

**EFFECTIVENESS OF THERAPEUTIC PLAY ON THE  
LEVEL OF ANXIETY AMONG HOSPITALIZED  
CHILDREN BETWEEN 3-6 YEARS.**



*Dissertation Submitted To*

**THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY  
CHENNAI**

IN PARTIAL FULFILMENT OF REQUIREMENT FOR THE AWARD OF  
DEGREE OF  
**MASTER OF SCIENCE IN NURSING**  
**APRIL 2011.**

**A STUDY TO ASSESS THE EFFECTIVENESS OF THERAPEUTIC PLAY  
ON THE LEVEL OF ANXIETY AMONG HOSPITALIZED CHILDREN  
BETWEEN 3-6YEARS IN STANLEY HOSPITAL,  
CHENNAI 2010 – 2011.**

Certified that this is the bonafide work of

**MS.MALATHI.A**  
**MADHA COLLEGE OF NURSING,**  
**KUNDRATHUR, CHENNAI – 600 069**

**COLLEGE SEAL**

**SIGNATURE: \_\_\_\_\_**

**PROF. TAMILARASI. B**  
R.N., R.M., M.Sc (N)., Ph.D.,  
Principal,  
Madha College of Nursing,  
Kundrathur,  
Chennai – 600 069, TamilNadu.



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**Approved by the dissertation committee on:** \_\_\_\_\_

**Research Guide**

:

\_\_\_\_\_  
**PROF.TAMILARASI. B**  
R.N., R.M., M.Sc (N)., Ph.D.,  
Principal,  
Madha College of Nursing,  
Kundrathur,  
Chennai – 600 069, TamilNadu.

**Clinical Guide**

:

\_\_\_\_\_  
**MRS.ZEALOUS MARY.C**  
R.N., R.M., M.Sc (N).,  
Head of the department,  
Child Health Nursing,  
Madha College of Nursing,  
Kundrathur,  
Chennai – 600 069, TamilNadu.

**Medical Guide**

:

\_\_\_\_\_  
**DR.G. SHIVARAJ BABU**  
MBBS, MD, DCH,  
Civil Asst. Surgeon,  
Government Hospital,  
Sholingar,  
Chennai.

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## ABSTRACT

Today's children are tomorrow's citizen, so the health of the children is very important in determining the prosperity of a country. Indian journal of pediatrics (2005) indicated that 20% of children have some form of psychological problem and that of 70% of these are helped through the use of psychological based therapies such as play and creative arts. According to Jean Piaget, knowledge arises neither from objects nor the child, but from interactions between the child and those objects. Therapeutic play is one type of play therapy. Constructive play helps to relieve anxiety of the child. Play is essential for a child to be healthy as well as to grow healthy.

A study was conducted to assess the effectiveness of therapeutic play on the level of anxiety among hospitalized children between 3- 6 years in Stanley Hospital, Chennai. The objective of the study was to determine the effectiveness of therapeutic play on the level of anxiety among hospitalized children between 3-6 years.

The study was conducted by adopting a one group pre test post test research design. The sample size was sixty children between 3-6 years who fulfilled the inclusive criteria and they were selected by convenient sampling technique. During pre test the required data were collected by using the observation checklist. Therapeutic play was given to the child for 2 hours on each day for 3 days. After the intervention completes post test was conducted by using the same observation checklist.

The analysis revealed that there was marked decrease in the mean value from 43.93 in the pre test level to 31.86 in the post test level of anxiety. The standard deviation is increased from 7.57 in pre test to 17.71 in post test. The 't' value at 18.47 is highly significant at  $p < 0.001$  level. So there was significant decrease in the post test level of anxiety among hospitalized children between 3-6 yrs. Therefore therapeutic play can be used as a safe and effective tool, which helps in reducing anxiety.

# **CHAPTER –I**

## **INTRODUCTION**

“Play is a window through which we come to understand the child from  
Both inside and outside”

- Sheridan, Foley and Radlinski.

Play is a universal medium for all children. It is pleasurable and enjoyable aspect of child's life and essential to promote growth and development. Play is a transaction between the child and the environment which is intrinsically motivated, internally controlled and not bound by objective reality. Various forms of play at different ages provide opportunities for children to learn themselves, about the world and about interacting with others. Above all play serves as a mechanism for maintaining the children's sense of equilibrium.

A good start in life is important to the health and well being of children. Children are the most important age group in all societies. Every child has the fundamental rights to his total health and we have an obligation to bring happy and healthy life to children which is a difficult task and requires an approach that is carefully planned, coordinated and implemented by knowledgeable people. Childhood is a complex area with many factors combining to influence children's health and development. Children in care are having a very special burden to bear at all stages of their growth and development.

Children are the assets of a nation. Health plays a major role in the future of the children to withstand and meet personal, psychological, and social needs and fulfill the challenges in life. Children under the age of 5 years are grouped with the mothers considering as vulnerable and risk group comprising about 32% of total population in India.

Anxiety level of children is high when compared to adults if they are admitted in the hospital. It has been well documented that for more than three decades that many hospitalized children suffer from emotional distress. In order to support a child in hospital it is essential to know the child's possible hospital related fears. There are some factors that play a major role in influencing fear and stress of preschool children during hospitalization. The well known factors are, long separation and abandonment, medical procedures can be seen as punishment, fear of castration, mutilation of body parts, loss of control and newly acquired skills, death, loss of appropriate sensory and motor stimulation, fear of blood and unknown events.

Hospital admission can be a frightening and stressful experience for any child, even if they are not seriously ill. However it doesn't have to be a negative experience because there are many strategies, which staff can use to reduce stress and even to produce a positive experience for the child. Epidemiologic evidence shows that 8 % of children between the ages of 5 and 17 suffer from difficulties due to anxiety. Indian journal of pediatrics (2005) indicated that 20% of children have some form of psychological problem and that of 70% of these are helped through the use of psychological based therapies such as play and creative arts.

Snyder, (2004) study says that, the parents and hospital personnel have reported that separation from parents, unfamiliar people, being held still, nursing procedures and unfamiliarity with the norms of accepted behavior cause fear and anxiety in children. More recent research supports the earlier contentions that children between the ages of 6 months and 4 years are especially vulnerable to upset but are also more amenable to change than other age groups. Maternal separation appears to be the primary stressor, but the presence of emotional disturbance prior to hospitalization and the child's level of cognitive development at the time may also be significant factors. Children express their fears through their games and drawings (Wikstrom 2005).

Play is the language of children. It is their most natural activity. Through play children express themselves, explore their world and learn. Even though play looks as if it is only amusing, fun and joyful, it is an extremely important activity for children, and even for adults. We find ways of playing throughout our lives whether it is

through art, sewing, cooking, building projects. Play is an activity that benefits us in so many ways and contributes to our overall sense of wellbeing.

Erickson (1963), stated that play is an attempt for a child to bring into harmony, the desires of self, social norms and roles gaining mastery. As children grow, the use of language becomes more sophisticated, but throughout childhood, they usually express much more of themselves in their play. We can understand our children better if we understood their play. By watching the children's play we often learn more about their thoughts, feelings, motivation and struggles than by talking with them.

The use of play as a therapeutic modality is widely used by the child psychologist. Therapeutic play is the inclusion of play therapy. Hence there is growing realization of the significance of play in the development of children. Play is essential for a child to be healthy as well as to grow healthy. Anxiety levels can be reduced by play and as a result, therapeutic play has become an invaluable tool in helping children to come to terms with their hospital experience. Therapeutic play allows the child to express thoughts and feelings, assimilate reality, resolve internal conflicts, achieve mastery and cope effectively. It provides a vehicle for a child's self expression and a way in which children and adults can communicate.

Play can be utilized therapeutically to help children to master their environmental stresses, such as those encountered by hospitalization. Play has been recognized as important since the time of Plato (429-347 B.C) who reportedly observed, "You can discover more about a person in an hour of play than in a year of conversation". Therapeutic play acts as a vehicle for eliciting information from children while also sharing information about what to expect from medical procedures and what sensations may be experienced.

Therapeutic play can be used with children who are distressed, angry, confused, and anxious, in pain or quite possibly a combination of these, to help alleviate their fears, worries or concerns. Children can cope with the anxiety of hospitalization through therapeutic play. The type of play activity chosen will depend on each individual's stage of development, their physical condition and abilities,

although hospitalization and its attendant stresses may cause the child to regress, in certain circumstances.

Marlow, (2009) said that therapeutic play is the specified play activity by which a child acts out or expresses his unconscious feelings. It is central mechanism in which children cope, communicate, learn and master a traumatic experience during hospitalization. The main purpose of therapeutic play is to create a home like atmosphere which is familiar to children and to give them an opportunity to express their feelings about being in the hospital and also helping them to interact with other children.

Fosson, Martin and Haley investigated the effectiveness of guided medical play in reducing anxiety in children. The anxiety level of experimental group was reduced when compared to control group. Several studies have shown that therapeutic play is effective in decreasing anxiety and fears for children from the time of admission to discharge.

## **NEED FOR THE STUDY**

“Childhood shows the man as morning shows the way”. The health of the children is very important in determining the prosperity of a country. Play is an essential activity of child, which serves as a parameter to state whether child is healthy or under developed or sick or well. It is not a waste of time nor it is just a way of keeping young children busy or out of mischief while their parents are busy in carrying out their own responsibilities or work or entertainment.

Admission to a hospital is disruptive and bewildering even after multiple admissions. Children often report about anxiety and discomfort from the process of entering this strange and frightening world. The child who is admitted to a hospital is separated from the usual surroundings and routines of his or her everyday interaction with siblings, school life, social and sports activities with friends.

At the time of hospitalization, children encounter new routines, new adult caretakers and meet other children with a variety of medical problems. They were

automatically thrown into a bizarre and unfamiliar environment in which even the most basic functions such as eating, sleeping are different from their normal pattern and are under someone else control. Especially preschoolers may experience severe hospital related fears and ongoing traumatic stress responses during hospitalization and post discharge. Hospitalization and other frightening traumatic experiences in childhood may also increase the risk of health problems later in life and delay the child's cognitive, physical, emotional and social development (Aley 2002).

According to several studies, preschool children have more hospital related fears than older children because of their developmental stage (Gazall & Mactie 2007). The preschool children are not always able to separate reality from the imaginary and the child's ability to express and cope with his or her fears is limited. According to parents, 83% of pre school children suffer from different kinds of anxiety symptoms related to hospital fears (Hus 2004).

Thompson & Vernon (2006) stated that indications of emotional difficulties are greatest among children between six months and six years of age and increase markedly if hospitalization is long or frequently recurs. Parents and teachers of children recently hospitalized frequently report behavior problems suggestive of difficulties with separation, fearfulness and regression.

Smith S. (2005) emphasized that a child's participation in play is essential for learning how to enjoy life. Play is essential to the development of a normal, well-adjusted personality. It is essential for physical as well as intellectual development. Therapeutic play helps in relieving stress and tension of children. The morbidity rate of underfive children was 11.26 per 1000 live births. The recent statistics of morbidity rate of hospitalized children in the world is about 10 million. In India it is estimated to be 2.1 million, particularly in TamilNadu it is about 18 per 1000 children.

Constructive play helps to relieve anxiety of the child. Play therapy refers to structural activities designed according to age, cognitive development and health related issue to promote psychosocial wellbeing of the hospitalized child. It facilitates self expression and development of positive coping mechanisms. It establishes mastery through play therapy, child can gain a better understanding of hospitalization

and learn to adapt to the stress that these entail. In fact play helps the child to cope better. Therapeutic play refers to specialised activities that are developmentally supportive and facilitate the emotional well being of a pediatric children. Therapeutic play is a less structured way, focuses on the process of critical events such as hospitalization.

Therapeutic play reflects and stimulates development in a child. Drawing and painting are excellent media for expression. Children are more at ease expressing their thoughts and feelings through art than through words. Building a tower of blocks, improves the child dexterity and co ordination, cognitive functions such as cause and effect, how he express feelings such as frustration or success, and even social skills by his ability to wait his turn if building the tower with others. Therapeutic play acts as a vehicle for eliciting information from the children. It also helps to share information about what to expect from medical procedures and what sensations may be experienced by the children. Children who were offered therapeutic play will exhibit greater cooperation during stressful procedures.

When the investigator came across the recent statistics and the experience which she had during her clinical posting in the hospital, she had noticed most of the children were not interacting with other children even with their family members except the primary care taker. They were not co-operating with any treatment procedures given by medical workers. They were frightened to see the hospital environment and medical procedures. They are totally stressed and worried.

Hence the investigator felt the need of relieving the anxiety among the hospitalized children. Providing therapeutic play material to the children would be effective. Therapeutic play is on the promotion of continuing normal development while enabling children to respond more effectively to difficult situations such as medical experience. The investigator feels that health promotion in childhood can be achieved through organized play activities, having adequate play equipment and safe play area to move around.



## **STATEMENT OF THE PROBLEM**

A study to assess the effectiveness of therapeutic play on the level of anxiety among hospitalized children between 3- 6 years in Stanley Hospital, Chennai.

## **OBJECTIVES**

1. To assess the pre test level of anxiety among hospitalized children between 3- 6 years.
2. To assess the post test level of anxiety among hospitalized children between 3- 6 years.
3. To determine the effectiveness of therapeutic play on the level of anxiety among hospitalized children between 3- 6 years.
4. To associate the pre and post test level of anxiety among hospitalized children between 3- 6 years with their selected demographic variables.

## **OPERATIONAL DEFINITION**

**Effectiveness:** It is the desired change brought about by the therapeutic play and is measured in terms of reduction in the level of anxiety among hospitalized children between 3- 6 years.

**Therapeutic Play:** Refers to make the child to do drawing, painting, play musical toys, solve puzzles and building blocks thereby enabling them to relieve the anxiety of children between 3- 6 years who are admitted in the hospital for the first time.

**Anxiety:** Refers to a state of emotional response of children who are admitted in the hospital for the first time.

**Hospitalized Children:** Refers to the children between the age group of 3-6 years and who were admitted in the medical ward for the first time.

## **HYPOTHESIS**

There is no significant relationship between the therapeutic play and the level of anxiety among hospitalized children between 3-6 years.

### **DELIMITATIONS**

- The study was delimited to single hospital.
- The study period was delimited to 4 weeks of data collection.
- The study sample was delimited to pre school children between 3-6 years.

## **CHAPTER – II**

### **REVIEW OF LITERATURE**

The term review of literature refers to the activities involved in identifying or searching for information on a topic and developing and understanding the state of knowledge of the topic (Polit & Hungler).

Review of literature is an essential component of research study as it provides a broad understanding of all research problems, keeping this in mind the investigator had made a thorough study on available source which has been helping in projecting the widened prospective of the study. It has also enabled the researcher to design the study to develop the tool and plan for data collection procedure and to analyze the data.

#### **PART – I REVIEW OF RELATED LITERATURE**

The play therapist provides freedom to the troubled child to explore his or her ideas and feelings about self and others through play. The experience is different from that of playing with friends, siblings, parents or other family members. The play therapy session becomes a time for the child to experiment with change, learn about choice, self-responsibility and self direction, and resolve emotional difficulties and inner conflicts. The spontaneous play of children has long been recognised as a natural form of communication.

The related literature for the study is presented in following sections.

- General information related to play therapy
- Literature related to therapeutic play.
- Literature related to anxiety of hospitalized children.

