Through medical play, JPN attempt to encourage children to take control and have their own images for the procedure so that they prepare for the situation.

Since children’s preferred style changes from day by day or from procedure to procedure, CLS and JPN continually monitor the reactions of children and families, gain new information, and rearrange the plan to meet the changing needs of the children and families. In addition, CLS and JPN try to share the information of the children and families among professionals who will interact with the children so that those professionals could provide continuous preparation of the children and families.

*Intervention/Interaction of Preparation*

When CLS and JPN provide children and families with preparation for diagnosis, hospitalization, and procedure/surgery, both CLS and JPN value rehearsing what the children would experience in a safe and comfortable environment. CLS additionally support the children and families in finding and rehearsing the children’s coping strategies, as well as rehearsing the process of procedure/surgery. During the preparation, CLS and JPN allow the children and families to have sense of control, express emotions, and promote their understanding. In addition, JPN encourage children to support “kakugo” and “ganbari” (an effort to support the decision) for hospitalization or procedure/surgery.
To Rehearse What Children would Experience

CLS and JPN provide children and families with opportunities to rehearse what the children will experience. CLS usually give children and families a tour of the hospital and allow the children to play with medical equipment. JPN seldom arrange the tour but encourage children to do medical play, read a picture book, or view a picture-story show about the procedure/surgery, and invite the children to draw the character’s experience from the story. These activities allow JPN to share the same “words” and “images” among the child, family, and professionals in a hospital (Akiyama et al., 2006; Nihihira et al., 2006). During the play or reading, JPN focus on the process of procedure/surgery and help the child to have an idea of how the procedure will take place (Hayashi et al., 2006; Isaka, 2006; Matsumori, & Kamoshita, 2006; Nishihira et al., 2006; Ohike, 2006; Takahashi et al., 2006). CLS focus not only on the procedure/surgery but also the children’s coping strategies. CLS encourage the children to find out their own coping strategy and to rehearse the strategy by providing various techniques. For example, a child and CLS rehearse how to hold still his/her arm during the placement of IV catheter by discussing which position the child would prefer and which distraction tools he/she wants to use (AAP, 2006; Gaynard et al., 1991; Herwald, 2004). That intervention enables children and families to imagine what the children can do to make things go as smoothly as possible (CLC, 2006).

To provide safe and comfortable environment

Since play is one of the most comfortable and relaxed activities for children, preparation by both CLS and JPN incorporates many elements of play. Playing with medical equipment and creating the children’s
own book help children to be active, to feel safe, and to have fun. In such an environment, children are able to express their feelings and thoughts associated with diagnosis, hospitalization, and procedure/surgery (Brewer, & Lambert, 1997; Gaynard et al., 1991; Matsukura et al., 2006; Matsumori et al., 2006; Matsumori, & Kamoshita, 2006). At an emergency department, CLS are “safe people” who tell the children what is happening and what they can do, while the other medical professionals are quickly assessing and providing medical interventions (AAP, 2006; Christian, & Thomas, 1998).

To Have a Sense of Control

CLS and JPN support children in participating actively in learning and coping process by allowing them to have a sense of control. CLS and JPN also welcome the children to take initiative and keep their own pace during the preparation (Gaynard et al., 1998; Kanda et al., 2007; Nishihira et al., 2006; Okada et al., 2007; Yoshitani et al., 2005). For example, medical play with dolls and appropriate information for children help them to make the environment more manageable (AAP, 2006; Brewer, & Lambert, 1997; Gaynard et al., 1991; Jessee et al., 2000; Hasenfuss, & Franceschi, 2003; Herwald, 2004; Isaka, 2006; Matsumori et al., 2006; Matsumori, & Kamoshita, 2006; Nishihira et al., 2006; Yoshitani et al., 2005). The children’s own surgical books, which CLS encourage children to collect autographs of medical team before surgery, allows the children to ask medical professionals questions easily (Brewer, & Lambert, 1997). CLS would also provide children with a “time out coupon” that is worth two minutes during a procedure (Hasenfuss, & Franceschi, 2003). In addition, offering children as many choices as possible helps children to feel more in control of the situation. This also supports the children’s adherence with the medical team (Brewer, &
Lambert, 1997; Hasenfuss, & Franceschi, 2003; Herwald, 2004; Hayashi et al., 2006; Kozono, 2006; Nishihira et al., 2006; Ohike, 2006; Yoshitani et al., 2005), such as CLS/JPN asking a child if he/she wants to hold the mask or if he/she wants the doctor to hold the it during the anesthesia induction (3, B29, 37). Before IV placement, CLS also discuss with a child coping strategies: the child could count until the needle is out or use his/her imagination to pretend to be at the beach (Herwald, 2004; Rollins et al., 2005; Hayashi et al., 2006). Although giving children choices is important, CLS and JPN sometimes ask if the children would like to hear more about what other children have found helpful when the children seem hesitant to make a choice (Gaynard et al., 1998; Isaka, 2006; Yoshitani et al., 2005).

