

**EFFECTIVENESS OF PLAY THERAPY ON
PERCEIVED STRESS EXPERIENCED BY
HOSPITALIZED TODDLERS**

By

SHEELA JOHN



**A DISSERTATION SUBMITTED TO THE TAMILNADU
Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI IN PARTIAL
FULFILMENT OF THE REQUIREMENT FOR
THE DEGREE OF MASTER OF SCIENCE IN NURSING**

April 2012

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CERTIFICATE

Certified that this is the bonafide work of **Ms. SHEELA JOHN**, Dr.G.Sakunthala College of Nursing, Trichy, submitted in partial fulfilment of the requirement for the degree of Master of Science in Nursing from the Dr. M.G.R. Medical University, Chennai.

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TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ethical committee of Dr. G. Sakunthala College of Nursing has discussed with its members the topic “A true experimental study to evaluate the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers” opted by **Ms. SHEELA JOHN** and its implication on study subjects for her thesis for M.Sc Nursing programme and the committee passed clearance for the same topic for her to persue.

Prof. Mrs. SANTHAM SWEET ROSE, M.Sc(N), Ph.D

Ethical Committee

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“To you alone, O Lord, to you alone, and not to us, must glory be given because of your constant love and faithfulness”

- Psalms 115:1

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ABSTRACT

A true experimental study to determine the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers was undertaken by Ms. Sheela John in partial fulfillment of the requirements for the degree of Master of Science in Nursing under Dr.M.G.R. Medical University, Chennai.

Objectives of the study

1. To assess the level of perceived stress experienced by hospitalized toddlers in experimental and control group before play therapy.
2. To evaluate the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers in the experimental group.
3. To compare the level of perceived stress between the experimental group and control group after play therapy.
4. To associate the level of perceived stress with selected demographic variables of the hospitalized toddlers in the experimental group.

Conceptual framework	:	Roy's adaptation model
Research Design	:	True experimental - pretest posttest control group design
		E – R O1 X O2
		C – R O3 O4
Population	:	Hospitalized toddlers
Sample Size	:	30 in control and 30 in experimental group
Sampling Technique	:	Simple random sampling

Setting : Children's ward
Child Jesus Hospital, Trichy

Tool : Observation checklist

Data collection

Pre assessment was done for both experimental and control group. Play therapy was given for 20 minutes for 2-3 times a day for 3 days only for experimental group. Then post assessment was done for experimental and control group.

Data Analysis

Descriptive statistics (Frequency, percentage, mean and standard deviation) and inferential statistics (Paired t test, independent t test and Chi square test) were used to test the research hypotheses.

Major Findings:

1. There was improvement in the appearance, coping, emotional, psychosomatic and biological responses among hospitalized toddlers in the experimental group after play therapy better than the control group.
2. There was no significant association between demographic variables and the post assessment appearance, coping, emotional, psychosomatic and biological response scores of the hospitalized toddlers in the experimental group.

Conclusion

Play therapy is the best and most effective intervention. Play therapy improves the appearance, coping, emotional, psychosomatic and biological responses of the hospitalized toddlers. Play therapy is welcomed by all children and their parents.

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CHAPTER – I

INTRODUCTION

Play is the universal language of childhood. It is through play that children understand each other and make sense of the world around them. Just as the adult works, so does the child play. Play is the business of childhood. Children develop their physical and intellectual abilities during play. Play can help develop creativity and provide a therapeutic release from stress and tension produced by environmental influences. (Dorothy and Reddins 2002)

Play is the mechanism through which children cope, learn, test new ideas and test newly acquired psychomotor skills. Play is the mechanism through which children grow and develop. Play also provides the child with a sense of control. (Bowden, Dickey and Greenberg 2009)

Play is essential to children's mental, emotional and social well-being. As with their developmental needs, the need for play does not stop when children are ill or when they enter the hospital. (Hockenberry and Wilson 2007)

Illness and hospitalization are the first crisis children must face. Hospitalization is often confusing, complex and overwhelming for children and their families. Reactions and responses to illness and hospitalization depend on a number of factors, including the unique characteristics and common situations associated with each developmental stage. (Hockenberry and Wilson 2007) Especially during the early years, children are particularly vulnerable to the crisis of illness and hospitalization because stress represents a change from the usual state of health and environmental routine and children have a limited number of coping mechanisms to resolve stressors (those events that produce stress). (kyle 2009)

Major stressors of hospitalization include separation from parents and loved ones, fear of the unknown, loss of control and autonomy, bodily injury resulting in discomfort, pain, mutilation and fear of death. Children's reactions to these crisis are influenced by their developmental age, their previous experience with illness, separation or hospitalization, their innate and acquired coping skills, the seriousness of the diagnosis and the support system available. The principal behavioral responses of young children to separation anxiety are manifested in three phases, phase of protest, phase of despair and phase of detachment. Children may react to the stressors of hospitalization before admission, during hospitalization and after discharge. (Hockenberry and Wilson 2007)

Toddlers are striving for autonomy, and this goal is evident in most of their behaviors – motor skills, play, interpersonal relationships, activities of daily living and communication. When their egocentric measures meet with obstacles, toddlers react with negativism, especially temper tantrums. Any restriction or limitation of movement, such as the simple act of laying toddlers on their backs, can cause forceful resistance and noncompliance. Loss of control also results from altered routines and rituals. Toddlers rely on their consistency and familiarity of daily rituals to provide a measure of stability and control in their life. The experience of hospitalization or illness severely limits their sense of expectation and predictability, since practically every detail of the hospital environment differs from that of home. (Hockenberry and Wilson 2007)

Their main areas of rituals include eating, sleeping, bathing, toileting and play. When the routines are disrupted, difficulties can occur in any or all of these areas. The principle reaction to such change is regression. Enforced dependency is a chief characteristic of the sick role and accounts for the numerous instances of toddler negativism. Although most toddlers initially react negatively and aggressively

to such dependency, prolonged loss of autonomy may result in passive withdrawal from interpersonal relationships and regression in all areas of development. (Hockenberry and Wilson 2007)

The challenge for nurses is to adapt practices by supporting the physical, emotional and developmental needs of the child and family while reducing costs without negatively influencing the quality of care provided. (Dorothy and Reddins 2002)

Play therapy is one form of individual therapy developed to address the needs of children in therapy. It allows children the freedom to experience their concerns and fears in a nonthreatening environment with an accepting and attentive adult. Play therapy is based on the assumption that play is therapeutic. In therapy, play becomes the medium by which the child explores life problems, developmental issues and interpersonal conflicts. (Bowden, Dickey and Greenberg 2009)

Play therapy in hospital promotes optimal learning and development, provides positive experiences and opportunities for enjoyment, distracts from pain and treatment, encourages healing, enhances self-esteem and confidence, enables communication, creates an environment where stress and anxiety are reduced and bridges the gap between home, early childhood centre or school and hospital. (kyle 2009)

Play therapy in hospital provides the child with opportunities for expression of emotions, meaningful decision making and re-establishing a sense of control, learning about, understanding and clarifying any misconceptions about their illness, the hospital and/or specific medical procedures and treatments and learning and practicing effective coping skills and mechanisms for the purpose of pain management and anxiety control. (Hockenberry and Wilson 2007)

SIGNIFICANCE AND NEED FOR THE STUDY

Hospitals can be difficult places for young children and their families to be. In hospital, children may find strange faces, different routines, strange beds and equipment, limited family contact, unfamiliar surroundings, different smells, foods, sounds, painful and frightening procedures, interruption of school work, forced dependency, lack of privacy, guilt, shame and worry about body integrity and death. These all provide stress in a hospitalized child.

Illness itself, can produce stress in all of us and when hospitalization is added to illness, that stress is increased. Studies have shown that hospital experience can seriously influence a child's development. Negative hospital experiences can interfere with a child's rehabilitation and recuperation and can inhibit normal growth and development.

Caring for a child's psycho-social state is vital for normal growth and development. It is not unusual for a child to react to being in hospital by expressions of protest such as crying, tantrums, shaking, thumb sucking, bedwetting, refusing to eat, being withdrawn and rejecting adults around them. They may also exhibit signs of restlessness, exhaustion, regression from known developmental stages, depression, apathy and dissociative reactions such as amnesia. All these reactions are common in hospitalized children but can be worked through with the child to help the child better cope with their situation.

Toddlers are the group most at risk for a stressful experience as a result of illness and hospitalization. This age group is old enough to understand that their routines have been disrupted, but they lack the cognitive ability to understand why separation from parents is the major stressor and they protest vigorously when their parents depart. (Hockenberry and Wilson 2007)

Kyle (2009) emphasized that toddlers are often fearful of strangers and can recall traumatic events. Disruptions in usual routines also contribute to loss of control and the toddler feels insecure. As a result, regression in toilet training and refusal to eat are common reactions in toddler age group.

Hockenberry and Wilson (2007) stated that toddlers main areas for rituals include eating, sleeping, bathing, toileting and play. When these routines are disrupted, difficulties can occur in any or all of these areas. The principle reaction is regression.

Dorothy and Reddins (2002) stated that play during toddler period stimulates all areas of growth and development. As the child grows, the social importance of play increases. Play therapy is used to help meet the emotional needs of children who have an illness or surgery that require hospitalization. Play therapy is a way to help children with issues they may have around hospitals and hospitalizations. It can also help to reduce stress in a child.

Mc Kinney (2000) insisted that toddlers spend most of their time at play. Play is a serious business to the toddler-it is the work of the child. Many hours are spent each day in play perfecting fine and gross motor skills, learning to control inner urges and gaining self esteem. Play during their period reflects the developmental level of the egocentric toddler.

Play therapy helps children in hospital to adjust to a strange environment, reduce stress, express their concerns about being in hospital, familiarize them with hospital staff and their roles, cope with hospital routines, learn about their illness and how to cope with treatments, meet and get to know other children, offers diversion / distraction for children undergoing treatment and medical preparation. It is challenging for nurses and health care professionals to include play therapy to reduce stress in hospitalized children. Play therapy performs a vital role. It stimulates

the child's sense of curiosity. Play therapy can provide a release from stress and tension for individuals of all ages.

Through play therapy child can gain better understanding of hospitalization and surgery and learn to adapt to the stress that these entail. It helps child to cope better. Play therapy is conceptualized as an important part of holistic nursing care.

Children who were admitted in the hospital were found to be cheerful when they saw the sight of any toy. They came forward smiling to grab it and played with it, thus showing a release from stress. Investigator during her clinical posting as a part of her academic requirements, witnessed children exhibiting negative reactions towards the effects of their hospitalization and so decided to conduct a study through play intervention to overcome the negative reactions.