#### **PART – II CONCEPTUAL FRAME WORK**

## **PART-I**

### **REVIEW OF RELATED LITERATURE**

#### **General information related to play therapy**

Play therapy is the systematic use of theoretical model to establish an interpersonal process wherein trained play therapists use the therapeutic powers of play to help clients to prevent or resolve psychosocial difficulties and achieve optimal growth and development. Janssen & Janssen, (1996) stated that play is a universal behavior of children that has been documented since ancient times.

Play is an activity, fast-paced and demands initiative. Play does not always have immediate, visible or external results. The enjoyment that comes from playing does not emanate from an immediate need for satisfaction, such as eating when hungry. The activity itself is the cause for satisfaction. Play is an imitation within change. Games have clear rules and definitions, as well as freedom of choice and a place for initiative variations and creativity.

The importance of play therapy for hospitalized children was, adjust to a strange environment, involve themselves in activities they enjoy, 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.

Types of play are classified as physical play, expressive play, dramatic play, symbolic play and manipulative play. Physical play has a social nature because it involves other children. It also provides exercise, which is essential for normal physical development. Certain forms of play give children opportunities to express feelings by engaging with materials. Parents can take an active role in expressive play by using the materials alongside the child. Children control or master their environment through manipulative play. They manipulate the environment and other people as much as possible. Manipulative play starts in infancy. Infants play with their parents. This interaction brings the infant and parent together in a game.

Certain games can symbolically express a child's problems because there are no rules in symbolic play. The child can use this play to reinforce, learn about and imaginatively alter painful experiences. Symbolic play may be used by children to cope with fear of separation when they go to school or to the hospital. Children act out situations which they suspect may happen to them, or that they have witnessed. Dramatic play can be either spontaneous or guided and may be therapeutic for children in the hospital.

### **Literature related to therapeutic play**

**Roohafza H, et al., (2009)** done a comparative study on impact of nurses clothing on anxiety of hospitalized children. The main aim of the study is to investigate anxiety levels in two groups of children exposed to nurses with white vs colored clothing in a university hospital in Iran. The design used for the study was clinical trail design. Totally 92 children, aged 7-15 years old hospitalized for 3-5 days in pediatric surgery ward were exposed to nurses in white or colored clothing. Children anxieties were assessed on admission and at discharge by using revised children manifest anxiety scale. The result showed that children exposed to white nursing uniforms showed higher anxiety levels ( $p < 0.005$ ) compared with children exposed to colored clothing.

**Lihc & Lopezv, (2008)** evaluated the effectiveness and appropriateness of therapeutic play intervention in preparing children for surgery. A randomized control trial was employed. The researcher has selected 203 children those who are admitted for surgery during a 13 month period. The result showed that the level of anxiety was reduced for the children after the intervention completes. They concluded that, the importance of integrating therapeutic play as an essential component of holistic and quality nursing care to prepare children for surgery.

**Raphael. L, (2007)** said that young cancer patients often have many anxieties and concern about their bodies, physical condition, and impending health care events. These children usually experience distress during and after health care experience. Therapeutic play seeks to help young patients cope with the stresses of health care experience by participating through play, instead of being passive participants in the

threatening health care experience. Therapeutic play interventions essentially enhance the children abilities to cope effectively with and learn from potentially stressful situations.

**William Li HC, et al., (2007)** done a study on effects of therapeutic play on outcomes of children undergoing day surgery in university of Hong Kong. Randomized controlled trial was used and 203 children were invited to participate in the study. The experimental group received therapeutic play and the control group received routine information preparation. The results showed that children in the experimental group reported significantly lower state anxiety scores in pre and post operative periods and exhibited fewer negative emotions at induction of anesthesia than children in the control group.

**Hendon C & Bohon Lm, (2006)** done a comparative study on hospitalized children's mood difference during play and music therapy. The investigator has observed 60 children either during play or music therapy. Happiness was operationally designed as the frequency of smiles during a 3 minute period. The results showed that music therapy ( $m=12.43$ ,  $SD=4.83$ ) led to significantly more smiles than did play therapy ( $m=5.83$ ,  $SD=3.10$ ). They concluded that increasing the amount of time for music therapy in hospitals for child may be a way to increase positive effect and ultimately to increase mental and physical well being in hospitalized children.

**Britt M.W, (2005)** conducted a study on communicating via expressive arts, the natural medium of self expression for hospitalized children in Swedish hospital. The purpose was directed towards investigating what takes place during play therapy when children were given the opportunity to use expressive arts such as clay. During the 3 year period twenty two hospitalized children participated in the study. The result of the qualitative analysis showed that there is decrease in loneliness, fear and powerlessness of the children. The result of the study suggested that the expressive arts should be used as a tool to help the child to express themselves when being hospitalized.

**Dix, A, (2004)** said that there is evidence that hospital play hastens children's recovery, increases compliance and reduces the need for general anesthesia. A survey showed an 11 percent rise in the number of play specialists in the past 2 years, but more are needed. The Children national service framework recommends that all children in hospital have daily access to a play specialist. The researcher finally concluded that more number of child specialist has to be appointed to enhance child recovery.

**Leonard.G, (2004)** done a study on giving toys to children reduces their anxiety about receiving pre medication for surgery. The aim of the study is giving small toys to the children would decrease the anxiety associated with taking oral medication because administration of oral medication to children is often met with apprehension, reluctance or refusal. He done a prospective study involving 100 children, 3-6 years of age and they were randomized into two equal groups. The anxiety of each child was assessed by using the modified Yale preoperative anxiety scale. The result showed that there is a significant reduction in the level of anxiety in children who received a toy before oral administration of midazolam. They concluded that future implications of play therapy in various aspects should be analyzed.

**Pan HL, et al., (2004)** done a study on application of therapeutic play in the process of nursing in preschool children. The study samples were 4-year-old female children with intestinal obstruction. Data were collected by participant observation. Therapeutic play was applied during the process of nursing in an effort to accomplish a trust between the child and the health care providers, to reduce the children fear of therapy, to help the child to understand her own self-image, to provide an emotional outlet for her. During the nursing process, they improved their overall compliance, emotional outlet, and helped to understand their self-image. The results showed that pediatric nurses consider employing play as a means to communicate with children effort to reduce their stress during hospitalization. The findings revealed that therapeutic play may also improve children compliance with the process of nursing.

**Bowmer, N. (2002)** had written an article about the use of puppet show as therapeutic play, to decrease anxiety in hospitalized preschoolers. He explained about the importance of educating the nurses on the effects of therapeutic play on anxiety

levels in hospitalized children. Nurses could use this information to implement therapeutic play in hospitals throughout the world. Feasibility issues would include the cost of materials needed and the time involved to educate nurses. More research should be done on therapeutic play as a method to decrease anxiety in children.

**Leblanc.M, & Ritchie.M, (2002)** conducted a study to determine the overall effectiveness of play therapy and the variables related to effectiveness in northeast Ireland. The sample size was 42 children and they were divided into experimental and control group. The experimental group underwent play therapy for 30 sessions and the control group underwent play therapy for 20 sessions. The results showed that there is a strong relationship between treatment effectiveness with the inclusion of parents and duration of play therapy in the therapeutic process was reported. They concluded that play therapy appeared to be effective in treating children experiencing emotional difficulties.

**Rob S.L.C, (2002)** had done a clinical study with the aim to evaluate the effect of therapeutic music interventions on the behaviors of the hospitalized children in isolation ward in Nigeria. Totally 10 pediatric oncology patients between the age of 4 and 11 years in isolation for neutropenia were participated in a cross - over design study. The investigator measured the effect of 4 different music interventions on the child's environment, engagement, mood and the child's relationship between the environment and behavior questionnaires. The result showed that music therapy has significant effect on behavior ( $P < 0.001$ ).

**Clatworthy.S, et al., (2002)** wrote an article regarding child drawing. Hospital, an instrument designed to measure the emotional status of hospitalized school-aged children. They said that hospitalization has long been accepted as a stressful experience for children, but the degree of anxiety experienced by any child is unknown. Physiological status is routinely measured, but the same is not true for emotional status. This report presents the validity and reliability of the "Child drawing hospital" as a measure of anxiety for hospitalized children.

**Martin MR, (2002)** done a descriptive study which aims at elaborating a protocol using therapeutic play for the preparation of pre school children to venous



puncture and also at testing its efficiency and applicability. The result showed that children who have attended the play session were more co-operative when they were punctured. The author concluded that this should be incorporate in the nursing care plan for hospitalized children.

**Dangle T.D& Sik, (2001)** examined the effectiveness of therapeutic play for hospitalized preschoolers by using a post test experimental and control group design. The sample size was 5 pre school children and they were assigned in to experimental and control group based on the convenient sampling technique. The tool used for the study was anxiety scale. Therapeutic play in the form of an interactive puppet show was administered to 50 preschool children one day before surgery. The findings reported that the children who received the therapeutic play intervention manifested marked less anxiety and more co-operations and had significantly lower mean blood pressure and pulse rates during injection than the control group. This study demonstrates that therapeutic play is valid in terms of reducing stressful responses to hospitalization.

**Renee C.B& Man., (2001)** wrote an article on “Evaluating children’s literature as a source for patient education”. He stated that preschoolers should be encouraged to be active participants in a story since they learn through imaginative play and manipulation of objects. A picture book also enhances it animals are used as the main characters in stories to children about hospitalization. It can effectively assist children in coping with stress by distancing the characters and providing a vicarious experience. Since preschoolers enjoy “make believe” situations, personification of toys and animals capture their attention. Hence nurses can use these measures in clinical settings and also recommend the parents for the selection of play.

**Zahr LK, (2001)** conducted a study on therapeutic play for hospitalized preschool children in Lebanon. Therapeutic play in the form of an interactive puppet show was administered to 50 preschool children. A control group of 50 preschool children received routine care but no therapeutic play. The study finding showed that the children who received the therapeutic play intervention manifested markedly less anxiety and more co-operations. He suggested that nurses could use this information to implement therapeutic play in hospitals throughout the world.

**Hudson, C.J et al., (2001)** done an experimental study of story telling as a measure of observing anxiety in hospitalized children. The investigator selected 67 hospitalized children and they were asked to create stories about pictures. The stories were categorized as negative or positive in tone and hence, the children were categorized as anxious or not anxious. They concluded that children who told negative stories displayed significantly more negative behavior and showed higher anxiety.

**Patil, (2001)** done a study on “effect of therapeutic play on the behavioral response of children undergoing surgical dressing” in lucknow hospital. The participants of the study were 87 children. Quasi experimental design was used for the study. He reported that therapeutic play intervention in the preparation for surgical dressing had significant effects in terms of behavioral responses. It also showed that children were more comfortable and co-operative during the procedure of dressing. This study recommended that the therapeutic play could be used as the nursing intervention for preparation of children for various therapeutic measures.

**Kuntz N & Adams JA, (2000)** conducted a clinical study on play therapy programs in a bone marrow transplant unit using a play cabinet. This play cabinet was designed to provide readily available sterilized toys that are appropriate for each of the four age groups such as infant, toddlers, preschool and school age children. Among them two cases are presented, which shows the efficacy of the use of the play cabinet in play therapy programs. It is recommended that therapeutic play is an intervention used by nurses to aid the ill and hospitalized children to express thoughts and feelings. This kind of play also helps the nurses to understand the thoughts, feelings and experiences of the children better.

**Martin & Haley, (2000)** had done an experimental study on “Anxiety among hospitalized latency age children”. The participants were 50 school age hospitalized children. Anxiety was measured by self – report, parental report, nurse’s report and direct observation. The results of the study showed that there is a significant reduction in the level of anxiety following guided play. The findings of the study suggested that play therapy will be an useful intervention in promoting the healthy behaviors of the hospitalized children.

**Sundaram, R. (2000)** done a study on art therapy to help pediatric patients to communicate their feelings about being in the hospital and cope with their illness or injury. This case study of Alan, who was admitted in pediatric unit with orthopedic injuries, shows how the art therapy process helped him to cope with his injury and subsequent 14 day hospitalization. Once Alan overcame his initial resistance to the art materials, he was able to use artwork as a communicative channel to express his feelings about being in the hospital and away from his family suffering from a painful injury.

**Ziegler & Michelle, (2000)** wrote an article on “Preparation for surgery and adjustment to hospitalization”. They stated that one out of every 4 children would be hospitalized at least once before reaching school age. The physical and psychosocial stress of hospitalization may be influenced by the child’s developmental level, causing behavioral changes, somatic complaints and a prolonged hospital stay. Through the use of a careful development assessment and therapeutic play techniques, fears could be allayed, misconceptions corrected, emotionally charged issues addressed and a positive self – image created. Therapeutic play also helped sick children to regain independence gradually through enjoyment of group experience and to have mastery over traumatic experience through creativity.

**Margaret.A & Chambers.R, (2000)** wrote an article regarding play as therapy for the hospitalized child. Play has been recognized as essential for normal growth and development. Children use play as a medium for self expression and communication. She said that play can be utilized therapeutically to help children to master environmental stresses, such as those encountered by hospitalization.

**Matthews & Barbara (2000)** said that a therapeutic play program in New Zealand aims to provide an environment which is helping the children to cope with the stress of being in a hospital. The therapeutic play program is a preventive mental health program that differs from play therapy, which is intervention for children who have an identified pathology. This program model transforms the potentially psychologically harmful hospital experience into a challenging experience through which the child can learn and grow.

**Ribeiro CA, (2000)** had written an article regarding the effects of the use of therapeutic play by the pediatric nurse on the behavior of recently hospitalized children. This work describes the realization and the results of one experimental research accomplished with children from 3 to 5 years of age, recently hospitalized using the therapeutic play. The results showed that it helped children behave more according to what is expected of this 3-5 years age group, as well as show signs that they had adapted or presented ego strength.

**Rae WA, et al., (2000)** compared the effects of play on the psychosocial adjustment of 46 hospitalized children for acute illness who were placed in one of four groups. The groups are divided into Therapeutic Play, Diversionary Play, Verbal Support and no treatment. Ratings of Psychological adjustment included self-report, as well as nurse and parent ratings. Children in the Therapeutic Play evidenced a significant reduction in self reported hospital fears.

**Clatworthy S, (2000)** had done a study on Therapeutic Play effects on hospitalized children. Totally 34 children aged 5 to 11 years were selected as study samples. This Study was conducted in two different hospital settings over a four year period. A two-group experimental design was developed that included therapeutic play for the experimental children and pre and post measures of anxiety for all children. Results of this study demonstrate that therapeutic play is a valuable intervention with hospitalized children in reducing the anxiety level.

**Butler, A et al ., (2000)** conducted a study to evaluate the effectiveness of play therapy on anxiety of preschooler in the hospital environment using a post test experimental and control group design. The participants of the study were 44 samples aged 2 to 6 in the experimental and the control group based on convenient sampling technique. The tools were child anxiety scale and observational rating scale to observe the reactions of the children. The findings of the study revealed that play can be a simple, effective way of helping 77% of preschool child to deal with the stranger and sometimes painful hospital world and to masters situation that might otherwise by over whelm ins. The study conducted that the type of play can be incorporated easily in to the nursing care plan and can become an essential aspect of the care of the hospitalized preschool child.