**To Express Feelings and Emotions**

CLS and JPN assist children in expressing what they think is going to happen and how they feel through preparation (AAP, 2006; Hasenfuss, & Franceschi, 2003; Jessee et al., 2000; Hayashi et al., 2006; Isaka, 2006; Matsumori et al., 2006; Tanaka et al., 2003; Yoshitani et al., 2005). To this end, CLS ask, “What is it like being here,” using the children’s own surgery book (Hasenfuss, & Franceschi, 2003). CLS and JPN ask the questions to the doll during medical play so that the children can start talking about their thoughts (Hasenfuss, & Franceschi, 2003; Jessee et al., 2000; Hayashi et al., 2006; Isaka, 2006). In addition, CLS support the children to act out their emotions, such as fear, anger, sadness, loneliness, happiness, or confidence (Hasenfuss, & Franceschi, 2003; Jessee et al., 2000; Justus et al., 2006). Since Broome et al. report that active behavior might be a function as a type of distraction technique (as cite Hasenfuss, & Franceschi, 2003), CLS consider that expressing emotions through active behavior in a safe environment, like
during play, is important for the children (AAP, 2006; Hasenfuss, & Franceschi, 2003). On the other hand, JPN sometimes feel it difficult to handle the children’s expression of active and negative emotions (Ebina, 2007; Tanaka et al, 2003). However, JPN try to judge such kind of expressions as a positive sign for the children. JPN attempt to accept the children’s emotions, listen to the children’s opinions and concerns, and interact with the children addressing their concerns (Isaka, 2006; Monma et al., 2007; Oikawa, 2002; Shimizu, 2008). It is also important for CLS and JPN to take time to just to be a listener for children so that the children can talk about themselves.

To Promote Understanding

Observing and assessing the children’s activities, CLS and JPN provide the children with the additional information and explanation of the procedure/surgery if needed. Asking questions during preparation also helps CLS and JPN to assess how the children understood the situation (Kain et al., 1998; Aoki et al., 2005; Hayashi et al., 2006; Kanda et al., 2007; Matsukura et al., 2006; Nishihira et al., 2006). Since children have remembered the information only in fragments, CLS and JPN repeat the explanation again and again. It is effective for the children to start talking about what the child remember or is interested in (Brewer et al., 1997; Desai et al., 2002; Herwald, 2004; Justas et al., 2006; Schat, 2007; Thompson & Stanford, 1981; Ebina et al., 2007; Handa et al., 2008; Narakino, 2006 5; Nishihira et al., 2006). During demonstration of an IV placement with a doll, CLS and JPN sometimes illustrate what would happen to the IV catheter if the doll’s arm was moving back and forth when the children try to place the IV catheter into the doll’s arm. Then, CLS would tell the children what a big help it is when the hand is still (Gaynard et al., 1991; Stephens et al., 1999) while
JPN would inform the child how difficult it is to place the catheter (Hayashi et al., 2006; Takahashi et al., 2006).

To Make an Effort for Procedure/Surgery and Support the Effort

Since JPN believe that children can make a “kakugo” (decision) to have the procedure/surgery if they have understood what would happen, JPN wait for the children to make a “kakugo” (Akiyama et al., 2006; Matsumori, & Kamoshita, 2006; Monma et al., 2007; Yositani et al., 2005). Before the procedure/surgery, JPN usually ask children if they have gotten ready for the procedure/surgery (Kanda et al., 2007; Matsumori, & Kamoshita, 2006; Monma et al., 2007; Okada et al., 2007; Tannai, Yamada, & Ishida, 2007; Yositani et al., 2005). Shimizu (2008) reports that even if there is a very short time to prepare children for a procedure in a busy emergency department, the children can make a “kakugo” to do the procedure if they could understand what would happen, how it would feel, and when the most difficult part would start. When it is not an emergency situation, the repetition would strengthen the children’s “kakugo” and encourage their “ganbari” (Handa et al., 2008; Nishihira et al., 2006). When a child has gotten ready for the procedure, the child might say, “I’m going to be like a shrimp, my back will be cleaned up. After one, two, three, I will ‘ganbaru’. Then, it will be done” (Yositani et al., 2005, p.67). The other child might say, “It is okay to cry, but it isn’t okay to move a lot, right? Okay, I’ll ‘ganbaru’ with this doll” (Yositani et al., 2005, p.68).

During Procedure/Surgery

CLS sometimes accompany children during the procedure/surgery, depending on the children’s stress level and situation. During the procedure/surgery, CLS play a role of advocating the children’s coping
strategies and helped them to perform the strategies. Along with the children’s developmental level and characteristics, CLS provide a distraction or keep the children informed of the procedure’s steps (AAP, 2006; Herwald, 2004; Stephens et al., 1999). If the children seem to be difficult in adjusting to the pre-operation room, CLS would turn the room into a game, such as CLS showing the children how changing their breathing could alter the numbers and lines on a monitor (Herwald, 2004). Regarding JPN, JPN remind children what they can do during procedure, which was the same explanation that the children had received during the preparation. During the procedure, JPN try to explain to the children what to do next. JPN also offer distraction tools, answer the children’s questions, and keep the children’s pace as much as possible. JPN usually respect the children’s request for “wait” and support them in making a “kakugo” again to continue (Ebina, 2007; Kanda et al., 2007; Nishihira et al., 2006).

After Procedure/Surgery

Right after the procedure/surgery, CLS and JPN always inform children the end of procedure/surgery and make positive statements, praising the children. CLS usually praise children for being a wonderful helper during the procedure (Herwald, 2004; Stephens et al., 1999). JPN also praise children for performing a great “ganbari” during the procedure (Hayashi et al., 2006; Isaka, 2006; Narakino, 2006; Nishihira et al., 2006; Yoshitani et al., 2005). Stephens et al. (1999) recommend using the words terrific, wonderful, awesome, super, incredible, and best in order for children to have positive feelings toward the procedure. In addition, both CLS and JPN mention that the parents also need to appreciate their own help and presence for their child during the procedure/surgery (Stephens et al., 1999; Nishihira et al., 2006).
After the procedure/surgery, CLS and JPN sometimes provide children and families with medical play as a postvention activity. The children play with the same material as in the previous medical play. Postvention medical play helps the children to process the things that happened to them and the overall experience (Herwald, 2004; Rollins et al., 2005; Ebina, 2005; Hayashi et al., 2006; Isaka, 2006; Matsumori et al., 2006; Matsumori, & Kamoshita, 2006; Narakino, 2006; Yoshitani et al., 2005). In addition, this activity provides the child with an opportunity to express feelings that they could not say during the procedure/surgery (Gaynard et al., 1991; Ebina, 2007; Hayashi et al., 2006; Isaka, 2006; Narakino, 2006). For example, a child drew the face of the doll which had a tight-lipped mouth; the JPN assessed that the child told that she made a great “ganbari” during the procedure through the doll (Matsumori, & Kamoshita, 2006). This kind of activity could be also offered and effective for children and families who had traumatic procedures with no preparation and supports (Rollins et al., 2005).