STATEMENT OF THE PROBLEM

A true experimental study to evaluate the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers at Child Jesus Hospital, Trichy, 2011

OBJECTIVES OF THE STUDY

1. To assess the level of perceived stress experienced by hospitalized toddlers in experimental and control group before play therapy.
2. To evaluate the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers in the experimental group.
3. To compare the level of perceived stress between the experimental group and control group after play therapy
4. To associate the level of perceived stress with selected demographic variables of the hospitalized toddlers in the experimental group

RESEARCH HYPOTHESES

At $P < 0.05$ level

- H1: There would be a significant difference in the level of perceived stress experienced by hospitalized toddlers in the experimental group after play therapy.
- H2: There would be a significant difference in the level of perceived stress between experimental and control group after play therapy.
- H3: There would be a significant association between the level of perceived stress and selected demographic variables of the hospitalized toddlers in the experimental group.

OPERATIONAL DEFINITION

Effectiveness

It is defined as a result produced by agents, actions or force.

In this study, it refers to the way by which the rendered play therapy proves positive in reducing the perceived stress in hospitalized toddlers.

Play Therapy

It is an act of fun and games provided to children who are hospitalized which helps in reducing stress and anxiety.

In this study, it refers to a type of activity offered to hospitalized toddlers involving age appropriate toys to reduce perceived stress, given for 20 minutes 2-3 times a day for 3 days, under the supervision of the investigator, as measured by using observational checklist.

Play materials used were

1-2 years

Toys with noise, lots of objects to play with and touch, scribbling and painting, songs, music and rhymes and story book read to them.

2-3 years

Mechanical toys with cause and effect mechanism, tricycle, crayons, small mechanical type of toys that produce action or sound, building blocks, clay, spoon and measuring cups, wooden puzzles, push and pull toys and kicking balls.

Perceived Stress

Mental trauma experienced by children admitted in the hospital due to absence of loved ones, parents, siblings, friends and unfamiliar surroundings.

In this study, it refers to the disturbance in the appearance, coping response, emotional response, psychosomatic response and biological response of the toddler due to hospitalization as measured by observational checklist.

Appearance

It refers to the behavioral response of the hospitalized toddler which involves the following:

Active and alert, clean and neat, cheerful and happy, shy and timid, dull and withdrawn, anxious and disinhibited, depressed and tearful and looks frightened.

Coping response

It refers to the behavioral response of the hospitalized toddler which involves the following:

Co-operates to take drugs, co-operates to nursing care, engages in reading and other activities, obeys commands and adjusts to unfamiliar environment.

Emotional response

It refers to the behavioral response of the hospitalized toddler which involves the following:

Irritable, exhibits temper tantrums, screams and shouts, destroys things, shows separation anxiety, feels isolated and bored, turns face away while interacting, clings to care giver, does not have interest in interacting with other children, demands care givers attention and aggressive towards people.

Psychosomatic response

It refers to the behavioral response of the hospitalized toddler which involves the following:

Has difficulty in lying down for a long time, becomes over tired and complains of aches.

Biological response

It refers to the behavioral response of the hospitalized toddler which involves the following:

Loss of appetite, disturbance in sleep and vomiting.

HOSPITALIZED TODDLERS

It is the age group between ages of 1 and 3, who were admitted in the hospital.

In this study, it refers to the toddlers between the age group of 1 and 3, who were admitted in the hospital for at least 3 days.

ASSUMPTIONS

1. Children normally experience stress when admitted in hospital.
2. Play Therapy reduces stress among children during hospitalization.
3. Nurses should integrate the importance of play therapy to the children along with other nursing measures.

DELIMITATIONS

The study was delimited to

1. 6 weeks.
2. 60 samples.
3. hospitalized toddlers.

CHAPTER – II

REVIEW OF LITERATURE

INTRODUCTION

It is a critical summary of research on a topic of interest, often prepared to put a research problem in context or as the basis for an implementation project.

- Polit and Beck (2004)

The aim of this systematic review is to summarize the best available information regarding Play Therapy. The most current information regarding play therapy helps to provide adequate knowledge and better practices. The investigator must probe into the available resources, documented information and studies.

Play therapy is used to help meet the emotional needs of children who have illness or surgery that requires hospitalization. Being in the hospital is stressful for children and their families. Sometimes, children feel scared, confused, and out of control. Play therapy is used to help children understand and cope with illness, surgery, hospitalization, treatments and procedures.

Review of literature is divided into two categories

1. Literature related to stressors of hospitalization.
2. Literature related to efficacy of play therapy in hospitalized children.

LITERATURE RELATED TO STRESSORS OF HOSPITALIZATION

Kyle (2009) stated that hospitalization is often confusing, complex and overwhelming for children and their families. Reactions and responses to illness and hospitalization depend on a number of factors, including the unique characteristics and common situations associated with each developmental stage.

Bowden, Dickey and Greenberg (2009) stated that children tend to respond to hospitalization with emotional upset. Children react negatively to stressors of hospitalization with separation anxiety, loss of control and unrealistic fears. These responses are often manifested in aggressive behaviors including crying, screaming, withdrawing, kicking, biting, hitting, physically resisting procedures or ignoring requests.

Lindholm et al (2009) conducted a study on infants and toddlers, remembering and forgetting of a stressful medical procedure. The purpose was to examine whether a distressing medical procedure leaves lasting impression in young children's memories. The sample consisted of a total of 172 children between 12 weeks to 78 weeks. It was concluded that stress during medical procedures in preverbal children may develop as a result of prior experience of such procedures. These memories were typically seen to fade within 6 months.

Hockenberry and Wilson (2007) stated that major stressors of hospitalization include separation from parents and loved ones, fear of unknown, loss of control and autonomy, bodily injury resulting in discomfort, pain, mutilation and fear of death.

Bernard (2002) in his article on stress in children-can nurses help? discussed the sources and effects of stress, stress reducing techniques and implications for

paediatric nurses. It was concluded that health care professionals should be able to recognize and manage stress in the course of treatment, as it can develop psychiatric disorders, trigger the onset of physical diseases, mask the underlying organic pathology, compound the treatment complexity and prolong the treatment duration and lead to iatrogenic complications due to misdiagnosis. Paediatric nurses are in a prime position to handle stresses in clinical situation, promote a beneficial therapist patient relationship and render holistic help to the family through a full understanding of stress by developmental and psychodynamic approaches.

Dorothy and Reddins (2002) stated that although stress is an integral part of everyone's life, its sources during hospitalization of children involves psychological, physiological, environmental, biological and chemical sources.

Freose, Eldridge and Shega (2001) emphasized that illness and hospitalization is a stressful experience for children and their families. Children's reaction to the stress of hospitalization is influenced by their developmental age, support systems available and previous experience with illness and hospitalization.

LITERATURE RELATED TO EFFICACY OF PLAY IN HOSPITALIZED CHILDREN

Judy (2009) conducted a review of literature on play therapy with hospitalized children and concluded the effectiveness of play therapy by which the original principles of play therapy were examined and applied to the play therapist's role in interactions with the hospitalized and / or terminally ill child.

Tonnikiche and De (2009) conducted a comparative study on therapeutic toy-strategy for pain management and tension relief during dressing change in children with the purpose of comparing children in reactions during dressing change before and after emotional support by using an instructional therapeutic toy. The sample consisted of 34 children who underwent a surgical procedure. The result suggested that therapeutic toy was an effective strategy in reducing frightening, relieving tension and managing pain in children during dressing change.

Boyd (2009) conducted a study on effectiveness of computer / video games as play therapy tool in reducing emotional disturbances in children. A qualitative, collective case study design was used. The findings from the study supported the fact that children suffering from emotional disturbances encounter difficulties academically, emotionally, and socially. The result confirmed the effectiveness of video and computer games as a play therapy tool with children suffering from emotional disturbances of sadness.

Lo and Yee (2009) conducted a literature review on therapeutic play intervention in promoting psychological well-being in hospitalized children with cancer. After an extensive review of literature, 5 interventional studies were selected to support the development of the therapeutic play intervention proposal. 4 studies were randomized controlled trials and 1 was an interventional study without a control group. The sample consisted of children aged between 2 and 12

years who underwent day surgery and role plays in various clinical situations. The results proved the effectiveness of therapeutic play interventions.

Murphy and Landreth (2009) conducted a study on the effectiveness of play therapy for children diagnosed with insulin dependent diabetes mellitus. The purpose of the study was to determine the effectiveness of an intensive play therapy intervention in a) reducing symptoms of anxiety in children with IDDM b) reducing the overall behaviour difficulties in children with IDDM c) increasing healthy adjustment in children with IDDM d) increasing diabetic children's adherence to their diabetic regime and e) having an impact on those emotional and behavioural symptoms overtime. It is a qualitative observational study. The results indicates that intensive play therapy may be an effective intervention for children diagnosed with IDDM.

Koller (2008) conducted a literature review on therapeutic play in Paediatric Health care, the essence of child life practice. The purpose was to present empirical findings regarding the value of play for children in the hospital and to assert that play constitutes an integral component of evidence based practice in child life. A total of 10 studies (9-quantitative and 1-qualitative) were included. The sample consisted of children between age of 3 and 12 years hospitalized for a variety of reasons. 8 quantitative studies used randomized experimental design and 1 quantitative study was a descriptive one. The results proved that therapeutic play facilitates the emotional and physical well being of children in hospital and as therapeutic play embodies the essence of the child life program, it should remain the focus of ongoing critical analysis and empirical investigation.

Li and Lopez (2008) conducted a study on effectiveness and appropriateness of therapeutic play intervention in preparing children for surgery. It was a randomised controlled trial. Samples consisted of 203 children of age between 7 to

12 years admitted for surgery. The study results promoted awareness in nurses and parents that play is a very important part of children's lives and heightened the importance of integrating therapeutic play as an essential component of holistic and quality nursing care to prepare children for surgery.

Elizabeth (2008) conducted a study on effectiveness of play therapy in reducing injection pain among children admitted to Kulasekaran Mookambiga Medical College Hospital. A quasi experimental design was used. Purposive sampling technique was used. The sample consisted of 60 hospitalized children (30 experimental and 30 control) between 1 and 10 years of age. The results proved that play therapy was effective in reducing injection pain in the experimental group.

Hockenberry and Wilson (2007) stated that play is one of the most important aspects of a child's life and one of the most effective tool for managing stress. Children who play are coping positively. The need for play does not stop when children are ill or when they enter the hospital.