**Johnson PA et al., (1999)** investigated effects of a Puppet Presentation on anxiety levels of Hospitalized Children as measured by the Palmar Sweat Index (PSI). Subjects were 43 Children, aged 5-8 years and they were allocated randomly to treatment and non treatment groups. Treatment consisted of a Puppet Show designed to familiarize patients with hospital routines and with procedures of their operations. The result showed that the treatment was associated with a significant reduction in anxiety from the time of admission to both the period immediately after the Puppet Show and the evening after surgery.

### **Literature related to anxiety of hospitalized children**

**Margaret, (2010)** conducted a study on “The voices of children-Stories about hospitalization”. The study explored children's views of hospitalization through their own voices. In this secondary analysis, 93 children aged 5 to 9 years told stories about hospitalization using a set of drawings of children in the hospital. Children were recruited in the hospital and in the community. Themes were identified through qualitative analysis. The results showed that Children’s stories focused on being alone and feeling scared, mad and sad. These children wanted protection. Children in the stories were not always facing scary events. They were simply not at home and feeling bored, lonely and sad and they wanted companions. Children displayed awareness of both good and bad outcomes. The hospital was a unique environment that could be fun as well as threatening.

**Vuillermin PJ, et al., (2010)** evaluated about prevalence of anxiety in children with asthma. The objective of this study was to determine children with asthma are more likely to suffer anxiety than children without asthma. A population-based, cross-sectional design was used in this study. Children aged 5-13 years were selected for the study. Control group were a sample of children without asthma symptoms. Spence Children's Anxiety Scale (SCAS) was used to assess children anxiety. Questionnaires were issued to 205 children with asthma .The results showed that SCAS scores were higher in asthmatics than controls ( $p<0.001$ ).They explored that children with asthma are substantially more likely to suffer anxiety than children without asthma.

**Sylvania M. C, (2009)** published an article in the journal of child psychology and psychiatry. As a part of the investigation the scientist annually evaluated a representative sample of preschoolers till five years of age. The results showed that 1758 children are atypically affected by high depressive and anxiety problems during hospitalization.

**Margie Crandall et al., (2007)** found that anxiety is a common symptom that children experience in the health care setting. The investigator selected 60 children and they were assessed by state trait anxiety inventory. Simple linear regression and Pearson correlation were performed to determine the strength of relationship. The result emphasis on the level of anxiety was high for the children during hospitalization. They suggested that proper measures should be undertaken to reduce the level of anxiety.

**Zeev N.K, (2006)** done a study on Preoperative Anxiety, Postoperative Pain, and Behavioral Recovery in Young Children Undergoing Surgery. They recruited 241 children aged 5 to 12 years scheduled to undergo elective outpatient tonsillectomy and adenoidectomy. Before surgery, they assessed child and parental situational anxiety and temperament. After surgery, all subjects were admitted to a research unit in which postoperative pain and analgesic consumption were assessed every 3 hours. Parental assessment of pain in their child showed that anxious children experienced significantly more pain both during the hospital stay and over the first 3 days at home. Result showed that Preoperative anxiety in young children undergoing surgery is associated with a more painful postoperative recovery and a higher incidence of sleep and other problems.

**Ten Thoren.C & Petermann.F, (2000)** said that anxiety disorders are more common in asthmatics and have a considerable influence on asthma management because they influence symptom perception. Excessive anxiety about asthma symptoms can affect the child's response to an asthma attack; anxiety related to asthma triggers can reduce the child's quality of life and anxiety related to medical treatment can influence compliance. The extent of this influence depends upon an individual's ability to cope.

**Zigmond, (2000)** explained that a self-assessment scale found to be a reliable instrument for detecting states of depression and anxiety in the setting of a hospital medical outpatient clinic. The anxiety and depressive subscales are also valid measures of severity of the emotional disorder. It is suggested that the introduction of the scales into general hospital practice would facilitate the large task of detection and management of emotional disorder in patients under investigation and treatment in medical and surgical departments.

## **PART-II**

### **CONCEPTUAL FRAMEWORK**

Conceptual framework or a model is made up of concepts and the mental images of the phenomenon. It provides the guidelines to proceed to attain the objectives of the study based on the theory. It is a schematic representation of the steps, activities and outcomes of the study.

Imogene King's theory (1981) states that the purpose of nursing is to help the people to maintain or restore health. Imogene King proposes an open system framework as a basis for her theory of goal attainment. It consists of three interacting systems which includes personal, interpersonal and social. The theory concentrates its attention on the interpersonal system and the interactions that take place between the individuals. The investigator adopted King's goal attainment theory (1981) as a basic theory for conceptual framework, which is aimed to assess the effectiveness of therapeutic play on reducing the level of anxiety among hospitalized children between 3-6 yrs. This involves interaction between the investigator and the hospitalized children. The six major concepts phenomenon are described as follows.

#### **Perception**

Perception is the individual's representation of image of reality. It influences all other behavior of a person and it is more subjective and unique to each person. The investigator perceived that children are having anxiety due to unfamiliar hospital environment, fear of nursing procedures like injection, dressing, oral medication and separation of parents.

#### **Judgement**

Judgement is decision which is made by the investigator. The investigator decided to relieve the anxiety of children during hospitalization. Mothers have lack of awareness to judge about the management to reduce the level of anxiety for the children between 3-6 years.



## **Action**

This refers to the changes that have to be achieved. The investigator action is to provide therapeutic play for the hospitalized children. The children action is ready to receive the therapeutic play. Therapeutic play can help the hospitalized child to better understand and interpret the imagery, sights, sounds and language used in the hospital. So the investigator decided to provide therapeutic play to the hospitalized children between 3-6 years.

## **Reaction**

Reaction means decision to act. It helps in setting a mutual goal. In this study the investigator and the children set a mutual goal to reduce their anxiety. The investigator developed the observational checklist to assess the level of anxiety among hospitalized children.

## **Interaction**

Interaction is a process of perception and communication between person and environment and between person and person, represented by verbal and non verbal behaviors that are goal directed. The investigator encouraged the children to actively participate in the therapeutic play. The play material includes drawing, painting, musical toys, puzzles and building blocks.

## **Transaction**

Transaction is purposeful interaction that leads to goal attainment. The investigator goal is to reduce the anxiety of children during hospitalization followed by therapeutic play. The effectiveness of therapeutic play was assessed by same observational checklist.

The post test assessment showed three outcomes ie mild, moderate and severe anxiety. Mild anxiety depicts the reinforcement process whereas moderate and severe anxiety depicts the reassessment process.

## **CHAPTER – III**

### **METHODOLOGY**

Research methodology is a systematic procedure in which the researcher starts from initial identification of the problems to find conclusions. (Kothari C.R 2003). The methodology of research indicates the general pattern of organizing the procedure it gathers valid and reliable data for the problem under investigation.

This chapter deals with the description of research methodology adopted by the investigator to evaluate the effectiveness of therapeutic play on reduction of anxiety among hospitalized children between 3-6 years. It includes research design, setting of the study, population, sample, sample size, sampling technique, criteria for sample selection, description of the instrument, validity and reliability, pilot study, data collection procedure, data analysis.

#### **RESEARCH DESIGN**

The research design used in this study was one group pre test post test research design.

#### **SETTING OF THE STUDY**

The study was conducted in Stanley Government hospital, Chennai. The total bed strength of the hospital is 1200. The hospital was well equipped with all specialties like emergency department, trauma unit, intensive care unit, neurology unit, isolation ward, surgical ward and all specialties out patient departments. There is separate block for pediatric department which consist of 5 floors. Inpatient ratios of pediatric children were 600 among that the ratios of preschool children were 150-250. The pediatric medical ward is situated in the 3<sup>rd</sup> floor. I have selected the preschool children from the general ward .The hospital was well equipped with all facilities.

## **POPULATION**

The population of the study was all the children who are admitted in the hospital.

## **SAMPLE**

The sample consists of children in the age group of 3-6 years who fulfilled the inclusive criteria.

## **SAMPLE SIZE**

Sample size consists of 60 hospitalized children between 3- 6 years.

## **SAMPLING TECHNIQUE**

Convenient sampling technique was used by the researcher to select the sample. The children between 3- 6 years who were admitted in the medical ward and fulfilled the inclusive criteria was randomly selected.

## **CRITERIA FOR SAMPLE SELECTION**

### **Inclusive criteria**

- Children belonging to the age group of 3-6 years.
- Children who were able to co-operate in the play activities.
- Children who were going to stay in hospital for more than 3 days.
- Children who were admitted in the medical ward.
- Children who were admitted for the first time.

### **Exclusive criteria**

- Children who were not to co-operate in the study.
- Children with mental and physical disability.
- Children who were less than 3 years and more than 6 years.
- Children who were admitted other than medical ward.

## DESCRIPTION OF THE INSTRUMENT

The tool constructed in this study has two parts

### Part - I

Demographic variables consists of age of child, sex of the child, birth order, education, number of days hospitalized, parents education, occupation and type of family.

### Part - II

Modified Achen Bach child behavior observation checklist was used in this study. It consists of 30 items, which were brought under five behavior responses namely the appearance, coping response, psychosomatic response, emotional response, and biological response. These behavior items had both positive and negative items. It consists of 5 aspects.

### Variables

Appearance	: 8 items
Coping response	: 5 items
Emotional response	: 11 items
Psychosomatic response	: 3 items
Biological response	: 3 items

### Scoring interpretation

It includes positive and negative items.

#### Positive items (\*)

N	: Never	-	2
O	: Occasional	-	1
A	: Always	-	0

$$\text{Score } 8 \times 2 = 16$$

#### Negative items (\*\*)

Never	-	0
Occasional	-	1
Always	-	2

$$\text{Score } 22 \times 2 = 44$$

Total score is  $16 + 44 = 60$

To interpret the level of anxiety, the score were interpreted as follows.

- <50% - Mild anxiety
- 51-75% - Moderate anxiety
- >75% - Severe anxiety

### **VALIDITY**

The content validity of the instrument was obtained from the experts in the field of pediatrics.

### **RELIABILITY**

The reliability of the instrument was assessed by using test retest method. Calculated test re test correlation coefficient for observation checklist was 0.8 .These correlation coefficients was high and it is appropriate tool for assessing anxiety score among children age 3-6 years.

### **ETHICAL CONSIDERATION**

The study was conducted after the approval of dissertation committee and director. Formal permission was obtained from the director of Stanley government hospital. Hospitalized children between 3-6 years and their care givers were clearly explained about the study purpose and procedures. The formal written consent was taken from the samples. The usual assurance of anonimity and confidentiality was obtained.

### **PILOT STUDY**

Pilot study is the trial of the major study. The pilot study was conducted from 26.04.10 to 30.04.10 in Stanley Government Hospital. Formal written permission was obtained from the director of Stanley Government Hospital. Participants are six children between 3-6 years who are admitted in the hospital were selected for the pilot study.The participants are selected by using convenient sampling technique.

A brief introduction was given to explain the purpose of the study to the mother, so as to get their co-operation. Oral consent was obtained from the caregivers. Pre test was conducted by using observational checklist for 30 min for each child. The therapeutic play was given for 2 hours per day for 3 days. After the intervention gets completed post test was conducted on the next day by using the same observation checklist.

Data analysis showed that therapeutic play was effective in reduction of anxiety of hospitalized children between 3-6 years. The results were analyzed based on the scores of the children. During pilot study the validity, the reliability and practicability of the instruments were checked. The result of the pilot study showed the feasibility of the original study.

#### **DATA COLLECTION PROCEDURE**

The investigator used observation checklist to assess the level of anxiety among hospitalized children between 3-6yrs. The investigator started the data collection procedure for the main study in Stanley Hospital from 1.5.10 to 31.5.10. The investigator selected the participant according to the criteria and availability. Every day 3 participants were selected. The brief introduction was given and explained the purpose of study to the mother. Formal written permission was obtained from the director of the hospital.

During pre test the required data were collected by using the observation checklist. Therapeutic play was given to the child for 2 hours on each day for 3 days. The play material includes musical toys, drawing, painting and building blocks. Play materials were selected according to the age and interest of the children. After the intervention gets completed post test was conducted on the next day by using the same observation checklist for children. The researcher worked from morning 9am to evening 3 pm for 6 days in a week during the data collection.

## **DATA ANALYSIS**

The data obtained was analyzed by using both descriptive and inferential statistics i.e. mean, percentage, standard deviation, paired 't'- test and chi-square test. Descriptive statistics includes frequency and percentage distribution of the demographic variables and mean and standard deviation of pre and post test level of anxiety of hospitalized preschool children. Inferential statistics includes the chi-square test to associate the level of anxiety with selected demographic variables and paired 't'-test to test the significance of pre and post test level of anxiety of hospitalized children between 3-6 years.

# **CHAPTER –I**

## **INTRODUCTION**

“Play is a window through which we come to understand the child from  
Both inside and outside”

- Sheridan, Foley and Radlinski.

Play is a universal medium for all children. It is pleasurable and enjoyable aspect of child's life and essential to promote growth and development. Play is a transaction between the child and the environment which is intrinsically motivated, internally controlled and not bound by objective reality. Various forms of play at different ages provide opportunities for children to learn themselves, about the world and about interacting with others. Above all play serves as a mechanism for maintaining the children's sense of equilibrium.

A good start in life is important to the health and well being of children. Children are the most important age group in all societies. Every child has the fundamental rights to his total health and we have an obligation to bring happy and healthy life to children which is a difficult task and requires an approach that is carefully planned, coordinated and implemented by knowledgeable people. Childhood is a complex area with many factors combining to influence children's health and development. Children in care are having a very special burden to bear at all stages of their growth and development.

Children are the assets of a nation. Health plays a major role in the future of the children to withstand and meet personal, psychological, and social needs and fulfill the challenges in life. Children under the age of 5 years are grouped with the mothers considering as vulnerable and risk group comprising about 32% of total population in India.



Anxiety level of children is high when compared to adults if they are admitted in the hospital. It has been well documented that for more than three decades that many hospitalized children suffer from emotional distress. In order to support a child in hospital it is essential to know the child's possible hospital related fears. There are some factors that play a major role in influencing fear and stress of preschool children during hospitalization. The well known factors are, long separation and abandonment, medical procedures can be seen as punishment, fear of castration, mutilation of body parts, loss of control and newly acquired skills, death, loss of appropriate sensory and motor stimulation, fear of blood and unknown events.

Hospital admission can be a frightening and stressful experience for any child, even if they are not seriously ill. However it doesn't have to be a negative experience because there are many strategies, which staff can use to reduce stress and even to produce a positive experience for the child. Epidemiologic evidence shows that 8 % of children between the ages of 5 and 17 suffer from difficulties due to anxiety. Indian journal of pediatrics (2005) indicated that 20% of children have some form of psychological problem and that of 70% of these are helped through the use of psychological based therapies such as play and creative arts.

Snyder, (2004) study says that, the parents and hospital personnel have reported that separation from parents, unfamiliar people, being held still, nursing procedures and unfamiliarity with the norms of accepted behavior cause fear and anxiety in children. More recent research supports the earlier contentions that children between the ages of 6 months and 4 years are especially vulnerable to upset but are also more amenable to change than other age groups. Maternal separation appears to be the primary stressor, but the presence of emotional disturbance prior to hospitalization and the child's level of cognitive development at the time may also be significant factors. Children express their fears through their games and drawings (Wikstrom 2005).