Summary

In order to put a preparation plan into action, CLS and JPN interact with children and families through providing them with the secure environment and a sense of control. The main intervention is rehearsing the process of what children will experience or have experienced in the health care events. CLS and JPN help children and families have an idea how to behave during the events. The rehearsal with CLS enhances children how to cope with the events while providing various coping techniques while the rehearsal with JPN promotes the children’s “kakugo” and “ganbari” for going through the events. Through the rehearsal, children and families get additional information and deepen their understandings. At the same time, the children and
families allow to express their feelings and thoughts for diagnosis, hospitalization, and procedure/surgery. During the procedure, both CLS and JPN keep children informed what will happen next or provide them with distraction techniques. CLS also advocate the children’s coping strategies. After the procedure/surgery, CLS praise children for their help with nurses and doctors, and JPN praise children for their effort during the procedure.

Outcome/Evaluation of Preparation

CLS and JPN evaluate their preparation of children and families for diagnosis, hospitalization, and procedure/surgery through the children’s and families’ reactions and behavior throughout the children’s hospital experience. The outcome of the preparation reported in the case studies/reports is assessed to evaluate if the children and families are satisfied with the goals that CLS and JPN have set up: whether the children’s and families’ understanding has been clarified, whether the children and families have been having a sense of control and feeling safe, whether the children’s and families’ fears and anxieties have reduced, whether the children and families have been developing rapport with health care professionals, whether the children have gotten medical success, and whether the children’s rights have been respected. In addition, CLS and JPN evaluate their characteristic goals: whether the children and families have been engaging in the coping strategy and whether the children’s and families’ emotional/psychological readiness have been promoted.

How children played with medical equipment, the contents of children’s questions and their answers of questions from CLS/JPN, and the children’s conversation with their parents/caregivers about procedure/surgery are the criteria when judging the children’s understanding (Jessee et al., 2000; Matsumori
et al., 2006; Ohike, 2006). When children are correctly rehearsed the procedure or when children talked about their procedure and experience concretely to their parents/caregivers, CLS and JPN judge that the children was able to understand and have an image of the procedure (Rollins et al., 2005; Jessee et al., 2000; Thompson, & Stanford, 1981; Handa et al., 2008; Matsumori, & Kamoshita, 2006; Nakamura et al., 2006; Nishihira et al., 2006; Ohike, 2006; Yoshitani et al., 2005). In addition, doing medical play pleasantly and taking initiative show CLS and JPN that children feel comfortable and are active learners with a sense of control in the preparation (Thompson, & Stanford, 1981; Hayashi et al., 2006; Kanda et al., 2007; Matsukura et al., 2006; Ohike, 2006; Okada et al., 2007; Yoshitani et al., 2005). Regarding the children’s and families’ fears and anxieties, how children reacted to the events in the hospital setting is one of the criteria for understanding the level of the children’s anxiety. CLS and JPN conclude that the children’s fears and anxieties reduced when the children faced to the procedure/surgery without an expression of surprise, fear, or refusal. Having opportunities to express emotions and feelings are also considered as the children and families beginning to take control of their emotions and reducing their fears and anxieties (AAP, 2006; Rollins et al., 2005; Thompson, & Stanford, 1981; Hayashi et al., 2006; Matsukura et al., 2006; Monma et al., 2007; Okada et al., 2007). CLS and JPN feel that the positive relationship has started developing when children and families verbalized their feelings or expressed them during playing, or the children have been actively involved in the process of procedure/surgery or nursing care (Hasenfuss, & Franceschi, 2003; Isaka, 2006; Matsumori, & Kamoshita, 2006 Yoshitani et al., 2005). Regarding positive effects of preparation for medical aspects, medical professionals have noticed that children provided with preparation needed less
anesthesia, recovered faster, and had a shorter hospital stay (Herwald, 2004; Christian, & Thomas, 1998; Akiyama et al., 2006). At the emergency department, the staff has noticed that staff anxieties were also reduced (Christian, & Thomas, 1998).

There are several differences between CLS and JPN in how they evaluate children’s and families’ reactions and behavior during medical events. CLS address which coping strategies the children and families used, the children’s willingness to engage in the strategies, and how the strategies worked for the children and families (Desai et al., 2002; Hasenfuss, & Franceschi, 2003; Herwald, 2004; Justus et al., 2006; Stephens et al., 1999). As one of the coping strategies, a child helped nurses to take the bandage off from her wounds, which was the scariest part of the procedure for the child. As a result of having a sense of control at the scariest part of the procedure, the child was able to cooperate with the nurses during the procedure (Hasenfuss, & Franceschi, 2003). As for JPN, JPN focus on how much readiness the children have prepared for the procedure/surgery. JPN usually ask children if they think they could get through the procedure/surgery. If the children seem to need more time, JPN recommend waiting for the children’s readiness and decision. JPN judge that a child has gotten ready for the procedure when the child expressed the decision to be involved in the event, such as having tight-lipped mouth, nodding to start the procedure, or said, “Ganbaru” (I’m ready for it) (Handa et al., 2008; Matsukura et al., 2006; Matsumori, & Kamoshita, 2006; Monma et al., 2007; Yoshitani et al., 2005). In addition, how children cooperated with nurses during the procedure is also one of the criteria of evaluating preparation for JPN. When children take a part in the procedure actively, positively, and calmly, such as cooperating without resistance, giving their arms for the IV placement by themselves, or
following the requests of medical professionals, JPN evaluate that the children have gotten emotionally prepared and could overcome the procedure/surgery (Akiyama et al., 2006; Kanda et al., 2007; Matsukura et al., 2006; Monma et al., 2007; Okada et al., 2007; Ohike, 2006; Tannai et al., 2007; Yoshitani et al., 2005).