Kuntz et al (2006) in the article on therapeutic play and bone marrow transplantation describes a successful play therapy program in a Bone marrow Transplant Unit, using a play cabinet designed to provide readily available, sterilized toys that are appropriate for each of the four age groups. The efficacy of the use of the play cabinet in play therapy programs was concluded.

Moore and Russ (2006) conducted a literature review on pretend play as a resource for children-implications for paediatricians and health professionals. Pretend play relates to many areas of adaptive functioning in child development including creativity, coping and emotion regulation. It was concluded that involving pretend play in medical settings are effective in inpatient and outpatient settings

for preventing and reducing anxiety and distress and it also has effects on pain, externalizing behaviour and adaptation to chronic illness.

Hemalatha (2006) conducted a study on effectiveness of play therapy among hospitalized children in reduction of stress at Government hospital, Melmaruvathur. A quasi experimental design was used. Convenient sampling technique was used. The sample consisted of 70 hospitalized children between 1 and 12 years of age. The results proved that there was a significant reduction in the stress among hospitalized children after play therapy.

Bjork, Nordstrom and Hallstrom (2006) conducted an observational study on needs of young children with cancer during their initial hospitalization, as expressed by their behaviour, body language and verbal expression. The sample consisted of 12 children under the age of seven who were followed during 26 hours with non-participant unstructured observations. The results indicated that one of the five themes identified during the study was need to play and feel joy.

Isaac (2005) conducted a study on effectiveness of therapeutic play during IV cannulation on level of pain among children admitted in the hospital. A quasi experimental design was used. Purposive sampling technique was used. The sample consisted of 40 hospitalized children (20 experimental and 20 control) between 1 and 10 years of age. The results proved the efficacy of play therapy in pain reduction in the experimental group.

Braton, Ray and Rhine (2005) conducted a meta-analytic review on the efficacy of play therapy with children a meta analytic review of treatment outcomes. 93 play therapy outcome studies were utilized. The sample consisted of hospitalized children between 7 and 10 years of age. The overall meta-analytic results established that play therapy was a statistically viable intervention with children suffering from various emotional and behavioral difficulties.

Yvonne and Sue (2005) conducted a study on school based child centered play therapy with Hispanic children-Outcomes and cultural consideration. The purpose was to examine the effect of child centered play therapy. The sample consisted of 29 children. The results showed that children who received child centered play therapy had a positive change in the behaviour attitudes.

Singh (2004) stated that hospitalized children should be provided with home friendly ambience in the hospital. Efforts should be made to keep them busy in good mood. A play room with necessary toys and indoor games should be available.

Marie (2004) conducted a study on practitioner's perceptions of the effectiveness of play therapy and their utilization of play therapy methods. The purpose was to examine practitioners perceptions of the utility of play therapy and based upon these perceptions, whether or not the practitioner utilizes the form of intervention. The conclusion was that practitioners with a higher perception of play therapy, proper training and self efficacy were more likely to utilize play therapy methods.

Lesniak (2003) presented a research paper on the effectiveness of non-directive play therapy. The play therapist recognizes the child's wants, needs and feelings which are expressed through play. Each toy selected by the child is a representative of what he or she is trying to communicate. This research paper reviewed current literature on play therapy, examined how effectiveness of play therapy is measured and examined specific studies on the effects of non-directive play therapy. A critical analysis of the literature and recommendations for further research were also included in this study.

Dowling (2002) conducted a literature review on humor - a coping strategy for pediatric patients. Many studies based on coping strategies in children were included. 1 qualitative study by Boyd and Hunsberger (1998) was involved in which 6 chronically ill school age children identified distraction (ie. watching television, playing games and thinking about other things) as a method of coping with stressors of repeated hospitalizations.

Jones and Landreth (2002) conducted a study on the efficacy of intensive individual play therapy for chronically ill children. The purpose was to examine the effectiveness of individual play therapy as a viable treatment intervention for children diagnosed with IDDM. A significant improvement was reported for the children in the experimental group in adopting to diabetes. Additionally, improvements were reported in both advance behaviours and behavioural difficulties for the children in the experimental group as compared to children in the control group.

Mitchell, Kepell and Johnston (2002) conducted a review of literature on an interactive multimedia approach to preparing children and their families for hospitalization with the purpose of describing the rationale, theoretical underpinnings and the process of developing an interactive multimedia preparation program. The sample were children between age group of 8 and 10 years undergoing elective surgery. It was concluded that the knowledge of the negative effects of hospitalization on children has resulted in marked changes to the care of children in hospitals and numerous measures have been implemented to reduce the stress of hospitalization for children and their families. Moreover there was an increased emphasis on making hospitals more friendly and play was encouraged.

Lind, Landreth and Giordano (2001) conducted a study on intensive group play therapy with child witness of domestic violence. The purpose of this study

was to examine the effectiveness of intensive sibling group play therapy in improving self concept, reducing internalizing and externalizing behaviour problems and reducing overall behaviour problems. Statistical significance was found in all areas for children in the experimental group as compared to children in the control group.

Froese, Eldridge and Shega (2001) stated that play should be apart of every child's daily routines. Play is an excellent outlet for childhood anxiety and energy.

Aruna (2000) conducted a study on the effectiveness of play therapy in helping children to cope with painful procedures at Christian Medical College, Vellore. It was a quasi experimental design. The samples consisted of 64 hospitalized children between 3 and 12 years of age. The results proved the effectiveness of play therapy in helping children to cope with painful procedures in the experimental group. It also proved that there was no association between the child's demographic profile and the coping mechanism.

Mcguire (2000) conducted a study on child centered group play therapy with children experiencing adjustment difficulties. The purpose of the study was to examine the effectiveness of child centered group play therapy in the following areas with kindergarten child experiencing adjustment difficulties like reducing behavioural problems, enhancing emotional and behavioural adjustment to school, improving self concept, increase self control and decreasing parental stress. More positive trends were observed for children in the experimental group.

Sue and Dee (2000) conducted a comprehensive literature on what research shows about play therapy. A total of 82 research studies from 1942 till 2000 were summarized, which proved the effectiveness of play therapy.

CONCLUSION

The above 34 literature review suggested the importance of play therapy in hospitalized children and its significance in the various aspects of growth and development in a child, thus stressing the health care workers to include play therapy as one of the intervention towards a child's recovery.

CONCEPTUAL FRAMEWORK (ROY'S ADAPTATION)

The conceptual framework and model adapted for the present study is based on Roy's adaptation model (1991). Roy's model focuses on the concept of adaptation of a person. The theorist concept of nursing, person, health and environment are all interrelated to this concept. The person continuously scans the environment for stimulant.

Roy expressed that a person's adaptation level is a constantly changing point made up of focal stimuli, which represents the person's standard of the range of stimuli which one can respond with ordinary adaptive response. It may be either adaptive or maladaptive response. Adaptive responses are those that promote integrity and helps the person to achieve the goals of adaptation that is reduction in the perceived stress level as evidenced by an improvement in the appearance, coping, emotional, psychosomatic and biological responses. Maladaptive responses are responses that slow improvement to achieve the goal of reducing perceived stress level as evidenced by a minimal or no improvement in the appearance, coping, emotional, psychosomatic and biological responses.

According to Roy's view the focal stimuli considered are the internal or external stimulus most immediately confronting the human system.

In the present study, the investigator considered the person as toddlers between 1 and 3 years who were admitted in children's ward. The environment of the toddler is the source of variety of stimuli that either threaten or promote the person's uniqueness.

In this study, the focal stimuli were considered as the hospitalized toddlers and the changes in appearance, coping, emotional, psychosomatic and biological responses towards perceived stress. The investigator assessed the appearance,

coping, emotional, psychosomatic and biological responses by using the observation checklist.

The adaptation level was determined by the hospitalized toddler's positive response to environmental changes by assessing post test. The investigator provided play therapy.

The adaptive response of the hospitalized toddlers led to a reduction in the perceived stress level as evidenced by an improvement in the appearance, coping, emotional, psychosomatic and biological responses.

The maladaptive response of the hospitalized toddlers led to no reduction in the perceived stress level as evidenced by a minimal or no improvement in the appearance, coping, emotional, psychosomatic and biological responses.