Play is the language of children. It is their most natural activity. Through play children express themselves, explore their world and learn. Even though play looks as if it is only amusing, fun and joyful, it is an extremely important activity for children, and even for adults. We find ways of playing throughout our lives whether it is

through art, sewing, cooking, building projects. Play is an activity that benefits us in so many ways and contributes to our overall sense of wellbeing.

Erickson (1963), stated that play is an attempt for a child to bring into harmony, the desires of self, social norms and roles gaining mastery. As children grow, the use of language becomes more sophisticated, but throughout childhood, they usually express much more of themselves in their play. We can understand our children better if we understood their play. By watching the children's play we often learn more about their thoughts, feelings, motivation and struggles than by talking with them.

The use of play as a therapeutic modality is widely used by the child psychologist. Therapeutic play is the inclusion of play therapy. Hence there is growing realization of the significance of play in the development of children. Play is essential for a child to be healthy as well as to grow healthy. Anxiety levels can be reduced by play and as a result, therapeutic play has become an invaluable tool in helping children to come to terms with their hospital experience. Therapeutic play allows the child to express thoughts and feelings, assimilate reality, resolve internal conflicts, achieve mastery and cope effectively. It provides a vehicle for a child's self expression and a way in which children and adults can communicate.

Play can be utilized therapeutically to help children to master their environmental stresses, such as those encountered by hospitalization. Play has been recognized as important since the time of Plato (429-347 B.C) who reportedly observed, "You can discover more about a person in an hour of play than in a year of conversation". Therapeutic play acts as a vehicle for eliciting information from children while also sharing information about what to expect from medical procedures and what sensations may be experienced.

Therapeutic play can be used with children who are distressed, angry, confused, and anxious, in pain or quite possibly a combination of these, to help alleviate their fears, worries or concerns. Children can cope with the anxiety of hospitalization through therapeutic play. The type of play activity chosen will depend on each individual's stage of development, their physical condition and abilities,

although hospitalization and its attendant stresses may cause the child to regress, in certain circumstances.

Marlow, (2009) said that therapeutic play is the specified play activity by which a child acts out or expresses his unconscious feelings. It is central mechanism in which children cope, communicate, learn and master a traumatic experience during hospitalization. The main purpose of therapeutic play is to create a home like atmosphere which is familiar to children and to give them an opportunity to express their feelings about being in the hospital and also helping them to interact with other children.

Fosson, Martin and Haley investigated the effectiveness of guided medical play in reducing anxiety in children. The anxiety level of experimental group was reduced when compared to control group. Several studies have shown that therapeutic play is effective in decreasing anxiety and fears for children from the time of admission to discharge.

## **NEED FOR THE STUDY**

“Childhood shows the man as morning shows the way”. The health of the children is very important in determining the prosperity of a country. Play is an essential activity of child, which serves as a parameter to state whether child is healthy or under developed or sick or well. It is not a waste of time nor it is just a way of keeping young children busy or out of mischief while their parents are busy in carrying out their own responsibilities or work or entertainment.

Admission to a hospital is disruptive and bewildering even after multiple admissions. Children often report about anxiety and discomfort from the process of entering this strange and frightening world. The child who is admitted to a hospital is separated from the usual surroundings and routines of his or her everyday interaction with siblings, school life, social and sports activities with friends.

At the time of hospitalization, children encounter new routines, new adult caretakers and meet other children with a variety of medical problems. They were

automatically thrown into a bizarre and unfamiliar environment in which even the most basic functions such as eating, sleeping are different from their normal pattern and are under someone else control. Especially preschoolers may experience severe hospital related fears and ongoing traumatic stress responses during hospitalization and post discharge. Hospitalization and other frightening traumatic experiences in childhood may also increase the risk of health problems later in life and delay the child's cognitive, physical, emotional and social development (Aley 2002).

According to several studies, preschool children have more hospital related fears than older children because of their developmental stage (Gazall & Mactie 2007). The preschool children are not always able to separate reality from the imaginary and the child's ability to express and cope with his or her fears is limited. According to parents, 83% of pre school children suffer from different kinds of anxiety symptoms related to hospital fears (Hus 2004).

Thompson & Vernon (2006) stated that indications of emotional difficulties are greatest among children between six months and six years of age and increase markedly if hospitalization is long or frequently recurs. Parents and teachers of children recently hospitalized frequently report behavior problems suggestive of difficulties with separation, fearfulness and regression.

Smith S. (2005) emphasized that a child's participation in play is essential for learning how to enjoy life. Play is essential to the development of a normal, well-adjusted personality. It is essential for physical as well as intellectual development. Therapeutic play helps in relieving stress and tension of children. The morbidity rate of underfive children was 11.26 per 1000 live births. The recent statistics of morbidity rate of hospitalized children in the world is about 10 million. In India it is estimated to be 2.1 million, particularly in TamilNadu it is about 18 per 1000 children.

Constructive play helps to relieve anxiety of the child. Play therapy refers to structural activities designed according to age, cognitive development and health related issue to promote psychosocial wellbeing of the hospitalized child. It facilitates self expression and development of positive coping mechanisms. It establishes mastery through play therapy, child can gain a better understanding of hospitalization

and learn to adapt to the stress that these entail. In fact play helps the child to cope better. Therapeutic play refers to specialised activities that are developmentally supportive and facilitate the emotional well being of a pediatric children. Therapeutic play is a less structured way, focuses on the process of critical events such as hospitalization.

Therapeutic play reflects and stimulates development in a child. Drawing and painting are excellent media for expression. Children are more at ease expressing their thoughts and feelings through art than through words. Building a tower of blocks, improves the child dexterity and co ordination, cognitive functions such as cause and effect, how he express feelings such as frustration or success, and even social skills by his ability to wait his turn if building the tower with others. Therapeutic play acts as a vehicle for eliciting information from the children. It also helps to share information about what to expect from medical procedures and what sensations may be experienced by the children. Children who were offered therapeutic play will exhibit greater cooperation during stressful procedures.

When the investigator came across the recent statistics and the experience which she had during her clinical posting in the hospital, she had noticed most of the children were not interacting with other children even with their family members except the primary care taker. They were not co-operating with any treatment procedures given by medical workers. They were frightened to see the hospital environment and medical procedures. They are totally stressed and worried.

Hence the investigator felt the need of relieving the anxiety among the hospitalized children. Providing therapeutic play material to the children would be effective. Therapeutic play is on the promotion of continuing normal development while enabling children to respond more effectively to difficult situations such as medical experience. The investigator feels that health promotion in childhood can be achieved through organized play activities, having adequate play equipment and safe play area to move around.

## **STATEMENT OF THE PROBLEM**

A study to assess the effectiveness of therapeutic play on the level of anxiety among hospitalized children between 3- 6 years in Stanley Hospital, Chennai.

## **OBJECTIVES**

5. To assess the pre test level of anxiety among hospitalized children between 3- 6 years.
6. To assess the post test level of anxiety among hospitalized children between 3- 6 years.
7. To determine the effectiveness of therapeutic play on the level of anxiety among hospitalized children between 3- 6 years.
8. To associate the pre and post test level of anxiety among hospitalized children between 3- 6 years with their selected demographic variables.

## **OPERATIONAL DEFINITION**

**Effectiveness:** It is the desired change brought about by the therapeutic play and is measured in terms of reduction in the level of anxiety among hospitalized children between 3- 6 years.

**Therapeutic Play:** Refers to make the child to do drawing, painting, play musical toys, solve puzzles and building blocks thereby enabling them to relieve the anxiety of children between 3- 6 years who are admitted in the hospital for the first time.

**Anxiety:** Refers to a state of emotional response of children who are admitted in the hospital for the first time.

**Hospitalized Children:** Refers to the children between the age group of 3-6 years and who were admitted in the medical ward for the first time.

## **HYPOTHESIS**

There is no significant relationship between the therapeutic play and the level of anxiety among hospitalized children between 3-6 years.

### **DELIMITATIONS**

- The study was delimited to single hospital.
- The study period was delimited to 4 weeks of data collection.
- The study sample was delimited to pre school children between 3-6 years.

## **CHAPTER – II**

### **REVIEW OF LITERATURE**

The term review of literature refers to the activities involved in identifying or searching for information on a topic and developing and understanding the state of knowledge of the topic (Polit & Hungler).

Review of literature is an essential component of research study as it provides a broad understanding of all research problems, keeping this in mind the investigator had made a thorough study on available source which has been helping in projecting the widened prospective of the study. It has also enabled the researcher to design the study to develop the tool and plan for data collection procedure and to analyze the data.

#### **PART – I REVIEW OF RELATED LITERATURE**

The play therapist provides freedom to the troubled child to explore his or her ideas and feelings about self and others through play. The experience is different from that of playing with friends, siblings, parents or other family members. The play therapy session becomes a time for the child to experiment with change, learn about choice, self-responsibility and self direction, and resolve emotional difficulties and inner conflicts. The spontaneous play of children has long been recognised as a natural form of communication.

The related literature for the study is presented in following sections.

- General information related to play therapy
- Literature related to therapeutic play.
- Literature related to anxiety of hospitalized children.

#### **PART – II CONCEPTUAL FRAME WORK**



## **PART-I**

### **REVIEW OF RELATED LITERATURE**

#### **General information related to play therapy**

Play therapy is the systematic use of theoretical model to establish an interpersonal process wherein trained play therapists use the therapeutic powers of play to help clients to prevent or resolve psychosocial difficulties and achieve optimal growth and development. Janssen & Janssen, (1996) stated that play is a universal behavior of children that has been documented since ancient times.

Play is an activity, fast-paced and demands initiative. Play does not always have immediate, visible or external results. The enjoyment that comes from playing does not emanate from an immediate need for satisfaction, such as eating when hungry. The activity itself is the cause for satisfaction. Play is an imitation within change. Games have clear rules and definitions, as well as freedom of choice and a place for initiative variations and creativity.

The importance of play therapy for hospitalized children was, adjust to a strange environment, involve themselves in activities they enjoy, 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.

Types of play are classified as physical play, expressive play, dramatic play, symbolic play and manipulative play. Physical play has a social nature because it involves other children. It also provides exercise, which is essential for normal physical development. Certain forms of play give children opportunities to express feelings by engaging with materials. Parents can take an active role in expressive play by using the materials alongside the child. Children control or master their environment through manipulative play. They manipulate the environment and other people as much as possible. Manipulative play starts in infancy. Infants play with their parents. This interaction brings the infant and parent together in a game.

Certain games can symbolically express a child's problems because there are no rules in symbolic play. The child can use this play to reinforce, learn about and imaginatively alter painful experiences. Symbolic play may be used by children to cope with fear of separation when they go to school or to the hospital. Children act out situations which they suspect may happen to them, or that they have witnessed. Dramatic play can be either spontaneous or guided and may be therapeutic for children in the hospital.

### **Literature related to therapeutic play**

**Roohafza H, et al., (2009)** done a comparative study on impact of nurses clothing on anxiety of hospitalized children. The main aim of the study is to investigate anxiety levels in two groups of children exposed to nurses with white vs colored clothing in a university hospital in Iran. The design used for the study was clinical trail design. Totally 92 children, aged 7-15 years old hospitalized for 3-5 days in pediatric surgery ward were exposed to nurses in white or colored clothing. Children anxieties were assessed on admission and at discharge by using revised children manifest anxiety scale. The result showed that children exposed to white nursing uniforms showed higher anxiety levels ( $p < 0.005$ ) compared with children exposed to colored clothing.

**Lihe & Lopezv, (2008)** evaluated the effectiveness and appropriateness of therapeutic play intervention in preparing children for surgery. A randomized control trial was employed. The researcher has selected 203 children those who are admitted for surgery during a 13 month period. The result showed that the level of anxiety was reduced for the children after the intervention completes. They concluded that, the importance of integrating therapeutic play as an essential component of holistic and quality nursing care to prepare children for surgery.

**Raphael. L, (2007)** said that young cancer patients often have many anxieties and concern about their bodies, physical condition, and impending health care events. These children usually experience distress during and after health care experience. Therapeutic play seeks to help young patients cope with the stresses of health care experience by participating through play, instead of being passive participants in the

threatening health care experience. Therapeutic play interventions essentially enhance the children abilities to cope effectively with and learn from potentially stressful situations.

**William Li HC, et al., (2007)** done a study on effects of therapeutic play on outcomes of children undergoing day surgery in university of Hong Kong. Randomized controlled trial was used and 203 children were invited to participate in the study. The experimental group received therapeutic play and the control group received routine information preparation. The results showed that children in the experimental group reported significantly lower state anxiety scores in pre and post operative periods and exhibited fewer negative emotions at induction of anesthesia than children in the control group.

**Hendon C & Bohon Lm, (2006)** done a comparative study on hospitalized children's mood difference during play and music therapy. The investigator has observed 60 children either during play or music therapy. Happiness was operationally designed as the frequency of smiles during a 3 minute period. The results showed that music therapy ( $m=12.43$ ,  $SD=4.83$ ) led to significantly more smiles than did play therapy ( $m=5.83$ ,  $SD=3.10$ ). They concluded that increasing the amount of time for music therapy in hospitals for child may be a way to increase positive effect and ultimately to increase mental and physical well being in hospitalized children.

**Britt M.W, (2005)** conducted a study on communicating via expressive arts, the natural medium of self expression for hospitalized children in Swedish hospital. The purpose was directed towards investigating what takes place during play therapy when children were given the opportunity to use expressive arts such as clay. During the 3 year period twenty two hospitalized children participated in the study. The result of the qualitative analysis showed that there is decrease in loneliness, fear and powerlessness of the children. The result of the study suggested that the expressive arts should be used as a tool to help the child to express themselves when being hospitalized.

**Dix, A, (2004)** said that there is evidence that hospital play hastens children's recovery, increases compliance and reduces the need for general anesthesia. A survey showed an 11 percent rise in the number of play specialists in the past 2 years, but more are needed. The Children national service framework recommends that all children in hospital have daily access to a play specialist. The researcher finally concluded that more number of child specialist has to be appointed to enhance child recovery.

**Leonard.G, (2004)** done a study on giving toys to children reduces their anxiety about receiving pre medication for surgery. The aim of the study is giving small toys to the children would decrease the anxiety associated with taking oral medication because administration of oral medication to children is often met with apprehension, reluctance or refusal. He done a prospective study involving 100 children, 3-6 years of age and they were randomized into two equal groups. The anxiety of each child was assessed by using the modified Yale preoperative anxiety scale. The result showed that there is a significant reduction in the level of anxiety in children who received a toy before oral administration of midazolam. They concluded that future implications of play therapy in various aspects should be analyzed.

**Pan HL, et al., (2004)** done a study on application of therapeutic play in the process of nursing in preschool children. The study samples were 4-year-old female children with intestinal obstruction. Data were collected by participant observation. Therapeutic play was applied during the process of nursing in an effort to accomplish a trust between the child and the health care providers, to reduce the children fear of therapy, to help the child to understand her own self-image, to provide an emotional outlet for her. During the nursing process, they improved their overall compliance, emotional outlet, and helped to understand their self-image. The results showed that pediatric nurses consider employing play as a means to communicate with children effort to reduce their stress during hospitalization. The findings revealed that therapeutic play may also improve children compliance with the process of nursing.