Research about the Effective Preparation Provided by CLS

There are two experimental studies that determined the effect of the preparation program including CLS’s intervention. Kain et al. (1998) conducted a comparative examination to find out which type of preparation program: (1) a tour of the operation room (information-based), (2) a tour and a commercially available videotape (information and modeling-based), or (3) a tour, a videotape, and child-life preparation (information, modeling and coping-based), is most effective within children ages 2 to 12 years who were scheduled for day surgery. The result of this study was that children and parents who received the information, modeling and coping-based preparation program exhibited lower levels of anxiety during the preoperative period but not during the inter-operative or post-operative periods. The child-life program in this study was tailored to the specific surgery and age of children. The children read a story with photographs illustrated by a doll going through each step that they could experience on the day of surgery and were offered an opportunity to participate in pre-operative activities through medical play.

The other research conducted by Brewer et al. (2006) was a double-blind intervention study that examined 142 children, ages between 5 and 11 years old who were undergoing day surgery. The result showed that children receiving child life preparation for surgery had less anxiety following surgery than those who received routine standard care. The child life preparation program consisted of a tour of surgical area
with developmentally appropriate explanation of the surgery process and opportunities to explore and rehearse with the medical equipment. The preparation addressed children’s anxiety levels and misconceptions regarding surgery. Although Kain et al. (1998) found that child life preparation minimize anxiety in only pre-operative period, this study showed that “child life preparation can continue to minimize children’s anxiety up to one month post-operatively” (Brewer et al., 2006, p.20). Researchers indicated that children’s coping abilities increase and anxiety is relieved through CLS’s preparation of the children.

Those studies show that CLS’s intervention reduced anxieties of children who experienced day surgery. The main interventions provided by CLS were medical play, which were developmentally appropriate and allowed children to rehearse their experiences. As reported in this literature review, similar to CLS, JPN allowed children to play with medical equipment and dolls in order to rehearse the experiences they would have in actual procedure. JPN also attempted to provide preparation along with each child’s developmental level. It was difficult to identify which specific interventions work efficiently for children during preparation in those experimental studies. It seems that the effective outcome of preparation depends on how CLS and JPN interact with children.

Summary

CLS and JPN have similar concepts and attitudes toward preparation of children for health care events, such as diagnosis, hospitalization, and procedure/surgery. The goals and the important points when they interact with children and families are almost the same. In addition, it is difficult to identify which specific methods and interventions work effectively for children during preparation. However, there are several
differences between the way how to approach and how to support throughout the preparation of children.

*The Similarities between CLS and JPN*

Preparation provided by CLS and JPN helps and supports children and families to prepare for and adjust to a difficult situation in a health care setting. Both of them attempt to enhance the children’s and families’ understanding of the situation and reduce their fears and anxieties in a normalized and secure environment. During the preparation, CLS and JPN assess the children’s health condition, developmental level, prior health care experiences, knowledge and understanding of their situation, as well as the children’s and families’ reactions to the children’s health and psycho-social condition.

During the preparation, CLS and JPN inform children and families what they will experience or explain what they have experienced. CLS and JPN convey the correct, accurate, and concrete information that is developmentally appropriate for each child. In order for children and families to understand and adjust to the situation, CLS and JPN plan how to provide information and interact with the children and families. The preparation by CLS and JPN usually includes a hospital tour, medical play, and reading pictures books regarding diagnosis, hospitalization, or procedure/surgery. The children are allowed to have the sensory information so that they could imagine and be ready for the sensations that they will encounter. The children and families are also encouraged to take the initiative, have a sense of control, and manage the situation as much as possible by exploring several choices. In addition, CLS and JPN also help children and families to express their feelings and emotions during the preparation. Through these interactions, the children and families are able to rehearse the children’s upcoming or prior experiences, develop their understanding, and
master the medical environment.

Both CLS and JPN continue to assess children and families by providing additional preparation if needed. The success of preparation creates the positive relationships between children and professionals and brings the positive effects for medical aspects, as well as leads the adjustment of the children and families to the smooth transition from a hospital to the children’s normal life. This process results in reducing the children’s and families’ fears and anxieties, promoting the children’s healthy development, and respecting the rights of children, which is to receive an explanation and be involved in decision-making regarding their health in a developmentally appropriate manner and receive the most comfortable care possible.

*The Differences between CLS and JPN*

The differences of the contents and methods of preparation of children and families between CLS and JPN are:

- The characteristic goal of CLS’s preparation of children is “to facilitate a child’s and family’s coping” while that of JPN’s is “to promote the children’s and families’ emotional/psychological readiness”.

- When obtaining information from the family members, CLS are interested in the family situation. On the other hand, JPN are interested in how well parents think their child understands his/her situation.

- Both CLS and JPN mention the importance of providing children and families with sensory information. CLS usually take children and families on a tour and allow them to explore how they will feel and sense directly. On the other hand, JPN usually inform the sensory matter during medical play by encouraging children to have an image “what it would be like”.

• CLS encourage children and families to express their emotions as one of the coping techniques while JPN tend to be afraid of how to deal with children’s and families’ expression of negative feelings although JPN realize that expressing emotion is important.

• CLS pay special attention to language when they talk with children about diagnosis, hospitalization, and procedure/surgery.

• Regarding how to behave during a procedure, CLS give children a job, such as holding still; by contrast, JPN suggest children how to cooperate with nurses and doctors with reasons for doing so.