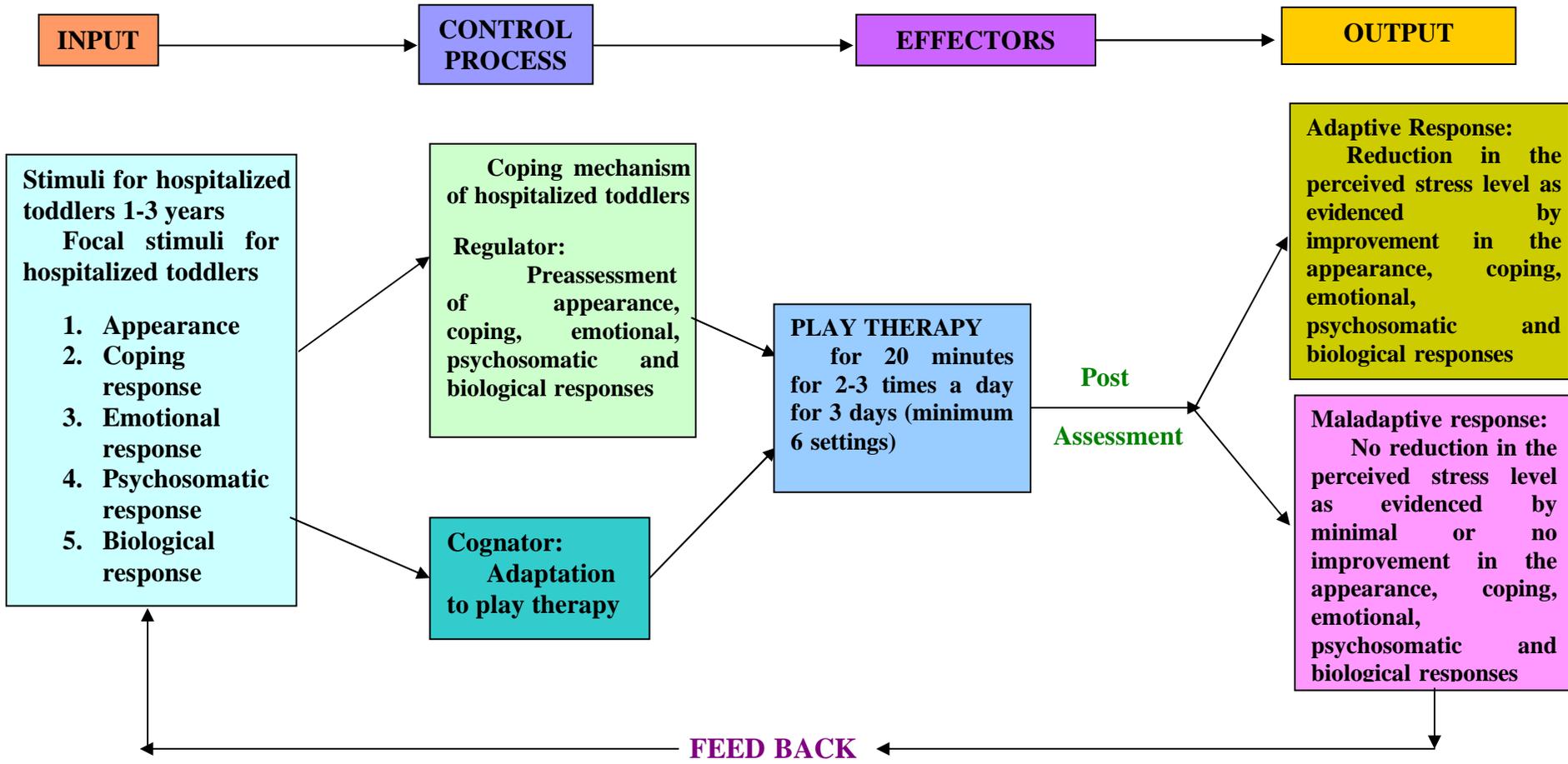


Figure1 CONCEPTUAL FRAMEWORK (ROY'S ADAPTATION MODEL)

CHAPTER – III

RESEARCH METHODOLOGY

Methodology of research refers to investigations of the ways of obtaining, organizing and analyzing data. Methodology studies address the development, validation and evaluation of research tools or methods.

- Polit and Beck (2004)

The research methodology includes the research approach, research design, research setting, population, sample, sampling technique, criteria for sample selection, sample size, research tools and technique, validity, scoring procedure, reliability of the tool, validity of the tool, pilot study, procedure for data collection, plan for data analysis and protection of human subjects.

RESEARCH APPROACH

Research approach indicates the basic procedure for conducting study. In order to achieve the objectives, an evaluative approach was found to be appropriate.

RESEARCH DESIGN

The research design used for this study was true experimental –pretest posttest control group design

E R 01 X 02

C R 03 04

E - Experimental group

C - Control group

01 - Preassessment in experimental group

X - Play Therapy

02 - Post assessment in experimental group

R - Randomization

03 - Preassessment in control group

04 - Postassessment in control group

SETTING OF THE STUDY

The study was conducted at children's ward, Child Jesus Hospital, Trichy. The hospital is a 300 bedded hospital in which the children's ward has a bed capacity of 45 beds. A maximum of 18 babies were admitted daily. Ward census frequently remained at maximum. Both medical and surgical cases were admitted. Many cases were referred from other hospitals and there are visiting paediatricians along with a resident paediatrician.

POPULATION

In this present study, the population was focused on toddlers (1-3years) who were hospitalized.

SAMPLE

The sample consisted of toddlers who were admitted at Child Jesus Hospital.

SAMPLE SIZE

Sample size consisted of 60 hospitalized toddlers (30 in control group and 30 in experimental group).

SAMPLING TECHNIQUE

Sampling technique used for this study was simple random sampling technique. Hospitalized toddlers fulfilling the inclusive criteria were identified. Numbers were allocated according to the available cases. Lottery method was used and odd numbers constituted the control group and even numbers constituted the experimental group.

SAMPLE CRITERIA

Inclusive Criteria

1. Hospitalized toddlers who were on nebulization.
2. Hospitalized toddlers who had painful procedures like intravenous infusions, injections, dressings.
3. Hospitalized toddlers who were monitored through different equipment. (Pulse oximeter)
4. Hospitalized toddlers who were on bed rest having disruption in their daily routines.

Exclusive Criteria

1. Hospitalized toddlers who had neurological deficit.
2. Hospitalized toddlers who had complex conditions with treatment.

RESEARCH TOOL AND TECHNIQUE

Instrument

Development of tools for data collection. The tool constructed in this study had 2 parts.

Part – I

Demographic variables.

Part – II

Observation Checklist.

Tool Description

Part – I

Demographic variables

1. Age
2. Gender
3. Birth Order
4. Type of illness

Part – II

Observation checklist

The observation checklist was a modified child behavior checklist. Achen Berch, Rutters checklist, National Institute of Mental Health, Bethasadan Maryland. The investigator modified the item suitable to the age group. The checklist consisted of 30 items brought under 5 behavioural responses.

1. Appearance
2. Coping response
3. Emotional response
4. Psychosomatic response
5. Biological response

These behavioural items had both positive and negative items.

Scoring Procedure

Based on the information data was classified as

- | | |
|---------|-------------------|
| < 50% | - severe stress |
| 51%-75% | - moderate stress |
| > 76% | - mild stress |

TESTING OF TOOL

VALIDITY

The tool was evaluated by 5 experts who were requested to give their valuable suggestions about the content areas, relevance, clarity and appropriate need of the items. Minor modification was done on the demographic variables regarding type of illness.

RELIABILITY

The reliability of the tool was established by assessing the quality and adequacy of the tool by using inter-rated reliability method. “r” value was 0.8. Hence, the tool was highly reliable.

PILOT STUDY

After obtaining formal administrative approval, the pilot study was carried out with 10 toddlers (5-experimental and 5-control) admitted in children’s ward at Child Jesus Hospital, Trichy from 19/06/11 to 27/06/11. There was no modification done in the study and the pilot study samples were excluded from the main samples for the data collection. The data collected were amenable to statistical analysis and thus the study was found to be feasible.

DATA COLLECTION PROCEDURE

The period of data collection was from 28/06/11 to 12/08/11. Before starting the study, the investigator obtained formal permission from the administrator of Child Jesus Hospital to conduct the study. After obtaining permission, the hospitalized toddlers were identified. Samples were selected with simple random sampling technique and true experimental - pretest posttest

control group design was used. The timing of data collection was from 9 am to 5 pm according to the availability of the cases and convenience of the ward. 2 or 3 babies were selected per day depending on their availability. The nature and purpose of the study was explained to the mothers of the children. Informed consent was obtained.

Pre assessment was done on the day of admission for the experimental and control group using the observation checklist. Play therapy was given for 20 minutes for 2 to 3 times a day till discharge (6 settings) only for the experimental group. Then post assessment was done using the same observation checklist for both the experimental and control group. Totally 30 hospitalized toddlers were selected for the experimental group and 30 hospitalized toddlers for the control group.

PLAN FOR DATA ANALYSIS

The collected data would be tabulated to represent the findings of the study. Descriptive statistics frequency, percentage, mean and standard deviation would be used to analyze the demographic variables.

Inferential statistics, Paired “t” test would be used to evaluate the effectiveness of play therapy among hospitalized toddlers in the experimental group, Independent “t” test would be used to compare the mean post assessment scores between the experimental and control group and Chi square test would be used to find out the association between the demographic variables of the hospitalized toddlers with the responses to the perceived stress in the experimental group. By using SPSS 13 version all statistics would be done at 0.05 level of significance.

ETHICAL CONSIDERATION

The research proposal was approved by the Dissertation Committee of the institution prior to the pilot study. Permission was obtained from the Administrator of Child Jesus Hospital, Trichy. Assurance was given to the subjects that confidentiality of each individual will be monitored and Informed consent was obtained orally from all mothers of hospitalized toddlers who received play therapy. The mothers were informed that they were free to withdraw from the study at any time.

CHAPTER – IV

ANALYSIS AND INTERPRETATION OF DATA

The data themselves do not provide answer to research questions. So the data need to be processed and analyzed in an orderly cohort fashion. After the analysis, they must be systematically interpreted. Interpretation is the process of making sense of the results and examining their implications.

This chapter deals with the description of the sample, analysis and interpretation of data to determine the effectiveness of play therapy on the appearance, coping response, emotional response, psychosomatic response and biological response among hospitalized toddlers. The data obtained were classified, grouped and analyzed statistically based on the objectives of the study.

OBJECTIVES OF THE STUDY

1. To assess the level of perceived stress experienced by hospitalized toddlers in experimental and control group before play therapy.
2. To evaluate the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers in the experimental group.
3. To compare the level of perceived stress between the experimental group and control group after play therapy.
4. To associate the level of perceived stress with selected demographic variables of the hospitalized toddlers in the experimental group.

THE STUDY FINDINGS ARE REPRESENTED AS FOLLOWS:

- Section I: Distribution of samples according to their demographic variables.
- Section II: Distribution of pre assessment scores on the level of perceived stress of hospitalized toddlers in the experimental and control group.
- Section III: Comparison of mean scores between pre assessment and post assessment in the experimental and control group.
- Section IV: Comparison of mean post assessment scores between experimental and control group.
- Section V: Association between post assessment scores and selected demographic variables of hospitalized toddlers in the experimental group.

Section I

This section deals with the demographic variables of the samples

Table 1 Distribution of hospitalized toddlers according to their demographic variables

N = 60

S. No	Demographic variables	Experimental Group		Control Group	
		f	%	f	%
1.	Age				
	1 – 2 years	21	70	14	46.7
	2 – 3 years	9	30	16	53.3
2.	Gender				
	Male	22	73.3	16	53.3
	Female	8	26.7	14	46.7
3.	Birth Order				
	1 st born	11	36.7	24	80
	2 nd born	17	56.7	5	16.7
	Last born	2	6.7	1	3.3
4.	Type of illness				
	Medical	27	90	24	80
	Surgical	3	10	6	20

Table 1 shows the distribution of hospitalized toddlers according to their demographic variables. It indicates that majority 21 (70%) in the experimental group belong to the age between 1-2 years and majority 16 (53.3%) in the control group belong to the age group between 2-3 years.

Majority 22 (73.3%) of hospitalized toddlers in the experimental group were males and majority 16 (53.3%) in the control group were males.

Majority 17 (56.7%) of hospitalized toddlers in the experimental group were in the birth order of 2nd born and majority 24 (80%) in the control group were in the birth order of 1st born.

Majority 27 (90%) of hospitalized toddlers in the experimental group and majority 24 (80%) in control group belong to medical illness category.