**Bowmer, N. (2002)** had written an article about the use of puppet show as therapeutic play, to decrease anxiety in hospitalized preschoolers. He explained about the importance of educating the nurses on the effects of therapeutic play on anxiety

levels in hospitalized children. Nurses could use this information to implement therapeutic play in hospitals throughout the world. Feasibility issues would include the cost of materials needed and the time involved to educate nurses. More research should be done on therapeutic play as a method to decrease anxiety in children.

**Leblanc.M, & Ritchie.M, (2002)** conducted a study to determine the overall effectiveness of play therapy and the variables related to effectiveness in northeast Ireland. The sample size was 42 children and they were divided into experimental and control group. The experimental group underwent play therapy for 30 sessions and the control group underwent play therapy for 20 sessions. The results showed that there is a strong relationship between treatment effectiveness with the inclusion of parents and duration of play therapy in the therapeutic process was reported. They concluded that play therapy appeared to be effective in treating children experiencing emotional difficulties.

**Rob S.L.C, (2002)** had done a clinical study with the aim to evaluate the effect of therapeutic music interventions on the behaviors of the hospitalized children in isolation ward in Nigeria. Totally 10 pediatric oncology patients between the age of 4 and 11 years in isolation for neutropenia were participated in a cross - over design study. The investigator measured the effect of 4 different music interventions on the child's environment, engagement, mood and the child's relationship between the environment and behavior questionnaires. The result showed that music therapy has significant effect on behavior ( $P < 0.001$ ).

**Clatworthy.S, et al., (2002)** wrote an article regarding child drawing. Hospital, an instrument designed to measure the emotional status of hospitalized school-aged children. They said that hospitalization has long been accepted as a stressful experience for children, but the degree of anxiety experienced by any child is unknown. Physiological status is routinely measured, but the same is not true for emotional status. This report presents the validity and reliability of the "Child drawing hospital" as a measure of anxiety for hospitalized children.

**Martin MR, (2002)** done a descriptive study which aims at elaborating a protocol using therapeutic play for the preparation of pre school children to venous

puncture and also at testing its efficiency and applicability. The result showed that children who have attended the play session were more co-operative when they were punctured. The author concluded that this should be incorporate in the nursing care plan for hospitalized children.

**Dangle T.D& Sik, (2001)** examined the effectiveness of therapeutic play for hospitalized preschoolers by using a post test experimental and control group design. The sample size was 5 pre school children and they were assigned in to experimental and control group based on the convenient sampling technique. The tool used for the study was anxiety scale. Therapeutic play in the form of an interactive puppet show was administered to 50 preschool children one day before surgery. The findings reported that the children who received the therapeutic play intervention manifested marked less anxiety and more co-operations and had significantly lower mean blood pressure and pulse rates during injection than the control group. This study demonstrates that therapeutic play is valid in terms of reducing stressful responses to hospitalization.

**Renee C.B& Man., (2001)** wrote an article on “Evaluating children’s literature as a source for patient education”. He stated that preschoolers should be encouraged to be active participants in a story since they learn through imaginative play and manipulation of objects. A picture book also enhances it animals are used as the main characters in stories to children about hospitalization. It can effectively assist children in coping with stress by distancing the characters and providing a vicarious experience. Since preschoolers enjoy “make believe” situations, personification of toys and animals capture their attention. Hence nurses can use these measures in clinical settings and also recommend the parents for the selection of play.

**Zahr LK, (2001)** conducted a study on therapeutic play for hospitalized preschool children in Lebanon. Therapeutic play in the form of an interactive puppet show was administered to 50 preschool children. A control group of 50 preschool children received routine care but no therapeutic play. The study finding showed that the children who received the therapeutic play intervention manifested markedly less anxiety and more co-operations. He suggested that nurses could use this information to implement therapeutic play in hospitals throughout the world.

**Hudson, C.J et al., (2001)** done an experimental study of story telling as a measure of observing anxiety in hospitalized children. The investigator selected 67 hospitalized children and they were asked to create stories about pictures. The stories were categorized as negative or positive in tone and hence, the children were categorized as anxious or not anxious. They concluded that children who told negative stories displayed significantly more negative behavior and showed higher anxiety.

**Patil, (2001)** done a study on “effect of therapeutic play on the behavioral response of children undergoing surgical dressing” in lucknow hospital. The participants of the study were 87 children. Quasi experimental design was used for the study. He reported that therapeutic play intervention in the preparation for surgical dressing had significant effects in terms of behavioral responses. It also showed that children were more comfortable and co-operative during the procedure of dressing. This study recommended that the therapeutic play could be used as the nursing intervention for preparation of children for various therapeutic measures.

**Kuntz N & Adams JA, (2000)** conducted a clinical study on play therapy programs in a bone marrow transplant unit using a play cabinet. This play cabinet was designed to provide readily available sterilized toys that are appropriate for each of the four age groups such as infant, toddlers, preschool and school age children. Among them two cases are presented, which shows the efficacy of the use of the play cabinet in play therapy programs. It is recommended that therapeutic play is an intervention used by nurses to aid the ill and hospitalized children to express thoughts and feelings. This kind of play also helps the nurses to understand the thoughts, feelings and experiences of the children better.

**Martin & Haley, (2000)** had done an experimental study on “Anxiety among hospitalized latency age children”. The participants were 50 school age hospitalized children. Anxiety was measured by self – report, parental report, nurse’s report and direct observation. The results of the study showed that there is a significant reduction in the level of anxiety following guided play. The findings of the study suggested that play therapy will be an useful intervention in promoting the healthy behaviors of the hospitalized children.

**Sundaram, R. (2000)** done a study on art therapy to help pediatric patients to communicate their feelings about being in the hospital and cope with their illness or injury. This case study of Alan, who was admitted in pediatric unit with orthopedic injuries, shows how the art therapy process helped him to cope with his injury and subsequent 14 day hospitalization. Once Alan overcame his initial resistance to the art materials, he was able to use artwork as a communicative channel to express his feelings about being in the hospital and away from his family suffering from a painful injury.

**Ziegler & Michelle, (2000)** wrote an article on “Preparation for surgery and adjustment to hospitalization”. They stated that one out of every 4 children would be hospitalized at least once before reaching school age. The physical and psychosocial stress of hospitalization may be influenced by the child’s developmental level, causing behavioral changes, somatic complaints and a prolonged hospital stay. Through the use of a careful development assessment and therapeutic play techniques, fears could be allayed, misconceptions corrected, emotionally charged issues addressed and a positive self – image created. Therapeutic play also helped sick children to regain independence gradually through enjoyment of group experience and to have mastery over traumatic experience through creativity.

**Margaret.A & Chambers.R, (2000)** wrote an article regarding play as therapy for the hospitalized child. Play has been recognized as essential for normal growth and development. Children use play as a medium for self expression and communication. She said that play can be utilized therapeutically to help children to master environmental stresses, such as those encountered by hospitalization.

**Matthews & Barbara (2000)** said that a therapeutic play program in New Zealand aims to provide an environment which is helping the children to cope with the stress of being in a hospital. The therapeutic play program is a preventive mental health program that differs from play therapy, which is intervention for children who have an identified pathology. This program model transforms the potentially psychologically harmful hospital experience into a challenging experience through which the child can learn and grow.



**Ribeiro CA, (2000)** had written an article regarding the effects of the use of therapeutic play by the pediatric nurse on the behavior of recently hospitalized children. This work describes the realization and the results of one experimental research accomplished with children from 3 to 5 years of age, recently hospitalized using the therapeutic play. The results showed that it helped children behave more according to what is expected of this 3-5 years age group, as well as show signs that they had adapted or presented ego strength.

**Rae WA, et al., (2000)** compared the effects of play on the psychosocial adjustment of 46 hospitalized children for acute illness who were placed in one of four groups. The groups are divided into Therapeutic Play, Diversionary Play, Verbal Support and no treatment. Ratings of Psychological adjustment included self-report, as well as nurse and parent ratings. Children in the Therapeutic Play evidenced a significant reduction in self reported hospital fears.

**Clatworthy S, (2000)** had done a study on Therapeutic Play effects on hospitalized children. Totally 34 children aged 5 to 11 years were selected as study samples. This Study was conducted in two different hospital settings over a four year period. A two-group experimental design was developed that included therapeutic play for the experimental children and pre and post measures of anxiety for all children. Results of this study demonstrate that therapeutic play is a valuable intervention with hospitalized children in reducing the anxiety level.

**Butler, A et al ., (2000)** conducted a study to evaluate the effectiveness of play therapy on anxiety of preschooler in the hospital environment using a post test experimental and control group design. The participants of the study were 44 samples aged 2 to 6 in the experimental and the control group based on convenient sampling technique. The tools were child anxiety scale and observational rating scale to observe the reactions of the children. The findings of the study revealed that play can be a simple, effective way of helping 77% of preschool child to deal with the stranger and sometimes painful hospital world and to masters situation that might otherwise by over whelm ins. The study conducted that the type of play can be incorporated easily in to the nursing care plan and can become an essential aspect of the care of the hospitalized preschool child.

**Johnson PA et al., (1999)** investigated effects of a Puppet Presentation on anxiety levels of Hospitalized Children as measured by the Palmar Sweat Index (PSI). Subjects were 43 Children, aged 5-8 years and they were allocated randomly to treatment and non treatment groups. Treatment consisted of a Puppet Show designed to familiarize patients with hospital routines and with procedures of their operations. The result showed that the treatment was associated with a significant reduction in anxiety from the time of admission to both the period immediately after the Puppet Show and the evening after surgery.

### **Literature related to anxiety of hospitalized children**

**Margaret, (2010)** conducted a study on “The voices of children-Stories about hospitalization”. The study explored children's views of hospitalization through their own voices. In this secondary analysis, 93 children aged 5 to 9 years told stories about hospitalization using a set of drawings of children in the hospital. Children were recruited in the hospital and in the community. Themes were identified through qualitative analysis. The results showed that Children’s stories focused on being alone and feeling scared, mad and sad. These children wanted protection. Children in the stories were not always facing scary events. They were simply not at home and feeling bored, lonely and sad and they wanted companions. Children displayed awareness of both good and bad outcomes. The hospital was a unique environment that could be fun as well as threatening.

**Vuillermin PJ, et al., (2010)** evaluated about prevalence of anxiety in children with asthma. The objective of this study was to determine children with asthma are more likely to suffer anxiety than children without asthma. A population-based, cross-sectional design was used in this study. Children aged 5-13 years were selected for the study. Control group were a sample of children without asthma symptoms. Spence Children's Anxiety Scale (SCAS) was used to assess children anxiety. Questionnaires were issued to 205 children with asthma .The results showed that SCAS scores were higher in asthmatics than controls ( $p < 0.001$ ). They explored that children with asthma are substantially more likely to suffer anxiety than children without asthma.

**Sylvania M. C, (2009)** published an article in the journal of child psychology and psychiatry. As a part of the investigation the scientist annually evaluated a representative sample of preschoolers till five years of age. The results showed that 1758 children are atypically affected by high depressive and anxiety problems during hospitalization.

**Margie Crandall et al., (2007)** found that anxiety is a common symptom that children experience in the health care setting. The investigator selected 60 children and they were assessed by state trait anxiety inventory. Simple linear regression and Pearson correlation were performed to determine the strength of relationship. The result emphasis on the level of anxiety was high for the children during hospitalization. They suggested that proper measures should be undertaken to reduce the level of anxiety.

**Zeev N.K, (2006)** done a study on Preoperative Anxiety, Postoperative Pain, and Behavioral Recovery in Young Children Undergoing Surgery. They recruited 241 children aged 5 to 12 years scheduled to undergo elective outpatient tonsillectomy and adenoidectomy. Before surgery, they assessed child and parental situational anxiety and temperament. After surgery, all subjects were admitted to a research unit in which postoperative pain and analgesic consumption were assessed every 3 hours. Parental assessment of pain in their child showed that anxious children experienced significantly more pain both during the hospital stay and over the first 3 days at home. Result showed that Preoperative anxiety in young children undergoing surgery is associated with a more painful postoperative recovery and a higher incidence of sleep and other problems.

**Ten Thoren.C & Petermann.F, (2000)** said that anxiety disorders are more common in asthmatics and have a considerable influence on asthma management because they influence symptom perception. Excessive anxiety about asthma symptoms can affect the child's response to an asthma attack; anxiety related to asthma triggers can reduce the child's quality of life and anxiety related to medical treatment can influence compliance. The extent of this influence depends upon an individual's ability to cope.

**Zigmond, (2000)** explained that a self-assessment scale found to be a reliable instrument for detecting states of depression and anxiety in the setting of a hospital medical outpatient clinic. The anxiety and depressive subscales are also valid measures of severity of the emotional disorder. It is suggested that the introduction of the scales into general hospital practice would facilitate the large task of detection and management of emotional disorder in patients under investigation and treatment in medical and surgical departments.

## **PART-II**

### **CONCEPTUAL FRAMEWORK**

Conceptual framework or a model is made up of concepts and the mental images of the phenomenon. It provides the guidelines to proceed to attain the objectives of the study based on the theory. It is a schematic representation of the steps, activities and outcomes of the study.

Imogene King's theory (1981) states that the purpose of nursing is to help the people to maintain or restore health. Imogene King proposes an open system framework as a basis for her theory of goal attainment. It consists of three interacting systems which includes personal, interpersonal and social. The theory concentrates its attention on the interpersonal system and the interactions that take place between the individuals. The investigator adopted King's goal attainment theory (1981) as a basic theory for conceptual framework, which is aimed to assess the effectiveness of therapeutic play on reducing the level of anxiety among hospitalized children between 3-6 yrs. This involves interaction between the investigator and the hospitalized children. The six major concepts phenomenon are described as follows.

#### **Perception**

Perception is the individual's representation of image of reality. It influences all other behavior of a person and it is more subjective and unique to each person. The investigator perceived that children are having anxiety due to unfamiliar hospital environment, fear of nursing procedures like injection, dressing, oral medication and separation of parents.

#### **Judgement**

Judgement is decision which is made by the investigator. The investigator decided to relieve the anxiety of children during hospitalization. Mothers have lack of awareness to judge about the management to reduce the level of anxiety for the children between 3-6 years.

## **Action**

This refers to the changes that have to be achieved. The investigator action is to provide therapeutic play for the hospitalized children. The children action is ready to receive the therapeutic play. Therapeutic play can help the hospitalized child to better understand and interpret the imagery, sights, sounds and language used in the hospital. So the investigator decided to provide therapeutic play to the hospitalized children between 3-6 years.

## **Reaction**

Reaction means decision to act. It helps in setting a mutual goal. In this study the investigator and the children set a mutual goal to reduce their anxiety. The investigator developed the observational checklist to assess the level of anxiety among hospitalized children.

## **Interaction**

Interaction is a process of perception and communication between person and environment and between person and person, represented by verbal and non verbal behaviors that are goal directed. The investigator encouraged the children to actively participate in the therapeutic play. The play material includes drawing, painting, musical toys, puzzles and building blocks.

## **Transaction**

Transaction is purposeful interaction that leads to goal attainment. The investigator goal is to reduce the anxiety of children during hospitalization followed by therapeutic play. The effectiveness of therapeutic play was assessed by same observational checklist.

The post test assessment showed three outcomes ie mild, moderate and severe anxiety. Mild anxiety depicts the reinforcement process whereas moderate and severe anxiety depicts the reassessment process.