• CLS are safe persons for children while JPN directly perform the procedure or nursing care.

• CLS address on which coping strategies children and families used and how the strategies worked for the children and families while JPN focus on whether children and families are ready for the events and how smoothly the event went.

The main difference is the focus on how to help children and families to get through difficult situations and events. CLS support the children and families to find their coping strategies to get through the difficult situation. On the other hand, JPN help children to be actively involved in and overcome the difficult situation by supporting the children’s capabilities, which is to make a “Kakugo” and a “Ganbari” toward the situation. The details are the following:

The Children’s Coping Strategies in Preparation by CLS

During preparation of children, CLS focus on facilitating the children’s coping strategies. CLS provide children and families with a variety of coping techniques based on the assessment of children’s and families’
coping styles and the children’s developmental level, stressors, and personality. Through the interaction with the children and families, CLS support the children in choosing which coping techniques apply or work best for the children or creating the new coping strategies for the children. In order to find out the most effective coping strategies for each situation, CLS value informing children what they will exactly sense or feel. Thus, CLS usually take the children and families on a tour in the hospital and provide medical play. Through medical play, children receive ideas what they need to do during the procedure by suggesting as a “job” that would help with the nurses and doctors. Then, CLS allow the children to rehearse not only what the children will experience but also rehearse various coping techniques. When CLS provide the children with an explanation verbally, CLS are careful to choose the words and phrases that are developmentally appropriate and minimally threatening. Through these interventions with the children and families, CLS support the children in making an image of what they can do to make things run as smooth and easily as possible. CLS also take the emotional expression as one of the coping techniques. During the procedure, CLS encourage the children to perform their own coping strategies. CLS sometimes accompany with the children, advocate, and coach their coping strategies during the procedure. Throughout the successful preparation, CLS believe that the children enhance their abilities to cope with a difficult situation not only that they are facing at that time, but also they will face in the future.

*The Children’s Effort in Preparation by JPN*

Through the preparation of children and families, JPN attempt to bring out the children’s capabilities that the children potentially have for getting through difficult events related to diagnosis, hospitalization, and
procedure/surgery. The capabilities that JPN focus on the preparation are the ability to make a decision, called “kakugo,” and the ability to make an effort for keeping the “kakugo”, which is called “ganbari”. In the preparation process, JPN help children to get emotionally and psychologically ready for the situation that the children need to face with “kakugo,” “ganbari,” and minimal fears and anxieties. After assessing the children’s understanding of the situation, their developmental level, and their stress level, JPN provide the children and families with information addressing the process of what they will experience, as well as several suggestions of what the children can do and what the nurses and doctors want them to do during the event. JPN usually encourage children to play with medical equipment and dolls or read books about diagnosis, hospitalization, and procedure/surgery. Through those activities, children are able to have an image of what they will face, what they need to do, and the reasons for the event. Then, JPN help the children to make a “kakugo” to have the event and support the “ganbari” during the event. Before the event, JPN confirm the children’s readiness, asking them whether they could “ganbaru” (get through) the procedure. During the event, JPN continue to support the children’s “ganbari” and encourage them to follow the nurses’ directions. If the children ask the JPN to wait for a while, the JPN attempts to wait for the children until they make a “kakugo” again. By overcoming the difficult situation successfully, JPN believe that children realize their strengths and gain self-esteem and self-efficacy.
SECTION III: CONCLUSION

Implications from the Literature Review

This literature review found several differences of preparation between CLS and JPN. The main difference was their focus on how they help children and families to get through difficult situations and events related to health care experiences. CLS focused on finding and supporting the child’s coping strategies to adapt to a difficult situation. Whereas, JPN paid attention to the children’s abilities of making a “kakugo” and a “ganbari” in order to help the children to be actively involved and overcome a difficult situation. Since the process of preparation helps children to get through a difficult condition, this process can be said to apply to one part of a child’s coping process. Thus, this section is going to discuss how the CLS’s and JPN’s focuses support children’s coping process by considering what the strengths of CLS’s and JPN’s preparation are and how each of their focus works effectively when preparing children. In addition, based on the discussion, suggestions of how CLS and JPN could corroborate with each other when providing preparation.

What the Strength and Effectiveness of CLS’s and JPN’s Preparation?

Coping of Children in a Health Care Setting

There are several different definitions of coping. From a process perspective, the most widely used theory of stress and coping is introduced from the research of Lazarus. Lazarus and Folkman (1984) define that coping is “constantly, changing and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (cited Chess, Thomas, & Hertzing, 1988, p.213). Zeitlin and Williamson (1994) also define that “coping is the process of making
adaptations to meet personal needs and to respond to the demands of the environment and is directed to the generation of effortful responses” (p.12). Thus, coping is the process of managing and adapting to the demands of the person-environment relationship. The demands are appraised as stress. The appraisal is the key to understand the ways that each person copes and his/her emotional reaction (Rollins et al., 2004). In the coping process, the specific actions, called coping efforts/strategies, are taken in order to manage and adapt to the appraised stressful events. The efforts are cognitive and behavioral strategies, including accepting, tolerating, and avoiding. In contrast, coping style is the certain types of methods that an individual usually uses when he/she faces stressors. Since people learn coping strategies from infancy and onward, coping style might become a characteristic way of individualistic behavior. (Chess et al., 1988; Zeitlin & Williamson, 1994).