Section II

This section deals with the distribution of preassessment scores on the level of perceived stress of hospitalized toddlers in the experimental and control group

Table 2 Distribution of preassessment scores on the level of perceived stress of hospitalized toddlers in the experimental and control group

N = 60

S. No	Behavioural responses	Experimental group			Control group		
		Severe	moderate	mild	Severe	moderate	mild
1	Appearance	24	3	3	23	4	3
2	Coping response	17	7	6	15	8	7
3	Emotional response	16	13	1	16	13	1
4	Psychosomatic response	21	6	3	21	6	3
5	Biological response	23	5	2	22	6	2
6	Total response	19	7	4	19	8	3

Table 2 shows the distribution of preassessment scores on the level of perceived stress of hospitalized toddlers in the experimental and control group. Majority of hospitalized toddlers were found to have severe stress 19 (63.3%) and only very few were found to have mild stress 4 (10%).

Section III

This section deals with the comparison of mean pre assessment and post assessment of appearance, coping response, emotional response, psychosomatic response and biological response scores in experimental and control group

Table 3 Comparison of mean pre assessment and post assessment of total behavioural response (appearance, coping, emotional, psychosomatic and biological) scores in the experimental and control group

Groups	Pretest		Post test		Mean difference	Paired t-test
	Mean	SD	Mean	SD		
Experimental	52.31	12.101	72.04	14.352	19.73	10.166 **
Control	53.18	11.626	53.20	11.954	-0.02	.073

** P<0.01

Table 3 shows the comparison of mean pre assessment and post assessment of total behavioural response (appearance, coping, emotional, psychosomatic and biological) scores in the experimental and control group. It indicates that play therapy was effective as significant at (p<0.01) as evident in the experimental group. So the research hypothesis 1 was accepted.

Table 4 Distribution of total behavioral response (appearance, coping, emotional, psychosomatic and biological) scores of hospitalized toddlers in the experimental and control group during pre assessment and post assessment

N=60

Total behavioural responses	Experimental Group			Control Group		
	Severe	Moderate	Mild	Severe	Moderate	Mild
Pretest	19	7	4	19	8	3
Post test	3	9	18	18	9	3

Table 4 shows the distribution of total behavioural response (appearance, coping, emotional, psychosomatic and biological) scores of hospitalized toddlers in the experimental and control group during pre assessment and post assessment. Majority of the hospitalized toddlers (19) in the experimental and control group were found to have severe stress and only few (4 experimental group and 3 control group) were found to have mild stress, during the preassessment. Majority of the hospitalized toddlers (18) were found to have mild stress and only very few (3) were found to have severe stress in the experimental group after play therapy. But in the control group majority (18) were found to have severe stress and only few (3) were found to have mild stress during post assessment.

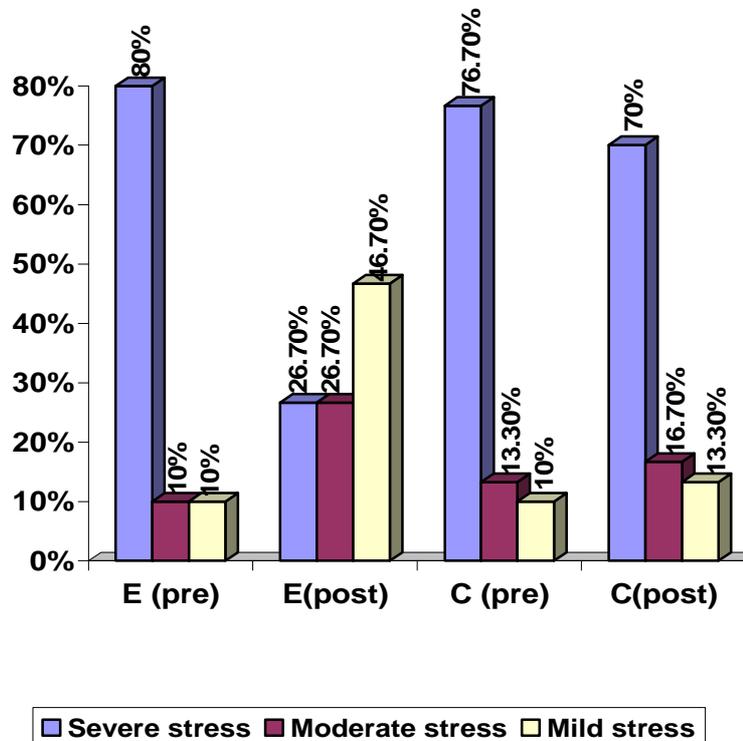


Figure 2 Percentage distribution of appearance response scores of hospitalized toddlers in the experimental and control group during pre assessment and post assessment

Figure 2 shows the pretest and posttest appearance response scores. In the experimental group, the pretest appearance response scores indicated that majority 24 (80%) had severe stress, 3(10%) had moderate stress and 3 (10%) had mild stress, whereas the post test appearance response scores indicated that majority 14 (46.7%) had mild stress, 8 (26.7%) had moderate stress and few 8(26.7%) had severe stress. In the control group the pretest appearance scores indicated that majority 23 (76.7%) had severe stress, 4 (13.3%) had moderate stress and 3 (10%) had mild stress, whereas the post test appearance scores indicated that only 4 (13.3%) had mild stress, 5 (16.7%) had moderate stress and majority 21 (70%) had severe stress.

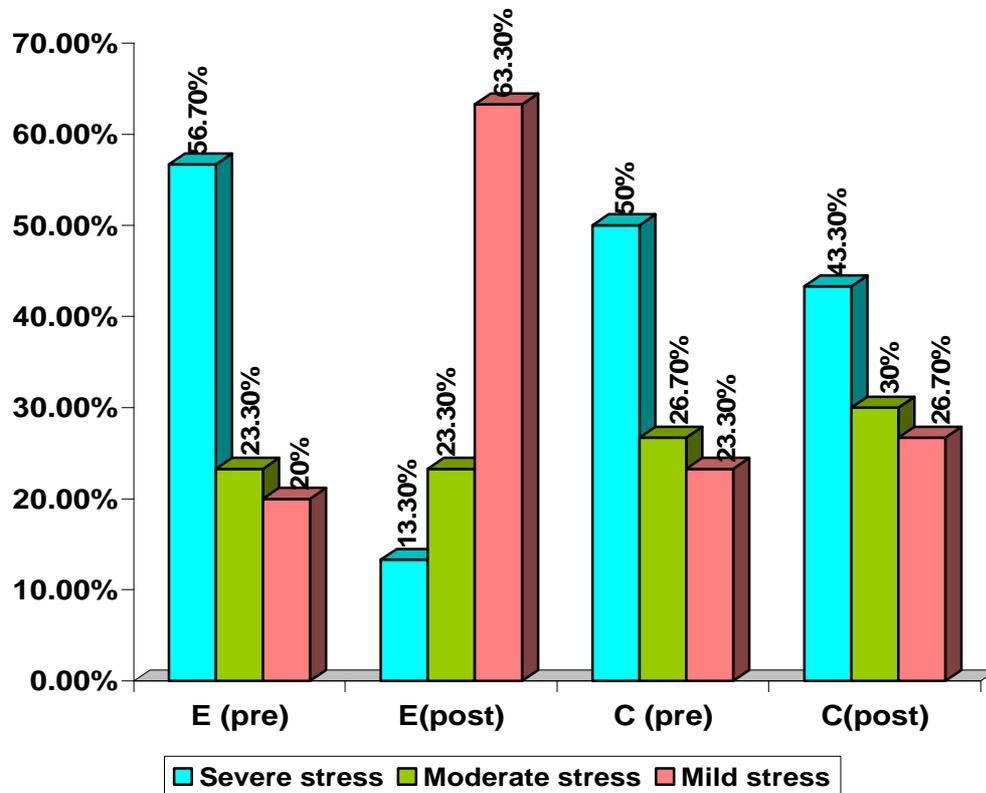


Figure 3 Percentage distribution of coping response scores of hospitalized toddlers in the experimental and control group during pre assessment and post assessment

Figure 3 shows the pretest and posttest coping response score. In the experimental group, the pretest coping response scores indicated that majority 17 (56.7%) had severe stress, 7 (23.3%) had moderate stress and 6 (20%) had mild stress, whereas the post test coping response scores indicated that majority 19(63.3%) had mild stress, 7 (23.3%) had moderate stress and few 4 (13.3%) had severe stress. In the control group the pretest coping response scores indicated that majority 15 (50%) had severe stress, 8 (26.7%) had moderate stress and 7 (23.3%) had mild stress, whereas the post test coping response scores indicated that only 8 (26.7%) had mild stress, 9 (30.0%) had moderate stress and majority 13(43.3%) had severe stress.

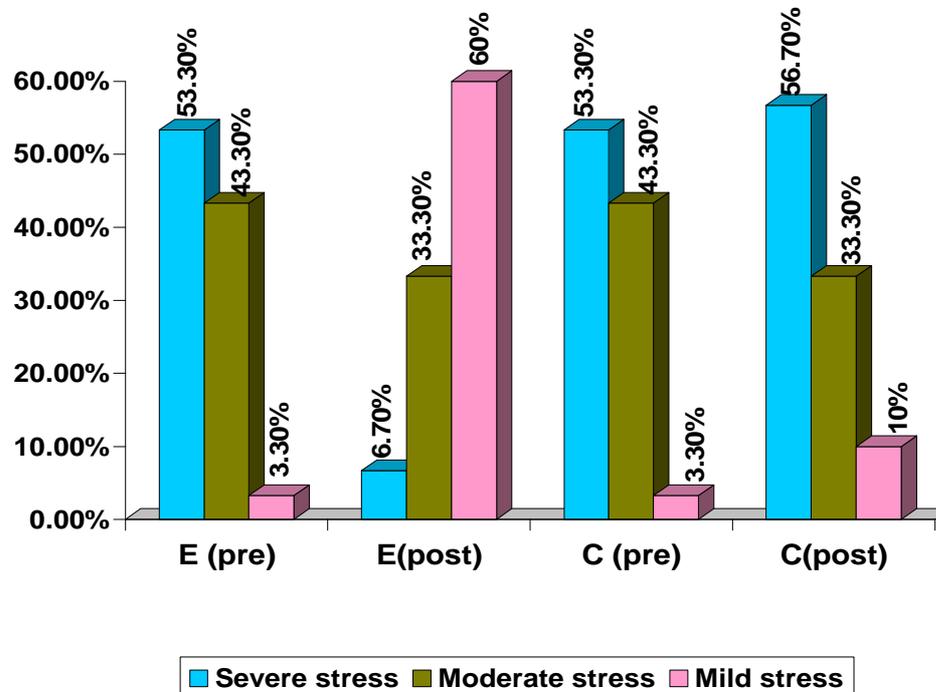


Figure 4 Percentage distribution of emotional response scores of hospitalized toddlers in the experimental and control group during pre assessment and post assessment

Figure 4 shows the pretest and posttest emotional response scores. In the experimental group, the pretest emotional response scores indicated that majority 16 (53.3%) had severe stress, 13 (43.3%) had moderate stress and 1 (3.3%) had mild stress, whereas the post test emotional response scores indicated that majority 18 (60.0%) had mild stress, 10 (33.3%) had moderate stress and few 2 (6.7%) had severe stress. In the control group the pretest emotional response scores indicated that majority 16 (53.3%) had severe stress, 13 (43.3%) had moderate stress and 1 (3.3%) had mild stress, whereas the post test emotional response scores indicated that only 3 (10.0%) had mild stress, 10 (33.3%) had moderate stress and majority 17 (56.7%) had severe stress.