## **CHAPTER – III**

### **METHODOLOGY**

Research methodology is a systematic procedure in which the researcher starts from initial identification of the problems to find conclusions. (Kothari C.R 2003). The methodology of research indicates the general pattern of organizing the procedure it gathers valid and reliable data for the problem under investigation.

This chapter deals with the description of research methodology adopted by the investigator to evaluate the effectiveness of therapeutic play on reduction of anxiety among hospitalized children between 3-6 years. It includes research design, setting of the study, population, sample, sample size, sampling technique, criteria for sample selection, description of the instrument, validity and reliability, pilot study, data collection procedure, data analysis.

#### **RESEARCH DESIGN**

The research design used in this study was one group pre test post test research design.

#### **SETTING OF THE STUDY**

The study was conducted in Stanley Government hospital, Chennai. The total bed strength of the hospital is 1200. The hospital was well equipped with all specialties like emergency department, trauma unit, intensive care unit, neurology unit, isolation ward, surgical ward and all specialties out patient departments. There is separate block for pediatric department which consist of 5 floors. Inpatient ratios of pediatric children were 600 among that the ratios of preschool children were 150-250. The pediatric medical ward is situated in the 3<sup>rd</sup> floor. I have selected the preschool children from the general ward .The hospital was well equipped with all facilities.

## **POPULATION**

The population of the study was all the children who are admitted in the hospital.

## **SAMPLE**

The sample consists of children in the age group of 3-6 years who fulfilled the inclusive criteria.

## **SAMPLE SIZE**

Sample size consists of 60 hospitalized children between 3- 6 years.

## **SAMPLING TECHNIQUE**

Convenient sampling technique was used by the researcher to select the sample. The children between 3- 6 years who were admitted in the medical ward and fulfilled the inclusive criteria was randomly selected.

## **CRITERIA FOR SAMPLE SELECTION**

### **Inclusive criteria**

- Children belonging to the age group of 3-6 years.
- Children who were able to co-operate in the play activities.
- Children who were going to stay in hospital for more than 3 days.
- Children who were admitted in the medical ward.
- Children who were admitted for the first time.

### **Exclusive criteria**

- Children who were not to co-operate in the study.
- Children with mental and physical disability.
- Children who were less than 3 years and more than 6 years.
- Children who were admitted other than medical ward.



## DESCRIPTION OF THE INSTRUMENT

The tool constructed in this study has two parts

### Part - I

Demographic variables consists of age of child, sex of the child, birth order, education, number of days hospitalized, parents education, occupation and type of family.

### Part - II

Modified Achen Bach child behavior observation checklist was used in this study. It consists of 30 items, which were brought under five behavior responses namely the appearance, coping response, psychosomatic response, emotional response, and biological response. These behavior items had both positive and negative items. It consists of 5 aspects.

### Variables

Appearance	: 8 items
Coping response	: 5 items
Emotional response	: 11 items
Psychosomatic response	: 3 items
Biological response	: 3 items

### Scoring interpretation

It includes positive and negative items.

#### Positive items (\*)

N : Never	-	2
O : Occasional	-	1
A : Always	-	0
Score $8 \times 2 = 16$		

#### Negative items (\*\*)

Never	-	0
Occasional	-	1
Always	-	2
Score $22 \times 2 = 44$		

Total score is  $16 + 44 = 60$

To interpret the level of anxiety, the score were interpreted as follows.

- <50% - Mild anxiety
- 51-75% - Moderate anxiety
- >75% - Severe anxiety

## **VALIDITY**

The content validity of the instrument was obtained from the experts in the field of pediatrics.

## **RELIABILITY**

The reliability of the instrument was assessed by using test retest method. Calculated test re test correlation coefficient for observation checklist was 0.8 .These correlation coefficients was high and it is appropriate tool for assessing anxiety score among children age 3-6 years.

## **ETHICAL CONSIDERATION**

The study was conducted after the approval of dissertation committee and director. Formal permission was obtained from the director of Stanley government hospital. Hospitalized children between 3-6 years and their care givers were clearly explained about the study purpose and procedures. The formal written consent was taken from the samples. The usual assurance of anonimity and confidentiality was obtained.

## **PILOT STUDY**

Pilot study is the trial of the major study. The pilot study was conducted from 26.04.10 to 30.04.10 in Stanley Government Hospital. Formal written permission was obtained from the director of Stanley Government Hospital. Participants are six children between 3-6 years who are admitted in the hospital were selected for the pilot study.The participants are selected by using convenient sampling technique.

A brief introduction was given to explain the purpose of the study to the mother, so as to get their co-operation. Oral consent was obtained from the caregivers. Pre test was conducted by using observational checklist for 30 min for each child. The therapeutic play was given for 2 hours per day for 3 days. After the intervention gets completed post test was conducted on the next day by using the same observation checklist.

Data analysis showed that therapeutic play was effective in reduction of anxiety of hospitalized children between 3-6 years. The results were analyzed based on the scores of the children. During pilot study the validity, the reliability and practicability of the instruments were checked. The result of the pilot study showed the feasibility of the original study.

### **DATA COLLECTION PROCEDURE**

The investigator used observation checklist to assess the level of anxiety among hospitalized children between 3-6yrs. The investigator started the data collection procedure for the main study in Stanley Hospital from 1.5.10 to 31.5.10. The investigator selected the participant according to the criteria and availability. Every day 3 participants were selected. The brief introduction was given and explained the purpose of study to the mother. Formal written permission was obtained from the director of the hospital.

During pre test the required data were collected by using the observation checklist. Therapeutic play was given to the child for 2 hours on each day for 3 days. The play material includes musical toys, drawing, painting and building blocks. Play materials were selected according to the age and interest of the children. After the intervention gets completed post test was conducted on the next day by using the same observation checklist for children. The researcher worked from morning 9am to evening 3 pm for 6 days in a week during the data collection.

### **DATA ANALYSIS**

The data obtained was analyzed by using both descriptive and inferential statistics i.e. mean, percentage, standard deviation, paired 't'- test and chi-square test. Descriptive statistics includes frequency and percentage distribution of the demographic variables and mean and standard deviation of pre and post test level of anxiety of hospitalized preschool children. Inferential statistics includes the chi-square test to associate the level of anxiety with selected demographic variables and paired 't'-test to test the significance of pre and post test level of anxiety of hospitalized children between 3-6 years.

## DATA ANALYSIS AND INTERPRETATION

Data analysis is the categorizing, ordering, manipulating, and summarizing of data to reduce in to intelligible and interpretable form so that the researcher problem can be studied and tested including the relationship between variables. (Kerlinger 1976). This Chapter deals with analysis and interpretation of data collected to evaluate the effectiveness of therapeutic play on reduction of anxiety among hospitalized children between 3-6 years. The data was analyzed based on the objectives and hypothesis of the study.

The findings are based on the descriptive and inferential statistical analyses are presented under the following section.

**Section A:** Distribution of demographic variables of hospitalized children between 3-6 years.

**Section B:** Assessment of the pre test level of anxiety among hospitalized children between 3-6 years.

**Section C:** Assessment of the post test level of anxiety among hospitalized children between 3-6 years.

**Section D:** Assessment of pre test and post test level of anxiety among hospitalized children between 3-6 years.

**Section E:** Comparison of mean and standard deviation between pre test and post test level of anxiety among hospitalized children between 3-6 years.

**Section F:** Association of the pre test level of anxiety among hospitalized children with their selected demographic variable.

**Section G:** Association of the post test level of anxiety among hospitalized children with their selected demographic variable.

### SECTION - A

**Table 1: Frequency and percentage distribution of hospitalized children between 3-6 years by age, sex etc.**

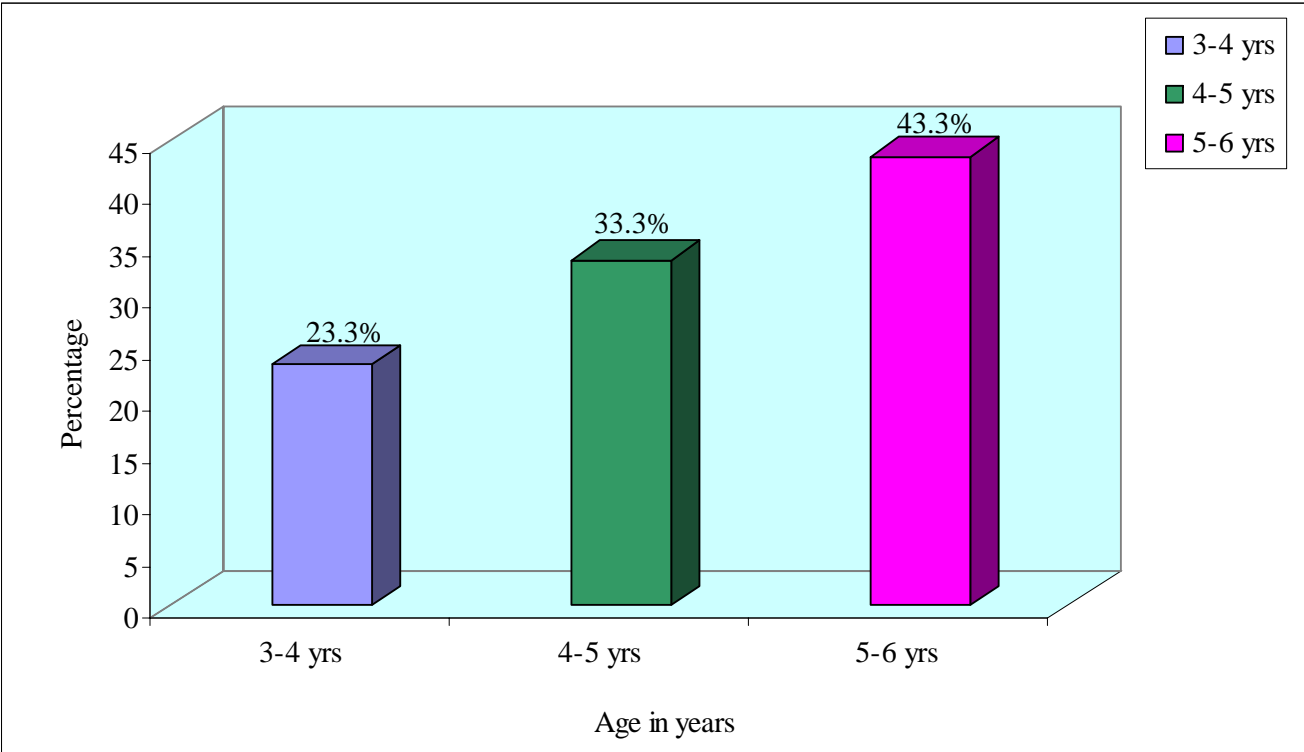
**N=60**

<b>S.No.</b>	<b>Demographic Variables</b>	<b>Frequency</b>	<b>Percentage</b>
1	<b>Age in years</b>		
	3 -4	14	23.3
	4 -5	20	33.3
	5 -6	26	43.3
2	<b>Sex</b>		
	Male	34	56.7
	Female	26	43.3
3	<b>Birth order</b>		
	First born	22	36.7
	Second & above	38	63.3
4	<b>Education of child</b>		
	Pre KG	18	30
	LKG	10	16.7
	UKG	8	13.3
	First std	24	40
5	<b>No. of days hospitalization</b>		
	1 -2	30	50
	3 -4	16	26.7
	5 -7	14	13.3
6	<b>Education of parents</b>		
	Literate	44	73.3
	Illiterate	16	26.7
7	<b>Occupation</b>		
	Coolie	60	100
	Employed	0	0
8	<b>Family income</b>		
	< Rs.2000	12	20
	> Rs.2000	48	80
9	<b>Type of family</b>		
	Nuclear family	44	73
	Joint family	16	26.7

Table 1 shows the frequency and percentage distribution of hospitalized children between 3-6 years. With regard to age of children 14 (23.3%) were in the age group between 3 and 4. 20(33.3%) children were in the age group between 4 and 5 years. 26(43.3%) Children were in the age group between 5 to 6 years. It was found that 34(56.7%) were male and 26(43.3%) were female in both groups.

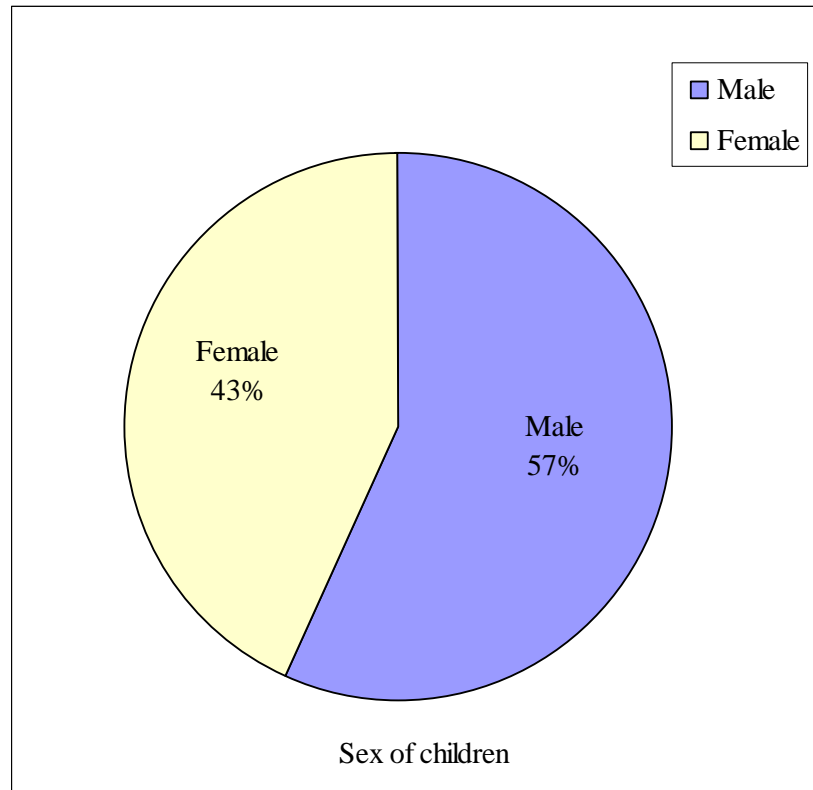
With regard to educational status, a maximum of 24(40%) were studying in 1st Standard, whereas 18(30%) were studying in Pre-Kg, 10 (16.7%) were studying in L.K.G, 8(13.3%) were studying in U.K.G. It was found that 44(73.3%) were educated parents, whereas 16 (26.7%) were illiterate. Majority of parents were Coolie. With regard to family income 12(20%) were getting <Rs.2000 per month, where as 48(80%) were getting >Rs.2000.

Regarding the birth order of the children 22(36.7%) are first born, whereas 38(56.3%) are 2nd and above born. With regard to type of family 44(73.3%) were belongs to nuclear family, where as 16(26.7%) belongs to joint family. It was found that 30(50%) children were hospitalized for 1-2 days, whereas 16(26.7%) were 3-4 days and 14(13.3%) were 5-7 days.