Zeitlin and Williamson (1994) illustrate a coping process model. The process has four steps: (1) determine the meaning of the event, (2) develop an action plan, (3) implement the coping effort, and (4) evaluate the effectiveness of the outcome. This process is transactional, which is the entire process and result in a conclusion. They insist that although each person copes with stress differently, the overall process is the same, regardless of age, culture, life experience, or many other different variables. On the other hand, coping outcomes are influenced by which resources are available for the individual. Coping resources include: “belief and values,” “physical state and affective state,” “knowledge and skills,” “coping style,” “human support,” and “material and environmental support” (Zeitlin & Williamson, 1994). Some resources are useful for effective coping more than others in different situations, cultures, and ages. Although the components of
the coping process is the same for all individuals, some considerations and alterations are required when applying the theory of coping strategies to the actions of children (Chess et al., 1988). That is because children are learning many coping strategies and models from others around them and trying several acquired coping strategies and models at one time. Thus, children’s coping styles are changing and developing (Rollins et al., 2005). In addition, since children are on the way of cognitive development, children’s coping efforts might be limited and be difficult to evaluate (Chess et al, 1988).

Regarding children in a health care setting, they are facing a lot of difficulties. CLC (2006) lists the factors that children most generally and routinely feel, fear, and stress. Those are followings:

- Separation from parents
- Any procedure involving a needle
- Waiting times, when realistic and fantasy-based fears can potentiate
- Any procedures that will be likely to cause pain or unfamiliar sensations
- Rectal or genital exams and procedures, as well as being exposed in the presence of others
- Large numbers of adults simultaneously involved in care
- Unfamiliar procedures, settings, or equipment (P.21)

Children will experience one or many of these potential stressors in a health care setting. There are some studies that have examined children’s coping related to their health care experiences. Katsuta, Katada, Ebina, Ninomiya, Handa, Suzuki et al. (2001) addressed that children’s experiences of procedures was beyond the explanation of common theories because children were scared and had anxieties during the experience.
Altshuler, Genevor, Rubele, and Bomstein (1995) conducted research regarding children’s awareness of coping strategies. The results showed that age, considered in combination with problem-solving skills and gender, is a meaningful developmental factor to consider in children’s coping knowledge and coping behaviors. They also found the difference between children’s coping knowledge and observed behavior. The result indicated that children, when under stress, might be unable to put coping strategies that they were able to demonstrate previous times into effect without specific support from others. Cohen, Bernard, and Greco (2002) examined that children’s coping strategies with immunization pain, although children previously demonstrated coping skills that they had learned, was not used during the actual procedure. Researchers indicated that children ignored coping strategies and chose to follow the nurse’s instruction during the procedure, or children applied the coping skills, but it did not result in less stress.

Those theories and studies show that coping is a process of efforts that deal with stressful events. People acknowledge their stress, and then plan to employ techniques for managing the event by using available resources. Although the process of coping is the same for all people, it is possible that children in a hospital setting experience too much stress to perform their coping style and to use their coping strategies as usual. They need special support in looking for and achieving their coping strategies.

*The Effectiveness of CLSs’ Preparation of a Child*

CLS focus children’s coping strategies throughout preparation. Both CLS and the other medical professionals consider that preparation is the major responsibility for CLS and that facilitating coping behavior is one of the key elements of their preparation (AAP, 2006; Brewer et al., 2006; Bandstra et al.,
2008; Cole, Diener, Wright, & Gaynard, 2001). CLS provide children with various kinds of coping techniques and strategies. Those varieties seem to come from how to use children’s coping resources. CLS could use their strong knowledge of child development and understanding of coping, impacts of disease, family systems, and diseases/injuries, CLS could assess children, seek available coping resources, arrange those resources as coping techniques, and offer them to children in a developmentally appropriate manner. Through preparation, CLS provide children with those coping strategies, allow them to choose and try the strategies, and support them in performing the strategies.

Since the coping resources have effects on the coping outcomes, coping strategies provided by CLS affect the outcomes of preparation. However, the person who would choose and decide how to use the coping strategies is the child. CLS only assist the process of the child’s choice and performance during the preparation. Thus, the outcomes of preparation depend on each child. Therefore, CLS’s interaction with children during preparation might bring the children a sense of control and self-confidence for managing the event by themselves. In addition, CLS may assist children in learning how to cope with a difficult situation by allowing the children to choose, plan, and practice their coping resources.

The Effectiveness of JPN’s Preparation of Children

JPN help children to realize and use their abilities to make a “kakugo” and a “ganbari” during preparation. Several studies demonstrated the appearance of “kakugo” and “ganbari” during children’s health care experiences. Katsuta et al. (2001) examined the children’s experience when they faced a procedure and found the specific children’s behavior, called “kakugo.” They defined this behavior as the children’s voluntary
attitude toward the procedure with well-balanced cognitive, emotional, and psychomotor manner. They explained that through having a procedure, children were facing a conflict between “I want to escape from it,” and “I know I have to do it,” but overcame the conflict by making a “kakugo.” Matsumori (1995) also reported that children tried to balance their fears and conflicts by using a “kakugo” and a “ganbari” when they were having the procedure. In addition, other studies showed that bringing out and supporting children’s “kakugo” and “ganbari” are the JPN’s roles during the procedure (Ninomiya, Ebina, Handa, Katada, Katsuda, Suzuki et al., 1999; Taya, Nishimura, Ohno, Inoue, and Takatsubo, 2005). Taya et al. (2005) also described that nurses encouraged all people who were involved in the children’s procedure to feel together in order to support the children’s “ganbari” during procedure. Those JPN’s attitudes appeared frequently at their preparation of children.

Those research show that “kakugo” and “ganbari” promote children’s efforts to overcome a conflict and a difficult situation. Thus, those efforts are a part of children’s coping efforts. JPN provide preparation by concentrating this part of coping efforts and guide children to accomplish their efforts. Through preparation, JPN assist children with making a “kakugo” by helping them understand the fact that there is something that the children need to face, the role of medical staff who are not scary people but help children to feel better, and what children will experience with accurate and concrete information. With the knowledge of relationship among body functioning, medical treatment, and diseases, JPN could accurately and concretely explain to each child the upcoming experiences and its purposes. In addition, JPN attempt to share the goal of achieving children’s procedure successfully among the children and other professionals and share the
children’s coping process. That is possibly because JPN exactly perform a procedure on children and wish to get through it in collaboration. Therefore, JPN’s interaction with children might strengthen the children’s self-efficacy and self-confidence as the children are gaining recognitions for their efforts and overcoming the difficult situation.