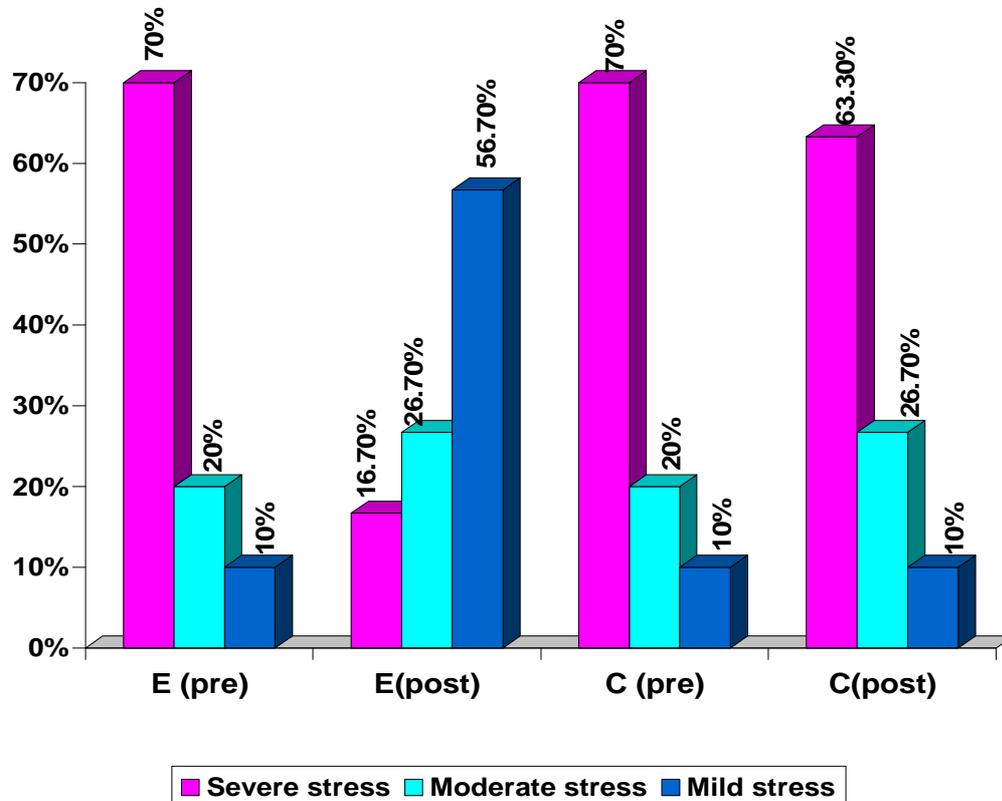


Figure 5 Percentage distribution of psychosomatic response scores of hospitalized toddlers in the experimental and control group during pre assessment and post assessment

Figure 5 shows the pretest and posttest psychosomatic response scores. In the experimental group, the pretest psychosomatic response scores indicated that majority 21 (70%) had severe stress, 6 (20%) had moderate stress and 3 (10%) had mild stress, whereas the post test psychosomatic response scores indicated that majority 17 (56.7%) had mild stress, 8 (26.7%) had moderate stress and few 5 (16.7%) had severe stress. In the control group pretest psychosomatic response scores indicated that majority 21 (70%) had severe stress, 6 (20%) had moderate stress and 3 (10%) had mild stress, whereas the post test psychosomatic response scores indicated that only 3 (10.0%) had mild stress, 8 (26.7%) had moderate stress and majority 19 (63.3%) had severe stress.

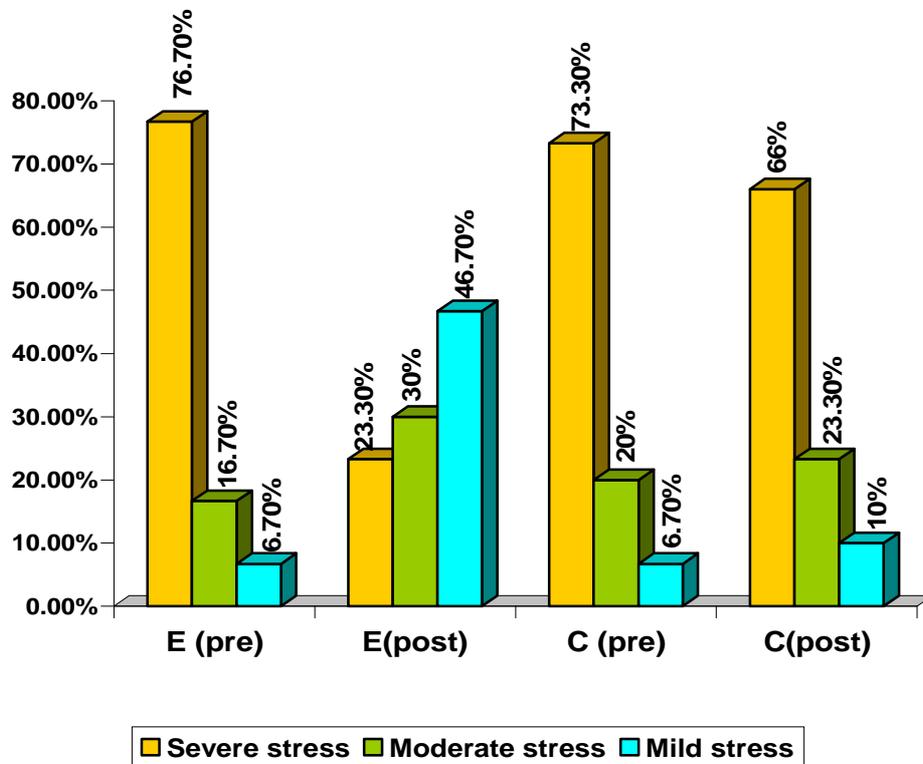


Figure 6 Percentage distribution of biological response scores of hospitalized toddlers in the experimental and control group during pre assessment and post assessment

Figure 6 shows the pretest and posttest biological response scores. In the experimental group, the pretest biological response scores indicated that majority 23 (76.7%) had severe stress, 5 (16.7%) had moderate stress and 2 (6.7%) had mild stress, whereas the post test biological response scores indicated that majority 14 (46.7%) had mild stress, 9 (30.0%) had moderate stress and few 7 (23.3%) had severe stress. In the control group, the pretest biological response scores indicated that majority 22 (73.3%) had severe stress, 6 (20%) had moderate stress and 2 (6.7%) had mild stress, whereas the post test biological response scores indicated that only 3 (10.0%) had mild stress, 7 (23.3%) had moderate stress and majority 20 (66.7%) had severe stress.

Table 5 Comparison of mean pre assessment and post assessment of appearance, coping, emotional, psychosomatic and biological scores in the experimental and control group

Behavioural responses	Experimental Group				Mean Difference	Control Group				Mean Difference	Paired “t” Test	
	Pre test		Post test			Pre test		Post Test			Experimental	Control
	Mean	SD	Mean	SD		Mean	SD	Mean	SD			
Appearance	50.67	13.676	70.42	16.944	19.75	50.92	12.806	51.33	12.827	0.41	7.433**	1.720
Coping	55.33	17.705	77.07	17.130	21.74	58.27	16.161	58.93	16.706	0.66	8.294**	1.153
Emotional	52.42	10.005	71.45	11.668	19.03	52.48	10.126	52.67	10.987	0.19	9.956**	.551
Psychosomatic	52.44	13.977	73.33	15.561	20.89	54.22	12.714	51.78	13.297	-2.44	9.882**	3.266*
Biological	50.89	12.923	70.89	16.561	20	53.11	12.064	50.44	12.340	-2.67	9.433**	2.845*

* $p < 0.5$ ** $p < 0.01$

Table 5 shows the comparison of mean pre assessment and post assessment of appearance, coping, emotional, psychosomatic and biological scores in the experimental and control group. It indicates that play therapy was more effective as significant at ($p < 0.01$) as evident in the experimental group. So the research hypothesis 1 was accepted.

Section IV

This section deals with the comparison of mean post assessment of the total behavioural response (appearance, coping, emotional, psychosomatic and behavioural) scores between experimental and control group

Table 6 Comparison of mean post assessment of the total behavioural response (appearance, coping response, emotional response, psychosomatic response and biological) scores between experimental and control group

Behavioural responses	Post test Mean		Post test SD		Mean Difference	Independent t-test
	Experimental	Control	Experimental	Control		
Appearance	16.944	12.827	70.42	51.33	19.083	4.918***
Coping	17.130	16.706	77.07	58.93	18.133	4.151***
Emotional	11.668	10.987	71.45	52.67	18.788	6.421***
Psychosomatic	15.561	13.297	73.33	51.78	21.556	5.768***
Biological	16.561	12.340	70.89	50.44	20.444	5.422***
Total response	14.352	11.954	72.04	53.20	18.844	5.526***

*** $P < 0.001$

Table 6 shows the comparison of mean post assessment of the total behavioural response (appearance, coping response, emotional response, psychosomatic response and biological) scores between experimental and control group. It indicates the difference between the post test mean of total behavioural response scores of the experimental and control group is significant. ($p < 0.001$). So the research hypothesis 2 was accepted.