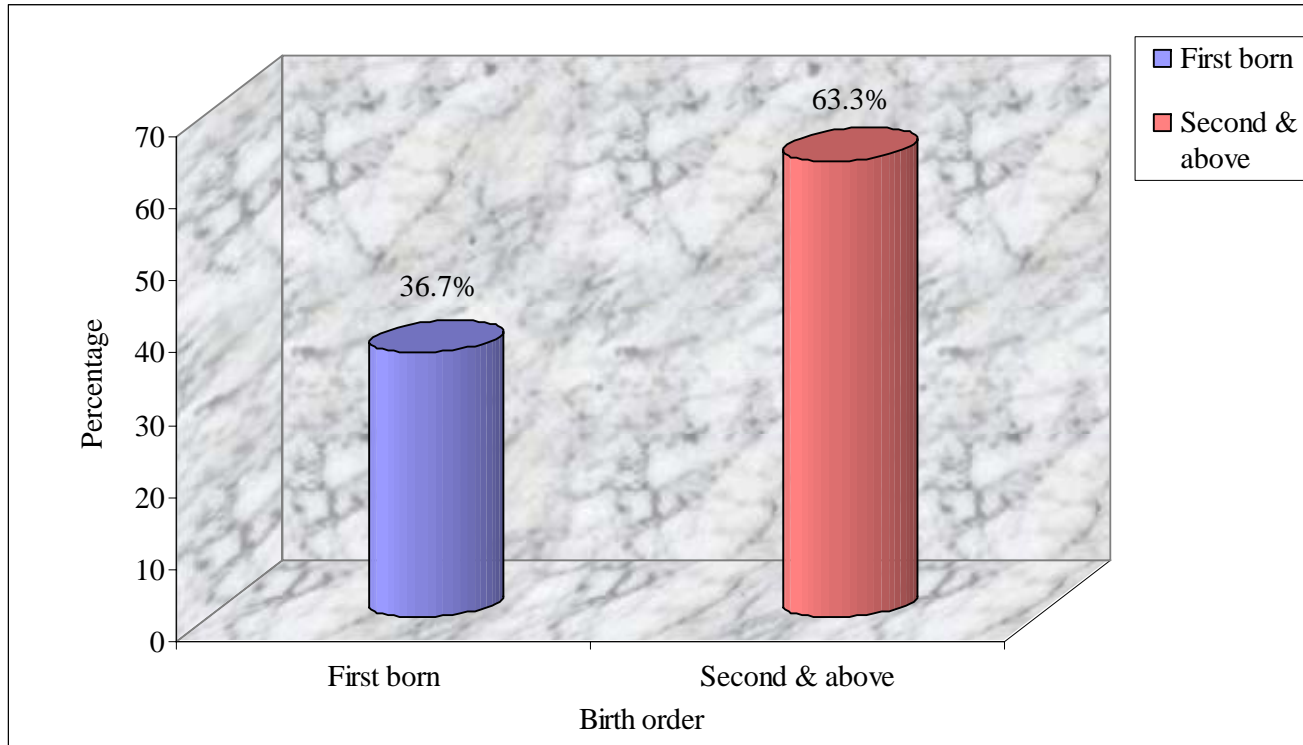


**Fig.2:** Percentage distribution of age of hospitalized children between 3-6 yrs.

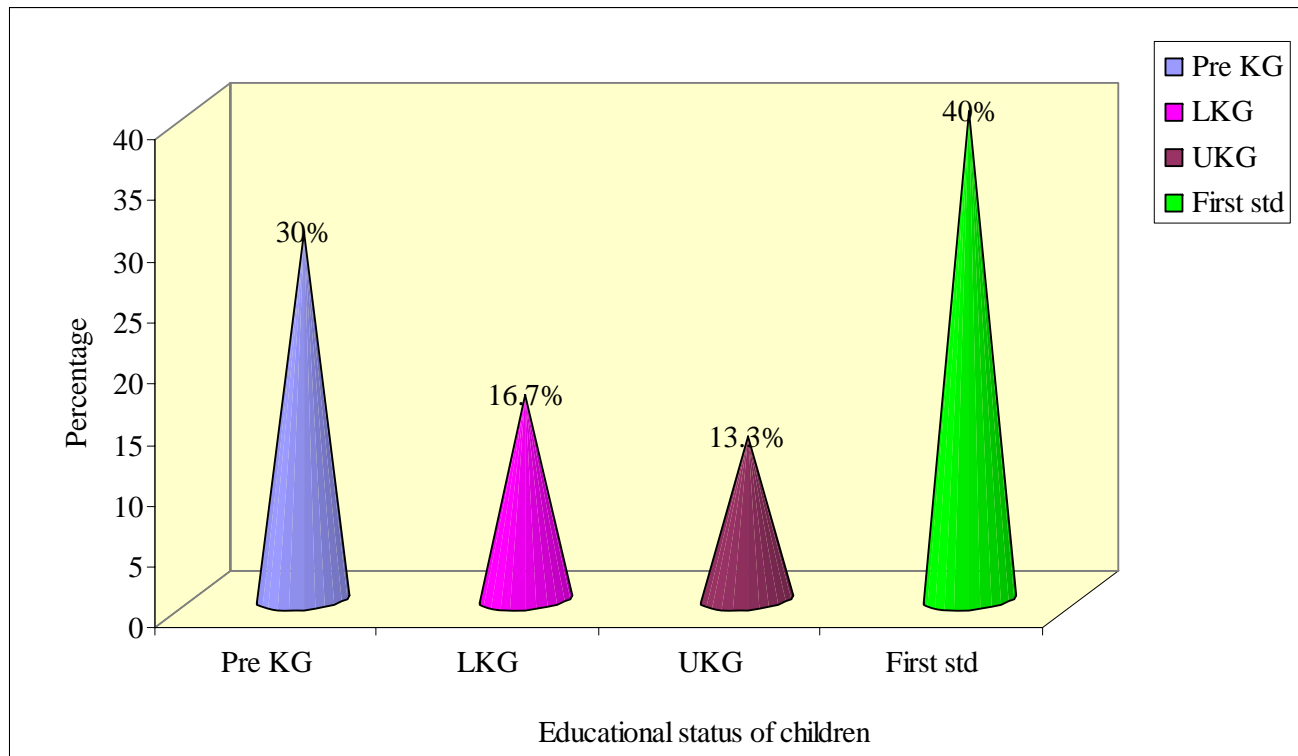




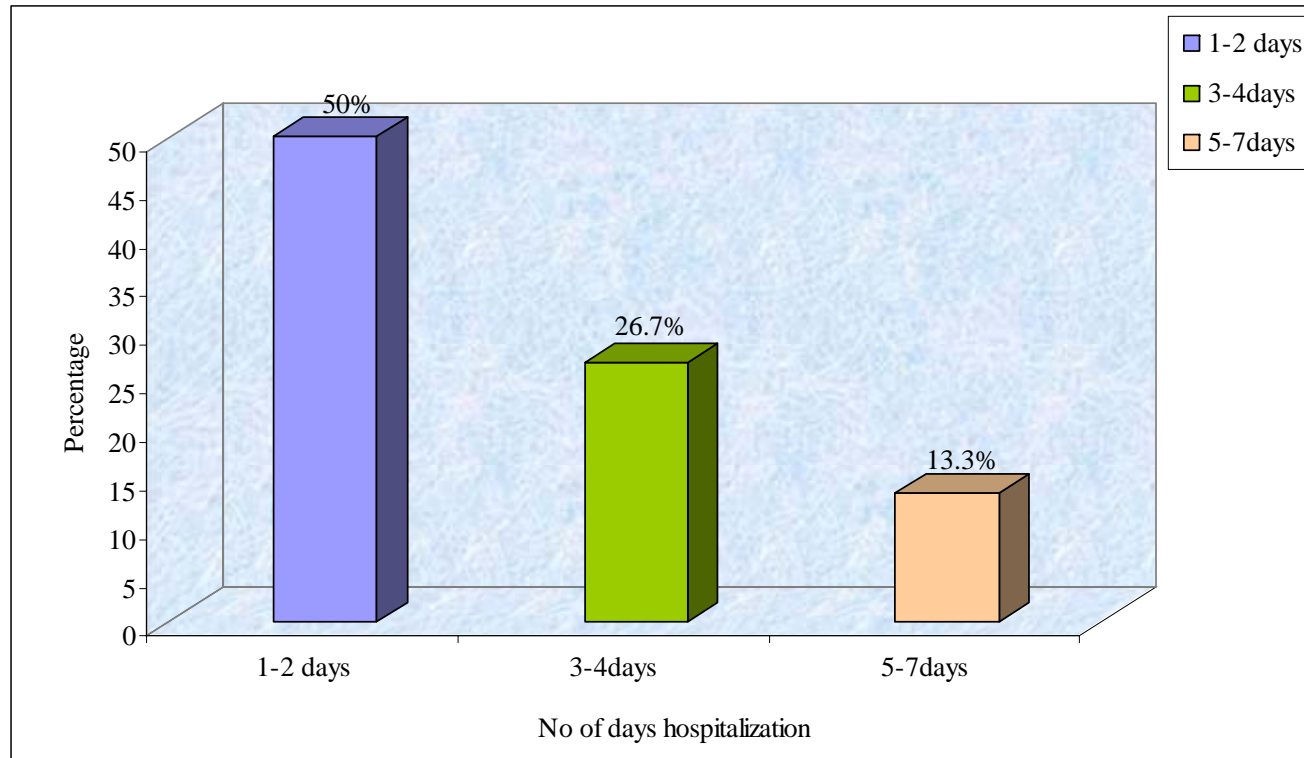
**Fig. 3:** Percentage distribution of sex of hospitalized children between 3-6 yrs.



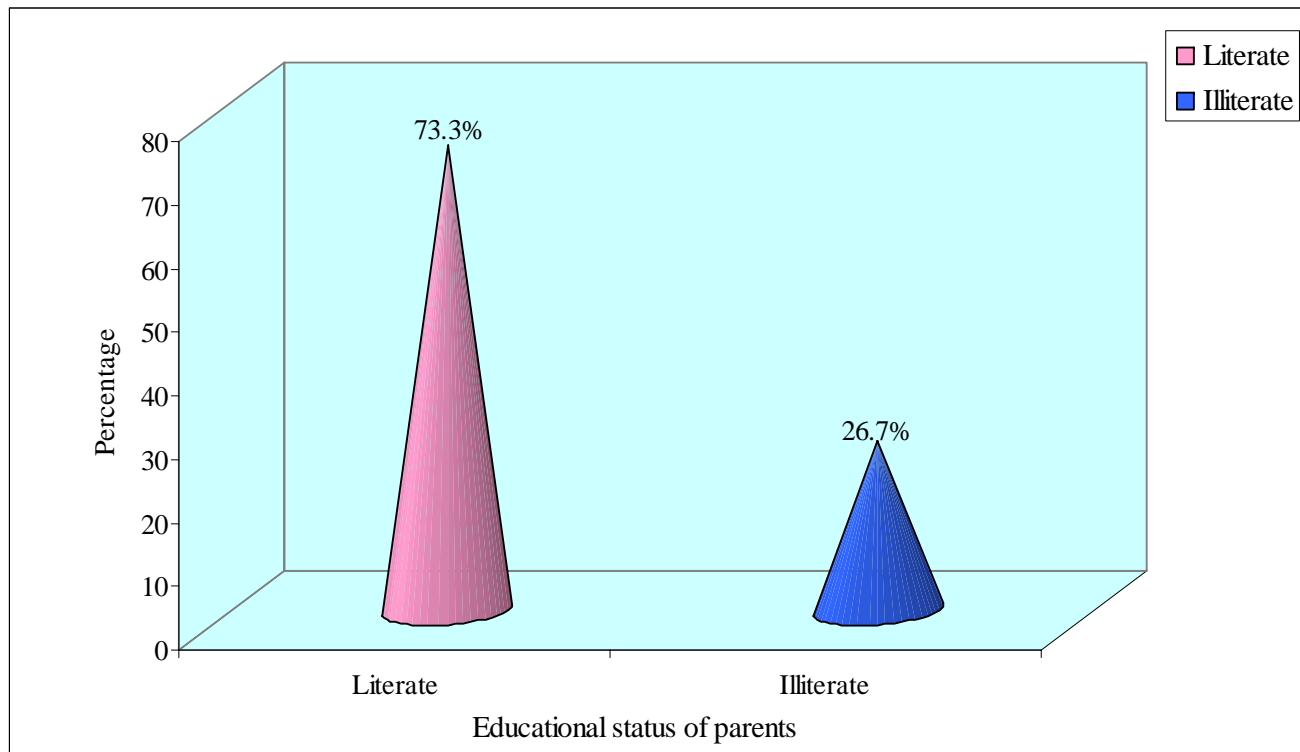
**Fig.4:** Percentage distribution of birth order of hospitalized children between 3-6 yrs.



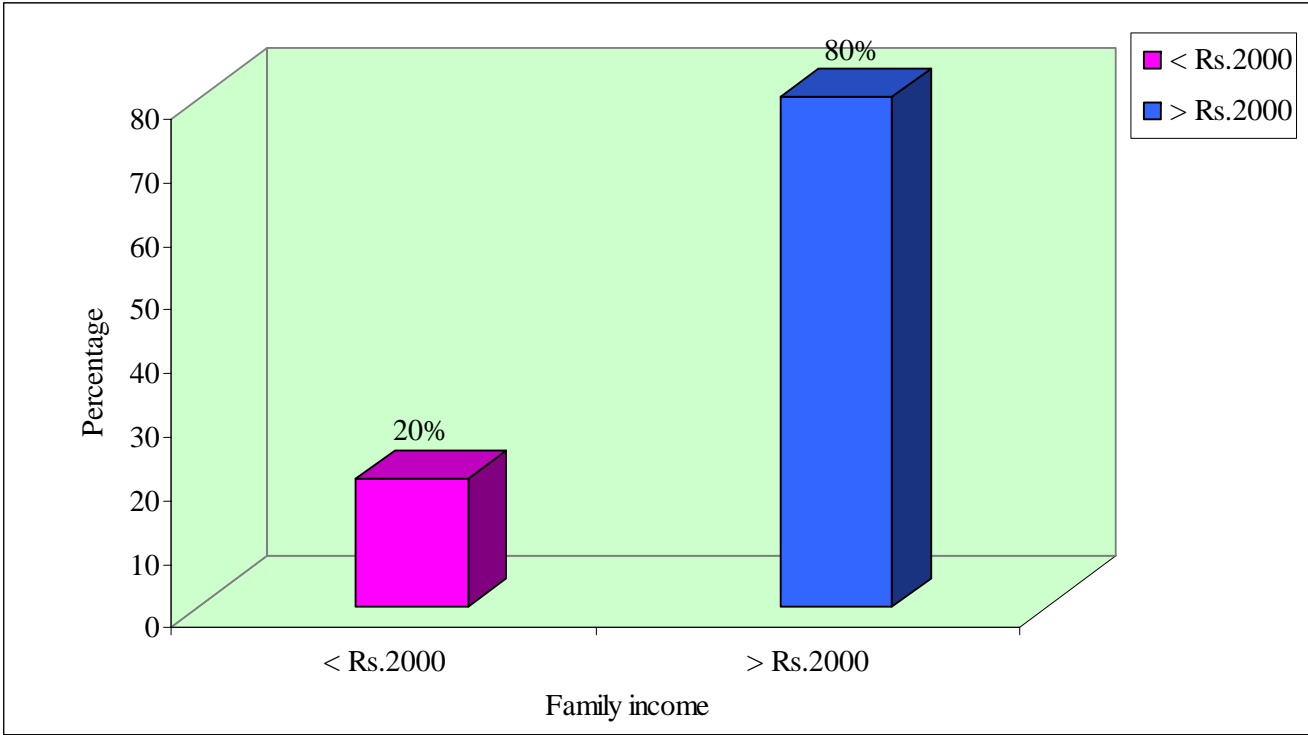
**Fig.5:** Percentage distribution of educational status of hospitalized children between 3-6 yrs.