**Conclusion**

The methods and intervention of preparation by CLS and JPN were similar to each other. Both CLS and JPN provided preparation for children and families with the goals of enhancing children’s and families’ understanding and reducing their anxieties related to their health care experiences. Children and families received accurate and concrete information that was developmentally appropriate for children through being encouraged to have a sense of control. It was difficult to identify which specific methods and intervention of CLS and JPN work effectively for a child during preparation. However, the CLS’s and JPN’s viewpoints when providing preparation were different. CLS focused on children’s coping strategies while JPN focused on children’s ability to make a “kakugo” and a “ganbari.” Those differences were also related to supporting the children’s coping process; CLS just supported children in coping although they offered a lot of appropriate resources to children. In contrast, JPN attempted to guide and be involved in the children’s coping process in order to achieve medical success for the children.

Although this literature review identified similarities and differences between preparation by CLS and JPN, further research should be attempted to directly observe both CLS’s and JPN’s preparation of children in order to confirm the result of this literature review. In the observation, the different and overlapping
effectiveness of preparation should be observed and measured with CLS and JPN involvement during preparation.

Recommendation of How to Collaborate with CLS and JPN

CLS and JPN provide children and families with preparation with a sense of common purpose, which is essential in collaborating with each other. On the current state of the pediatrics in Japan, there is one or no CLS in a pediatric ward, even in a children’s hospital. Although it is important for children and families to receive support from a professional throughout hospitalization as reflected in Thompson’s and Stanford’s guideline (1981), it seems necessary to consider the division of roles between CLS and JPN.

Since JPN attempt to make children focus on their ability to make a “kakugo” and a “ganbari” and encourage them to be actively involved in the procedure, JPN could have responsibility for preparation for routine and daily procedure. JPN would be the best person to judge the timing of the preparation and support children’s feelings because JPN always there for the children and could notice any changes of the children physically and emotionally. In addition, JPN could make children’s and other professionals’ feelings get through the procedure together by concentrating on the children’s specific effort, “kakugo” and “ganbari”; waiting for children making a “kakugo” and a “ganbari” and supporting children’s “ganbari.” However, it is sometimes too difficult for children to make a “kakugo” and “ganbari.” If children have failed to balance their conflicts in their mind, the children might feel that they are forced to make a “kakugo.” Such children would not be able to take the initiative during the procedure. In another issue, children are just overwhelmed because there is too much stimuli in a hospital. Such children would not be easy to make extra decisions. In addition,
since JPN has a lot of duties during the shift, it is frequently difficult to take enough time to provide preparation.

In such a challenging situation, it might be useful of CLS’s variety of coping strategies. CLS could approach any child and situation with the skills of finding the appropriate resources and arranging those resources for each child. CLS could also expand JPN’s preparation by providing children and families with a pre-administration or pre-operational tour before hospitalization or surgery, distraction techniques during procedure, and post-operation/surgery play activities. In addition, since CLS have a strong knowledge of child development, CLS could have responsibility for educating the other medical professionals about the characteristic reactions of children during medical events in each developmental level, developmentally appropriate intervention, and what child-friendly language is.
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Monma, K., Ishikawa, T., & Someya, N. (2007). How to interact with the child who is scared and feels loneliness: In case the child is going to have surgery. *The Japanese Journal of Child Nursing, 30*(13), 1831-1837

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Appendix A

Sources of Literature Review (Child Life Specialists)

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<td>Jessee et al., 2000</td>
<td>Review</td>
<td>Explanation of medical play</td>
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<td>Stephens et al, 1999</td>
<td>Review</td>
<td>Techniques to comfort children, Concept of preparation</td>
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<td>Brewer, &amp; Lambert, 1997</td>
<td>Review</td>
<td>Preparing children for same day surgery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Tour, medical equipment, Album)</td>
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<td>Desai et al., 2002</td>
<td>Review</td>
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<td>The use of Stuffed, Body-Outline Dolls</td>
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<td>Rollins et al., 2005</td>
<td>book</td>
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<td>Thompson, &amp; Stanford, 1981</td>
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<td>Preparing children for medical encounters</td>
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<td>CLC, 2006</td>
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<td>Stress point care and psychological preparation</td>
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<td>Hasenfuss, &amp; Franceschi, 2003</td>
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<td>Collaboration of nursing and child life</td>
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<td>An emergent surgical resection</td>
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<td></td>
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<td>Surgery, Introduction of a preparation program</td>
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<td>Diabetes education (game, models)</td>
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<td>Case report</td>
<td>Child life in a refugee and immigrant advocacy organization</td>
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<td>Brewer et al., 2006</td>
<td>Research report</td>
<td>Surgery (tour, medical equipment)</td>
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<td>Research report</td>
<td>Surgery (tour, album, pictures, dolls, book)</td>
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**Sources of Literature Review (Japanese Pediatric Nurses)**

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<td>review</td>
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<td>review</td>
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<td>Tanaka et al., 2003</td>
<td>Review</td>
<td>Important points of preparation, Methods of preparation</td>
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<td>Review</td>
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<td>Surgery, dolls, model, medical equipment</td>
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<td>Case study</td>
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<td>Surgery (dolls, models, medical equipment)</td>
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<td>Case study</td>
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<td>Case study</td>
<td>Surgery (picture book, dolls, brochure)</td>
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<td>Case study</td>
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<td>Monma et al., 2007</td>
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<td>Surgery (dolls, medical equipment, models)</td>
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<td>Handa et al., 2008</td>
<td>Case study</td>
<td>A cardiac catheter test (models, dolls)</td>
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<td>Kanda et al., 2007</td>
<td>Report</td>
<td>Surgery (Picture book, medical equipment, dolls, models)</td>
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<td>Report</td>
<td>Injection (Picture book)</td>
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<td>Nakamura et al., 2006</td>
<td>Report</td>
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<td>Report</td>
<td>Distraction (bottles)</td>
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<td>Okada et al., 2007</td>
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<td>Takahashi et al., 2006</td>
<td>Research report</td>
<td>Introduction of preparation</td>
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Appendix B

Check List (for Age 5 to 7)

If you did not ask the parents/child the items below, write the reasons into ( ).