Section V

This section deals with the association between post assessment scores and selected demographic variables of hospitalized toddlers in the experimental group

Table 7 Association between post assessment scores and selected demographic variables of hospitalized toddlers in the experimental group

n = 30

S. No	Demographic variables	Experimental group			χ^2
		Mild	moderate	severe	
1.	Age				
	1-2 yrs	9	6	6	.490
	2-3 yrs	5	3	1	df - 2
2.	Gender				
	Male	11	6	5	.256
	Female	3	3	2	df - 2
3.	Birth Order				
	1 st born	5	4	2	.172
	2 nd born	8	4	5	df - 4
	Last born	1	1	0	
4.	Type of illness				
	Medical	13	7	7	.831
	Surgical	1	2	0	df - 2

Table 7 shows the association of demographic variables and post assessment score which was tested using chi square test for the experimental group. The figures in the table especially the chi square values indicate that none of the demographic variables attained significant association at 0.05 level. All these demographic variables were independent on the perceived stress of the hospitalized toddlers. Therefore the research hypothesis 3 was rejected.

CHAPTER – V

DISCUSSION

This chapter deals with the findings of the study. The study was done to evaluate the effectiveness of play therapy in hospitalized toddlers at children's ward, Child Jesus Hospital, Trichy. A true experimental - pretest posttest control group design was used to conduct the study. The behavioral responses before and after play therapy was analysed using an observational checklist (modified child behavioral checklist). Probability sampling technique, simple random sampling (lottery method) was used to select the samples. The study consisted of 60 samples (30 control group and 30 experimental group). Using the above tool, data were collected and analysed.

The study findings revealed the following:

The aim of the study was to determine the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers.

Among the demographic profile of the toddlers majority were males. During the data collection period, majority of the admissions were males. There was no homogeneity. The heterogeneity of the group was because of the inclusive and exclusive criteria and the majority of admissions being male. In Tamil Nadu, as the male children are of more concern and are considered as a boon to the succession of a family, they are given more priority by the parents in all aspects especially during sickness. Genetics also states that XX chromosomes have more immune power than the XY chromosomes, which renders the male prone to more sickness. Recent statistics in India shows that male children are more due to female infanticide. These may be some of the reasons for admission of more male children. The findings were supported by a study done by Tonnikiche and De Amorin (2009).

The first objective of the study was to assess the level of perceived stress among hospitalized toddlers in the experimental and control group.

The investigator found out that majority of hospitalized toddlers were found to have severe stress (63.3%) and only very few were found to have mild stress (10%).

The findings extend this research by suggesting that it is not reasonable to expect that hospitalized children are without stress. The findings were supported by a study done by Lindholm et al (2009) and Bernard (2000).

The second objective was to evaluate the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers in the experimental group.

The mean post assessment of total behavioural response (appearance, coping, emotional, psychosomatic and biological) score (72.04) was higher than the mean pre assessment score (52.31) in the experimental group and the t value was significant at 0.01 level. But in the control group the mean post assessment of total behavioural response (appearance, coping, emotional, psychosomatic and biological) score (53.20) was higher than the pre assessment score (53.18) and the t value was not significant at 0.01 level. This increase in the postassessment scores in the experimental group was due to the effectiveness of play therapy.

The investigator found that the reduction in the perceived stress as evidenced by an increase in the appearance, coping, emotional, psychosomatic and biological response scores among hospitalized toddlers in the experimental group after play therapy was better than in the control group.

By analyzing children's behaviour before play therapy initially, significant changes were found when comparing results obtained before and after play therapy. Before play therapy, types of behaviour showing less adaptation to and acceptance of procedure predominated. These behaviours

were found to become less frequent after play therapy. The children began to collaborate during the procedure showing more willingness to help spontaneously. The children smiled while playing, overcoming their fear and tension. The feeling of pleasure became evident during play therapy when children were found to be very interested in playing and majority wanted to keep playing even after the session ended. Children who participated in play therapy were less upset during procedures, appeared generally happier and more active in the hospital and continued to be more active physically and socially after discharge also and some of them recognized the investigator when they came for follow up in the OPD. Thus play therapy in hospital provides the child with opportunities for expression of emotions, re-establishing a sense of control, learning about, understanding and clarifying any misconceptions about their illness, the hospital and/or specific medical procedures and treatments and learning and practicing effective coping skills and mechanisms for the purpose of pain management and anxiety control.

It is worth emphasizing that playing is a spontaneous activity free from conflict and tension always involving an element of pleasure.

It was also observed that child- mother relationship became stronger with play therapy. Children used to seek them after play therapy asking them to return to play. In addition, when mothers met researchers, they showed satisfaction with their child's behavioral improvement after play therapy.

The findings extend this research by suggesting that play therapy in the hospital provides positive experiences, encourages healing, enables communication and creates an environment where stress and anxiety are reduced. Thus play interventions appeared practical and reasonable in reducing perceived stress in hospitalized toddlers in the experimental group. The findings were supported by the studies done by Tonnikiche and De Amorin (2009), Boyd (2009), Lo and Yee (2009), Murphy and Landreth (2009), Koller (2008), Li and Lopez

(2008), Kuntz et al (2006), Hemalatha (2006), Moore and Russ (2006), Bjork, Nordstrom and Hallstrom (2006), Braton, Ray and Rhine (2005), Yvonne and Sue (2005), Lesniak (2003), Mitchell, Kepell and Johnston (2002) and Sue and Dee (2000).

The third objective was to compare the level of perceived stress between experimental and control group.

The investigator concluded that play therapy was more effective in reducing the level of perceived stress as evidenced by the appearance, coping, emotional, psychosomatic and biological responses in the experimental group.

The play intervention received by the experimental group helped them to be calmer than the control group during nursing interventions. They remained quiet and co-operated well. They interacted with other children and looked cheerful. The findings were substantiated by similar studies done by Elizabeth (2008), Isaac (2005), Jones and Landreth, (2002), Lind, Landreth and Giordano (2001), Mcguire (2000) and Aruna (2000).

The fourth objective was to determine the association between the demographic variables of the hospitalized toddlers and level of perceived stress in the experimental group.

The investigator concluded that there was no association between the demographic variables and the post assessment test scores in the experimental group. The findings extend this research by suggesting that children irrespective of their age, sex, birth order or any type of illness face stress during hospitalization and toddlers are the group at risk for a stressful experience as a result of illness and hospitalization. During the study the hospitalized toddlers exhibited some negative reactions towards hospitalization initially and also coped positively during and after play therapy in the experimental group irrespective of their age, sex, birth order or type of illness. The findings were supported by a similar study done by Aruna (2000).

CHAPTER – VI

SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

This chapter presents the summary of the study, conclusion and implications for different areas like nursing practice, nursing education, nursing administration and nursing research, limitations and recommendations for further study.

SUMMARY OF THE STUDY

A true experimental study was conducted to determine the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers at Child Jesus Hospital, Trichy, 2011.

THE FOLLOWING OBJECTIVES WERE SET FOR THE STUDY

1. To assess the level of perceived stress experienced by hospitalized toddlers in experimental and control group before play therapy.
2. To evaluate the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers in the experimental group.
3. To compare the level of perceived stress between the experimental group and control group after play therapy.
4. To associate between the level of perceived stress with selected demographic variables of the hospitalized toddlers in the experimental group.

The conceptual model of the study was based on Roy's adaptation model. The study was conducted by using true experimental - pretest posttest control group design. The sample size used for the study was 60 hospitalized

toddlers. 30 hospitalized toddlers in experimental group and 30 in control group. Simple random sampling technique (lottery method) was used to select the samples. The instruments used for data collection were observation checklist and five point likert scale.

The data was analysed and interpreted in terms of objectives and research hypotheses. Descriptive statistics (Frequency, percentage, mean and standard deviation) and inferential statistics (Paired t- test, independent t-test and chi square) were used to test the research hypotheses.

Major findings of the study

Among the demographic profile of the toddlers 70% in the experimental group and 46.7% in the control group were in the age group between 1 and 2 years and 30% in the experimental group and 53.3% in the control group were in the age group between 2 and 3 years. 73.3% in the experimental group and 53.3% in the control group were males and 26.7% in the experimental group and 46.7% in the control group were females. 36.7% in the experimental group and 80% in the control group were 1st born, 56.7% in the experimental group and 16.7% in the control group were 2nd born and 6.7% in the experimental group and 3.3% in the control group were last born. 90% in the experimental group and 80% in the control group had medical illness and 10% in the experimental group and 20% in the control group had surgical illness.

In the present study, the pretest total behavioural response (appearance, coping, emotional, psychosomatic and biological) scores indicated that 19 (63.3%) had severe stress, 7 (23.3%) had moderate stress and 4 (13.3%) had mild stress in the experimental group and 19 (63.3%) had severe stress, 8 (26.7%) had moderate stress and 3 (10%) had mild stress, in the control group.

In the paired t-test, the investigator found that there is reduction in perceived stress level as evidenced by an increase in the appearance, coping, emotional, psychosomatic and biological response score among hospitalized

toddlers in the experimental group after play therapy than the control group, as evidenced by post test analysis.

In the independent T-test, it was found that there was a significant difference in the mean post assessment of total behavioural responses (appearance, coping, emotional, psychosomatic and biological) scores between experimental and control group and t value ($t = 5.526$) was significant at 0.001 level. The investigator concluded that play therapy was effective in reducing perceived stress in the experimental group.

There was no significant association between the demographic variables of the hospitalized toddlers and the post assessment of total behavioural response (appearance, coping, emotional, psychosomatic and biological) scores in the experimental group.

CONCLUSION

Based on the findings of the study, following conclusions are drawn. Play is one of the most important aspects of a child's life and one of the most effective tool for managing stress. Play therapy provides one of the best opportunity for encouraging emotional expression, including the safe release of anger and hostility. Children who play are coping positively. Play therapy in the hospital provides diversion and relaxation. Play therapy improves mother-child relationship. Play is an important part of the hospitalized child's life and it is a vehicle for promoting optimum development. Play therapy maximizes potential benefits of hospitalization and supports family members. Play therapy improves the appearance, coping, emotional, psychosomatic and biological responses of the hospitalized toddlers.

The demographic variables of the hospitalized toddlers does not play any role in reducing perceived stress, as hospitalization and illness itself stresses any individual irrespective of age, gender etc.

IMPLICATIONS

The findings of the study have several implications on Nursing practice, Nursing education, Nursing administration and Nursing research.

NURSING PRACTICE

Numerous implications can be drawn from the present study for practice which promotes and creates a new dimension to nursing profession. Nursing practice on play therapy plays a vital role in reducing stress in hospitalized toddlers leading to quick recovery process.

Nurses can practice play therapy as a part of their routine nursing care to hospitalized children. The nurse, health professionals and health care practitioners are able to make significant contributions to promote the overall well being of the hospitalized child. The study brings a positive effect on hospitalization. Nurses can practice play therapy in paediatric wards and in other wards where children are admitted. Play therapy is a safe and effective intervention for hospitalized children to speed up their recovery. Continuous nursing education programmes can be planned for nurses, especially for paediatric nurses regarding play therapy to update their knowledge and skills in using different age appropriate toys in a safe manner.

NURSING EDUCATION

Orientation can be given to all new staff on play therapy with children. In-service education can be given to the nursing personnel regarding play therapy and use of safety toys. To conduct seminars, workshops, conferences, symposiums and micro-teaching programmes regarding play therapy to educate nursing personnel. Nurse educators can encourage students to use toys to play when interacting with children. Nurse educators should emphasize the concept of involvement of the family during play therapy for hospitalized children.

NURSING ADMINISTRATION

There can be improvement in practice, by providing a playroom with age appropriate toys in the paediatric unit. Nurse administrator can make a policy decision to use play therapy during child care in the hospital. Nurse administrator can employ a full time play therapist in the paediatric unit.

NURSING RESEARCH

Extensive researches should be conducted in various settings regarding play therapy to identify the efficacy, feasibility and acceptability. The study can be done in hospitalized preschool children also. To encourage the researcher to set long term goals regarding play therapy and stimulate them to achieve that goal. Play therapy may be studied more scientifically and used as an evidence based nursing intervention. The study can be conducted with a large number of samples.

LIMITATIONS

1. The study was limited to 60 samples, so that the study findings limit the generalisability.
2. Play therapy could not be continued for more longer duration as majority of the children were admitted for a maximum of 3 days only.

RECOMMENDATIONS

Based on this study the following recommendations are drawn

1. A true experimental study to evaluate the effectiveness of play therapy during intravenous therapy of hospitalized children could be conducted.

2. A true experimental study to evaluate the effectiveness of play therapy on the perceived stress among hospitalized preschool children could be conducted.
3. A true experimental study to evaluate the effectiveness of play therapy on the growth and development of toddlers in the community could be done.
4. A comparative study between play therapy and music therapy on the perceived stress among hospitalized toddlers could be conducted.
5. A pre experimental study to evaluate the effectiveness of IEC package on play therapy among mothers of underfive children in the community could be done.
6. A comparative study between individual play therapy and group play therapy among hospitalized children could be conducted.

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APPENDIX A
INSTRUMENT

Part I

Demographic variables

1. Age in years

1-2years 2-3years

2. Gender

Male Female

3. Birth Order

1st born 2nd born Last born

4. Type of illness

Medical illness Surgical illness

Part II

Observation checklist

The observation checklist was a modified child behaviour checklist. Auchen Berch, Rutters checklist, National Institute of Mental Health, Bethasadan Maryland. The investigator modified the item suitable to the age group. The checklist consisted of 30 items brought under 5 behavioural responses.

1. Appearance
2. Coping response
3. Emotional response
4. Psychosomatic response
5. Biological response

These behavioural items had both positive and negative items.

Observation Checklist

ITEM	NE	SE	SO	OF	AL
<p>I APPEARANCE</p> <ol style="list-style-type: none"> 1. Active and alert 2. Clean and neat 3. Cheerful and happy 4. Shy and timid 5. Dull and withdrawn 6. Anxious and disinhibited 7. Depressed and tearful 8. Looks frightened 					
<p>II COPING RESPONSE</p> <ol style="list-style-type: none"> 9. Co-operates to take drugs 10. Co-operates to nursing care 11. Engages in reading and other activities 12. Obeys commands 13. Adjusts to unfamiliar situations 					
<p>III EMOTIONAL RESPONSE</p> <ol style="list-style-type: none"> 14. Irritable 15. Exhibits temper tantrums 16. Screams and shouts 17. Destroys things 18. Shows separation anxiety 19. Feels isolated and bored 					

20. Turns face away while interacting 21. Clings to caregiver 22. Does not have interest in interacting with other children 23. Demands caregiver's attention 24. Aggressive towards people					
IV PSYCHOSOMATIC RESPONSE 25. Has difficulty in lying down for a long time 26. Becomes overtired 27. Complains of aches					
V BIOLOGICAL RESPONSE 28. Loss of appetite 29. Disturbance in sleep 30. Vomiting					

Key:

NE – Never

SE – Seldom

SO – Sometimes

OF – Often

AL – Always

APPENDIX B
SCORING KEY
ITEM SCORE – OBSERVATION CHECKLIST

Item No	NE	SE	SO	OF	AL
1	1	2	3	4	5
2	1	2	3	4	5
3	1	2	3	4	5
4	5	4	3	2	1
5	5	4	3	2	1
6	5	4	3	2	1
7	5	4	3	2	1
8	5	4	3	2	1
9	1	2	3	4	5
10	1	2	3	4	5
11	1	2	3	4	5
12	1	2	3	4	5
13	1	2	3	4	5
14	5	4	3	2	1
15	5	4	3	2	1
16	5	4	3	2	1
17	5	4	3	2	1

18	5	4	3	2	1
19	5	4	3	2	1
20	5	4	3	2	1
21	5	4	3	2	1
22	5	4	3	2	1
23	5	4	3	2	1
24	5	4	3	2	1
25	5	4	3	2	1
26	5	4	3	2	1
27	5	4	3	2	1
28	5	4	3	2	1
29	5	4	3	2	1
30	5	4	3	2	1

Positive Items (8) – 1, 2, 3, 9, 10, 11, 12, 13

NE – 1, SE – 2, SO – 3, OF – 4, AL – 5

Negative items (22) – 4, 5, 6, 7, 8, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25,
26, 27, 28, 29, 30

NE – 5, SE – 4, SO – 3, OF – 2, AL – 1

Total Score – 150

Score interpretation = $\frac{\text{Obtained score} \times 100}{\text{Total score}}$

APPENDIX C

LETTERS

A. LETTER SEEKING PERMISSION TO CONDUCT THE RESEARCH STUDY

From

Ms. Sheela John
II year M.Sc (N) student,
Dr. G. Sakunthala College of Nursing,
Thiruvananthapuram,
Trichy - 5.

To

The Principal,
Dr. G.Sakunthala College of Nursing,
Thiruvananthapuram,
Trichy-5.

Respected Madam,

Sub: Letter seeking permission to conduct the study

I am a final year M.Sc., Nursing student of Dr.G.Sakunthala College of Nursing. I would like to conduct a study as a part of partial fulfillment for the degree of masters in nursing. The statement of the problem is “A study to determine the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers at selected hospital, Trichy.” Kindly grant me permission to conduct the study.

Thanking you in anticipation.

Yours faithfully,

Sheela John

**B. LETTER SEEKING PERMISSION TO CONDUCT THE RESEARCH
STUDY**

From

The Principal,
Dr. G. Sakunthala College of Nursing,
Thiruvanaikoil,
Trichy-5.

To

The Administrator
Dr. G.Sakunthala College of Nursing,
Trichy-5.

Respected Madam,

Sub: Requesting permission to conduct study.

This is to introduce Ms. Sheela John a first year M.Sc., Nursing student of Dr. G. Sakunthala College of Nursing, Trichy-5. She is to conduct a research project which is to be submitted to Dr. M.G.R. Medical University in partial fulfillment of University requirement for the award of master degree of nursing.

Topic: "A study to determine the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers at selected hospital, Trichy." The student is interested in conducting her study among hospitalized toddlers in children's ward at Child Jesus Hospital. I shall be obliged if you kindly grant permission for conducting her study in your esteemed institution.

Thanking you.

Date:

Yours sincerely

Place:

(Principal)

**C. LETTER GRANTING PERMISSION TO CONDUCT RESEARCH
STUDY**

From

The Administrator,
Child Jesus Hospital,
Trichy.

To

The Principal,
Dr.G.Sakunthala College of Nursing,
Thiruvananai Koil,
Trichy -5.

Respected Madam,

Sub: Permission to conduct study in Child Jesus Hospital

Ms.Sheela John M.Sc., Nursing student of Dr. G.Sakunthala College of Nursing, Trichy -5, is granted permission to do her project on “A study to determine the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers at Child Jesus Hospital, Trichy.”

Thanking you.

Date:

Yours sincerely,

Place:

ADMINISTRATOR
Child Jesus Hospital,
Trichy.

D. LETTER REQUESTING FOR VALIDATION

From

Ms. Sheela John
II year M.Sc (N) student,
Dr.G.Sakunthala College of Nursing,
Thiruvananthapuram,
Trichy-5.

To

Respected Madam,

Sub: Letter requesting opinion and suggestions from experts for establishing content validity of the tools.

I am a M.Sc., Nursing student of Dr.G.Sakunthala College of Nursing, Trichy. As part of my course I am doing a study on the topic mentioned below.

“A study to determine the effectiveness of play therapy on perceived stress experienced by hospitalized toddlers at selected hospital, Trichy.”

May I request you to give your valuable suggestions regarding the appropriateness of the tool.

Thanking you in anticipation.

Yours sincerely

Sheela John

Signature and seal of validation

APPENDIX D
LIST OF EXPERTS CONSULTED FOR THE CONTENT VALIDITY
OF RESEARCH TOOL

1. Mrs. N. Saraswathi
Professor,
Child Health Nursing,
Matha College of Nursing
Vanpuram, Sivagangai district,
Manamadurai - 630606.

2. Mrs. Prabavathy
Principal,
Vellalar College of Nursing,
Thindal,
Erode - 12.

3. Mrs. C. Kavitha,
Reader,
Child health Nursing,
Shanmuga College of Nursing,
Salem - 7.

4. Mrs. Punithavathy,
Assistant Professor,
Child Health Nursing,
Sharmila College of Nursing,
Besant Nagar,
Chennai.

5. Dr. K. Ramanathan, MD (Paediatrics)
Paediatrician and Neonatologist,
Child Jesus Hospital,
Trichy - 620001.

APPENDIX E

Photos showing the investigator with her play interventions



APPENDIX F
PLAY MATERIALS USED

1-2 years

1. Toys with noise
2. Lots of objects to play with and touch
3. Scribbling and painting
4. Songs, music and rhymes
5. Story books read to them

2-3years

1. Mechanical toys with cause and effect mechanism
2. Riding tricycle
3. Colouring with crayons
4. Operating small mechanical type of toys that produce action or sound
5. Building blocks
6. Clay
7. Spoon and measuring cups
8. Wooden puzzles
9. Push and pull toys
10. Kicking balls