Before Procedure (for the child’s parents)

☐ Asked the parents if they understood about the procedure. (  )

☐ Asked the parents if they understand how the procedure would be performed. (  )

☐ Asked the parents if they understood the purpose of the procedure. (  )

☐ Asked the parents if they understood expected physical changes of their child after the procedure. (  )

☐ Assessed the parents’ feelings and thoughts about the procedure. (  )

☐ Discussed with the parents who would be better to explain about the procedure to the child. (  )

☐ Discussed with the parents what information the child needs. (  )

☐ Asked which would be better for parents: to be present with the child or not during the procedure. (  )

Before the procedure (for the child)

☐ Asked the child if he/she heard about the procedure from doctors, nurses, or parents. (  )

☐ Asked the child how long before he/she would like to know about the procedure. (  )
When did you tell the child about the procedure?

- Just before the procedure, ( ) hour before, ( ) days before

Told the child the purpose when you invited the child to the procedure. ( )

Asked the parents to be present when the nurse/doctor explained about the procedure to the child. ( )

Talked with the child at his/her eyes level. ( )

Decided whether the parent would be present or not, according to the child’s opinion. ( )

Assessed the child’s feeling whether he/she had made the decision to have the procedure. ( )

Judged the timing of the child’s decision and promoted his/her decision. ( )

Created the environment where the child would feel secure. ( )

During the procedure (for the child’s parents)

In case the parents are not present

- Explained where the parents should stand. ( )

- Explained which part of the child’s body the parents could or could not touch. ( )

- Explained how to interact with the child during the procedure. ( )

In case the parents are present

- Told the child where the parents were. ( )

- If the procedure was long and drawn out, explained the reasons to the child. ( )

During the procedure (for the child)
Told the child what was going on. ( )

Answered/Responded to the child’s question and concerns. ( )

Communicated with the child according to the child’s “ganbari” (effort). ( )

When the child cried, did not restrict him/her and used the other methods. What methods did you use? ( )

Allowed the child to bring what he/she wanted. ( )

Distracted the child from the procedure. ( )

Created the environment where the child concentrated or cooperated with the nurses/doctors. ( )

Did not talk about what was unrelated to the procedure with medical staff during the procedure. ( )

Did not imply that the procedure had been done before the procedure exactly finished. ( )

After the procedure (for the child’s parents)

In case the parents are present

Encouraged the parents to praise the child’s effort. ( )

Expressed our thanks to the parents for their cooperation. ( )

In case of the parents are not present

Assessed the parents’ feelings and told the end of the procedure. ( )

Told how the child was doing during the procedure. ( )
Encouraged the parents to praise the child’s effort. ( )

Both cases

Double-checked with the parents what they need to be careful of regarding the child after the procedure.

After the procedure (for the child)

Told the end of the procedure. ( )

Praised the child’s “ganbari” (effort) through showing the actual materials used during the procedure.

( )

Explained about what the child needs to be careful of after the procedure. ( )

(Ebina, 2008, p.581)
Appendix C

Suggestions of Coping Techniques

Nonpharmacological Strategies

<Behavioral strategies>

Behavioral distraction, Desensitization, Medical staff coaching, Modeling, Parent coaching, Parent training, positive reinforcement, Rehearsal,

<Cognitive strategies>

Breathing exercises, Cognitive distraction, Comforting, Reassurance, Coping self-statements, Hypnosis, Imagery, Memory change, Progressive muscle relaxation, Providing information, Relaxation training, Suggestion, Thought-stopping, Virtual reality

<Complementary strategies>

Medical play, Therapeutic art, Therapeutic play, Therapeutic use of music

<Physical strings>

Comfort positioning, Healing/Therapeutic touch, Heat/Cold therapy, Massage,

Spot-pressure/Counter-irritation

(Bandstra et al., 2008, P.322)
Coping Kit Items

<For Infant>

Pacifiers, rattles, Lullaby music, Mobiles

<For Toddler>

Bubbles, Pop-up books,

<For preschooler>

Bubbles, Magic wands, Feathers, Aek and find/flap-up books, play-doh, Action figures

<For school-age>

Imaginary aids, Bubbles, Books: Ispy, Story Tapes, Video games, Stickers, Sand/Water timers

<For adolescent>

Relaxation tapes, Massage, Stress balls

(Hasenfuss, & Franceschi, 2003, p.363)

Coping Intervention

Interdisciplinary Interventions, Incentive chart, Family Centered schedule, Special language, Consistency, Time out coupons, Coping kits, Incorporating mother into distraction tasks, Premedication for all procedures, Age-appropriate pain scale to guide interventions

(Hasenfuss, & Franceschi, 2003, p.361)
Suggestion of Strategies during Procedure

Sitting on a caregiver’s lap, Turning head away from the procedure, Watching the procedure,

Holding (squeezing) a parent’s or health care provider’s hand, Watching television, Diversional object,

Talking with someone (to divert the child’s attention), Concentrating on soothing. Listening to music,

Watching someone blowing bubbles, Crying, Cognitive challenges, Using positive imagery,

Gentle breathing or blowing the feeling away, and Listening to a story

(Gaynard et al., 1998, p.99)