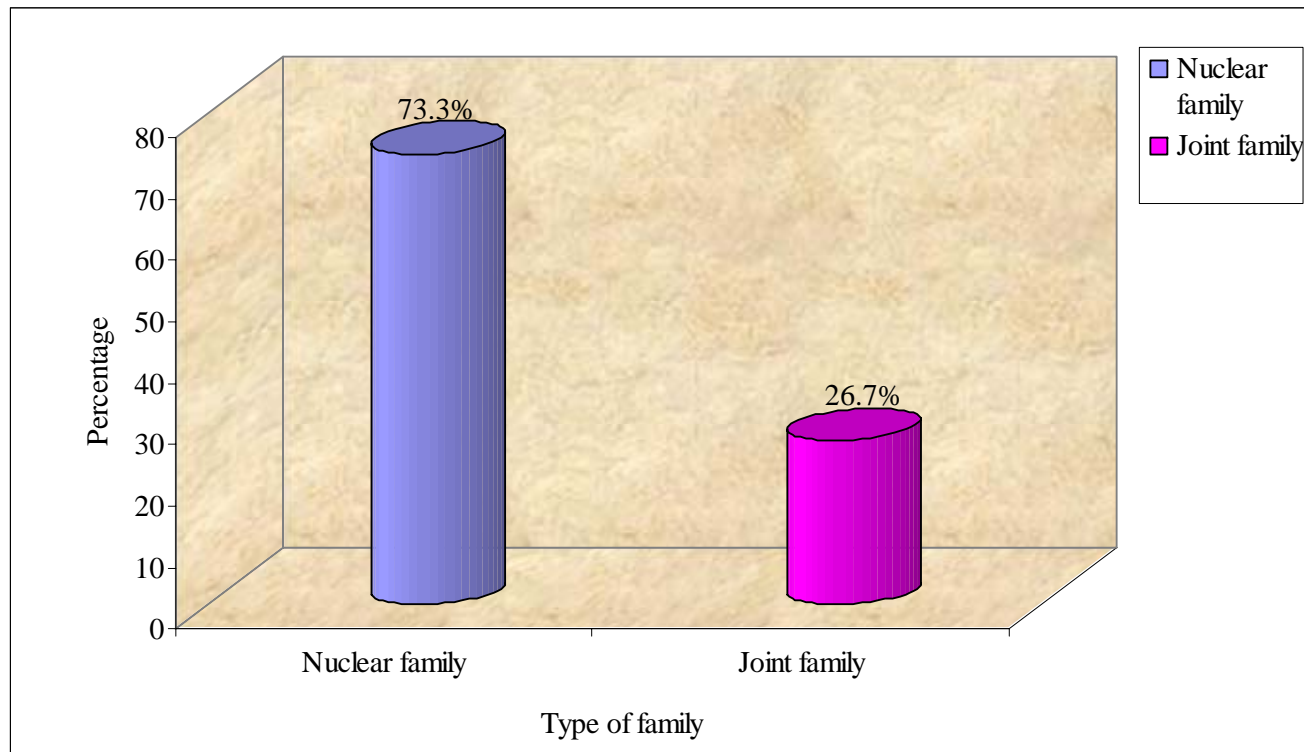
**Fig.6:** Percentage distribution of number of days of hospitalization of children between 3-6 yrs.



**Fig.7:** Percentage distribution of educational status of parents of hospitalized children between 3-6 yrs.



**Fig.8:** Percentage distribution of family income of hospitalized children between 3-6 yrs.



**Fig. 9:** Percentage distribution type of family of hospitalized children between 3-6 yrs.

## SECTION – B

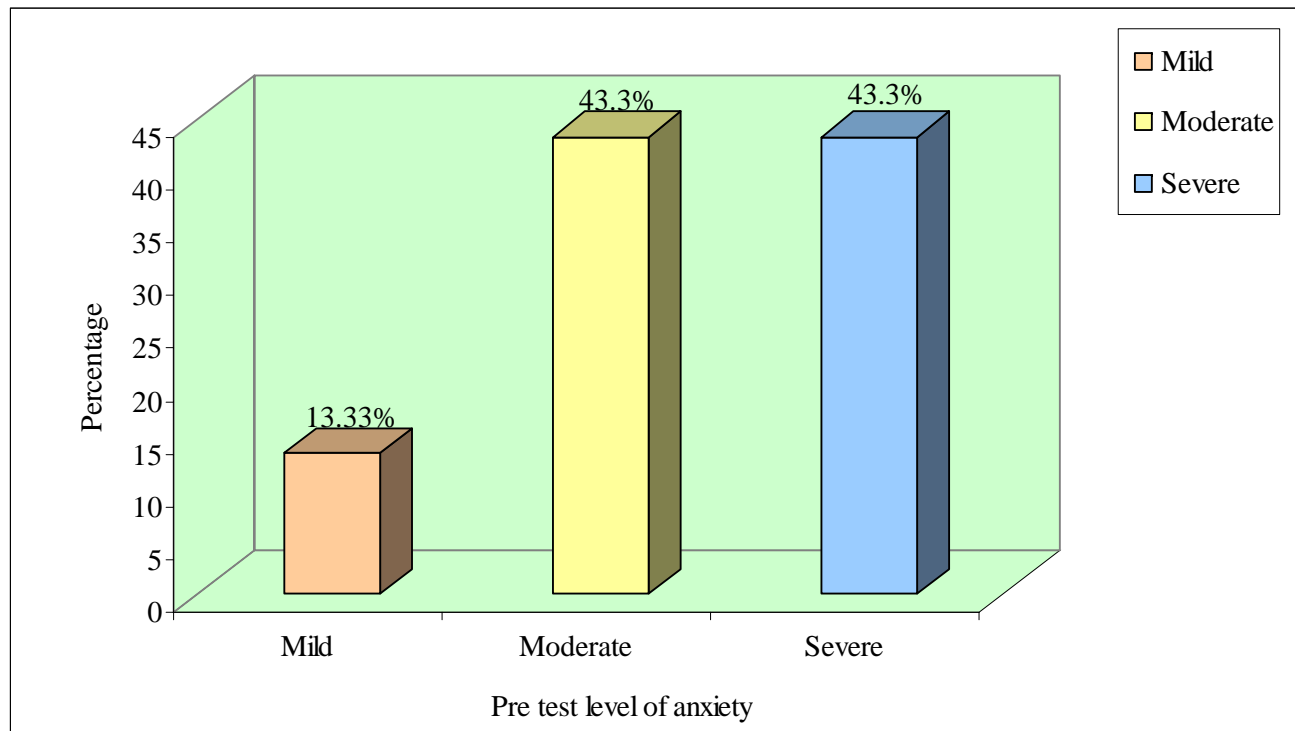
**Table 2: Frequency and percentage distribution of pre test level of anxiety among hospitalized children between 3-6 years.**

N=60

Level of anxiety	Pre test	
	Frequency	Percentage
Mild	8	13.3
Moderate	26	43.3
Severe	26	43.3

Table 2 shows, frequency and percentage distribution of pre test level of anxiety among hospitalized children between 3-6 years. It indicates that majority 26(43.3%) children had severe level of anxiety, 26(43.3%) had moderate level of anxiety and 8(13.3%) of the children had mild anxiety.





**Fig.10:** Percentage distribution of pre test level of anxiety among hospitalized children between 3-6 yrs.

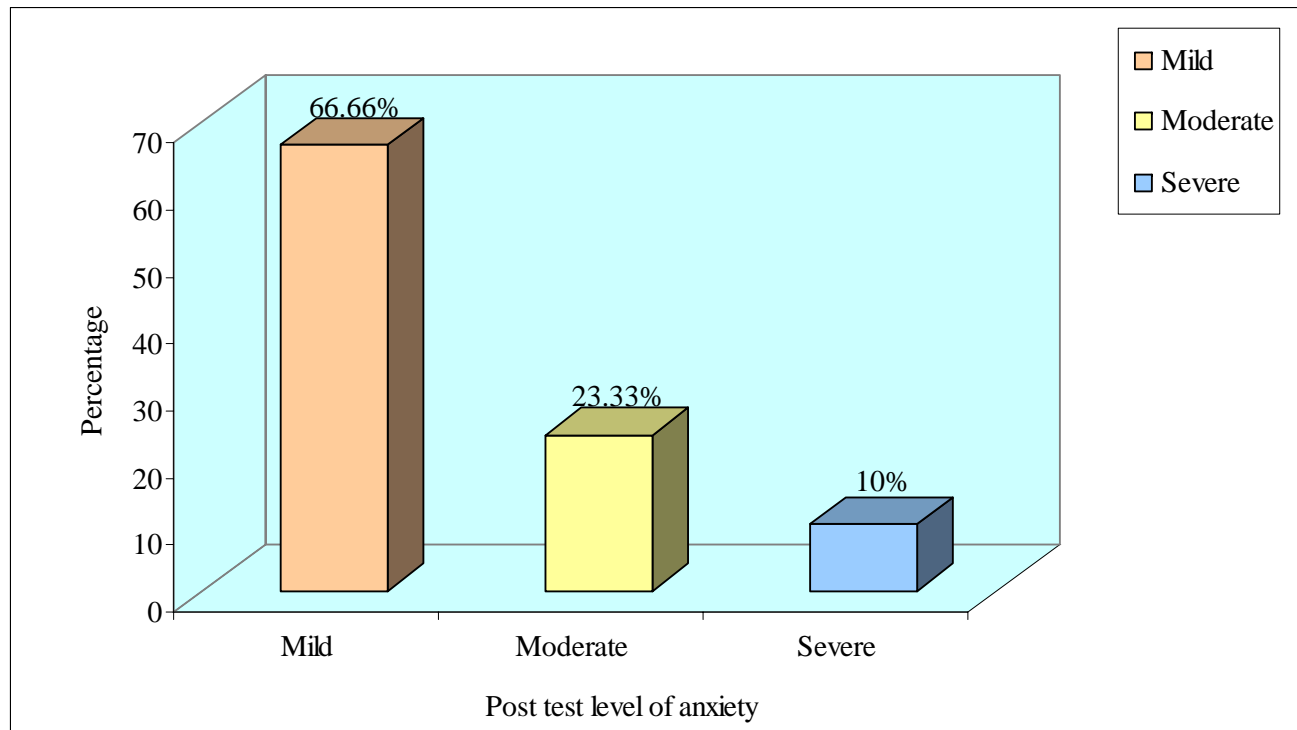
## SECTION - C

**Table 3: Frequency and percentage distribution of post test level of anxiety among hospitalized children between 3-6 years.**

N=60

Level of anxiety	Post test	
	Frequency	Percentage
Mild	40	66.66
Moderate	14	23.33
Severe	6	10

Table 3 represents the frequency and percentage distribution of post test level of anxiety among hospitalized children between 3-6 years. In the post test majority 40(66.66%) of the children had mild anxiety, 14(23.33%) of the children had moderate anxiety and 6(10%) of the children had severe anxiety.



**Fig.11:** Percentage distribution of post test level of anxiety among hospitalized children between 3-6 yrs.

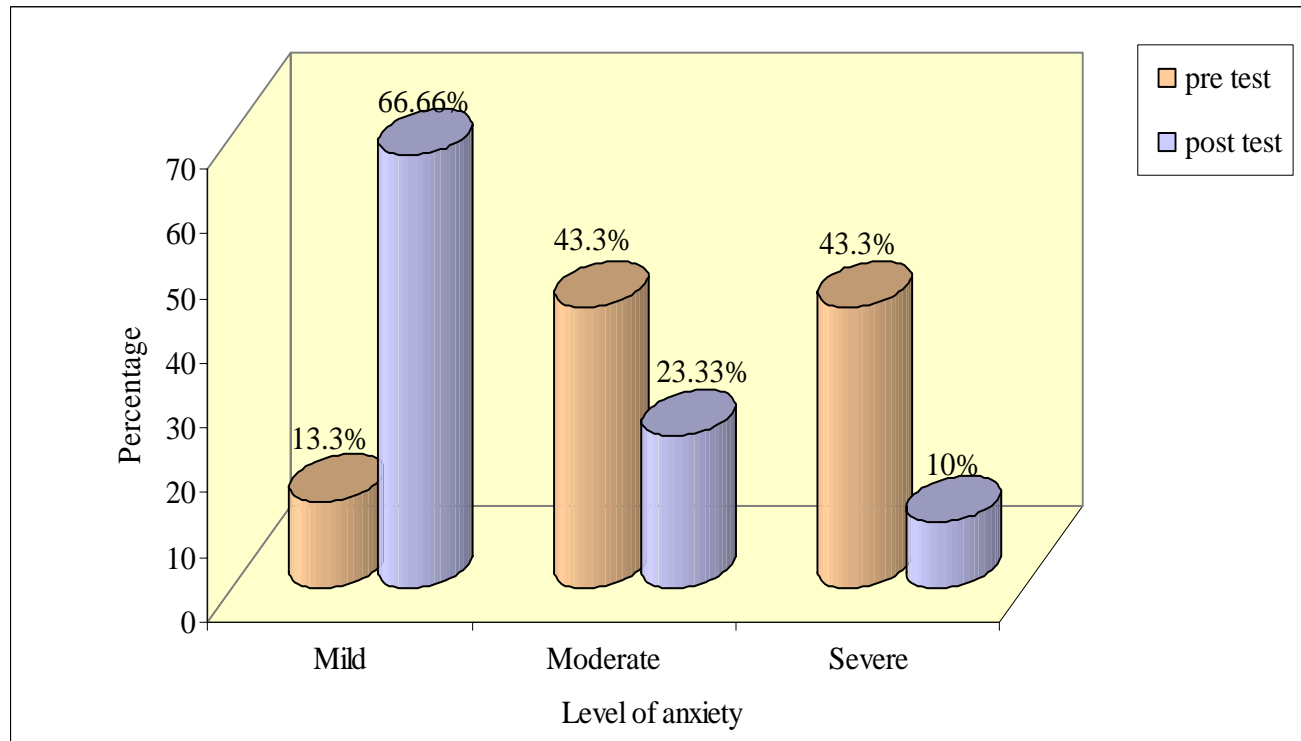
## SECTION D

**Table 4: Frequency and percentage distribution of pre test and post test level of anxiety among hospitalized children between 3-6 yrs.**

N=60

Level of anxiety	Pre test		Post test	
	Frequency	Percentage	Frequency	Percentage
Mild	8	13.3	40	66.66
Moderate	26	43.3	14	23.33
Severe	26	43.3	6	10

Table 4 shows the frequency and percentage distribution of pre test and post test level of anxiety among hospitalized children between 3-6 yrs. In pre test 43.3% had severe level of anxiety during hospitalization and in post test only 10% had severe level of anxiety which shows that therapeutic play was effective.



**Fig. 12:** Percentage distribution of pre and post test level of anxiety among hospitalized children between 3-6 yrs.

## SECTION - E

**Table 5: Comparison of mean and standard deviation between pre and post test level of anxiety among hospitalized children between 3-6 years.**

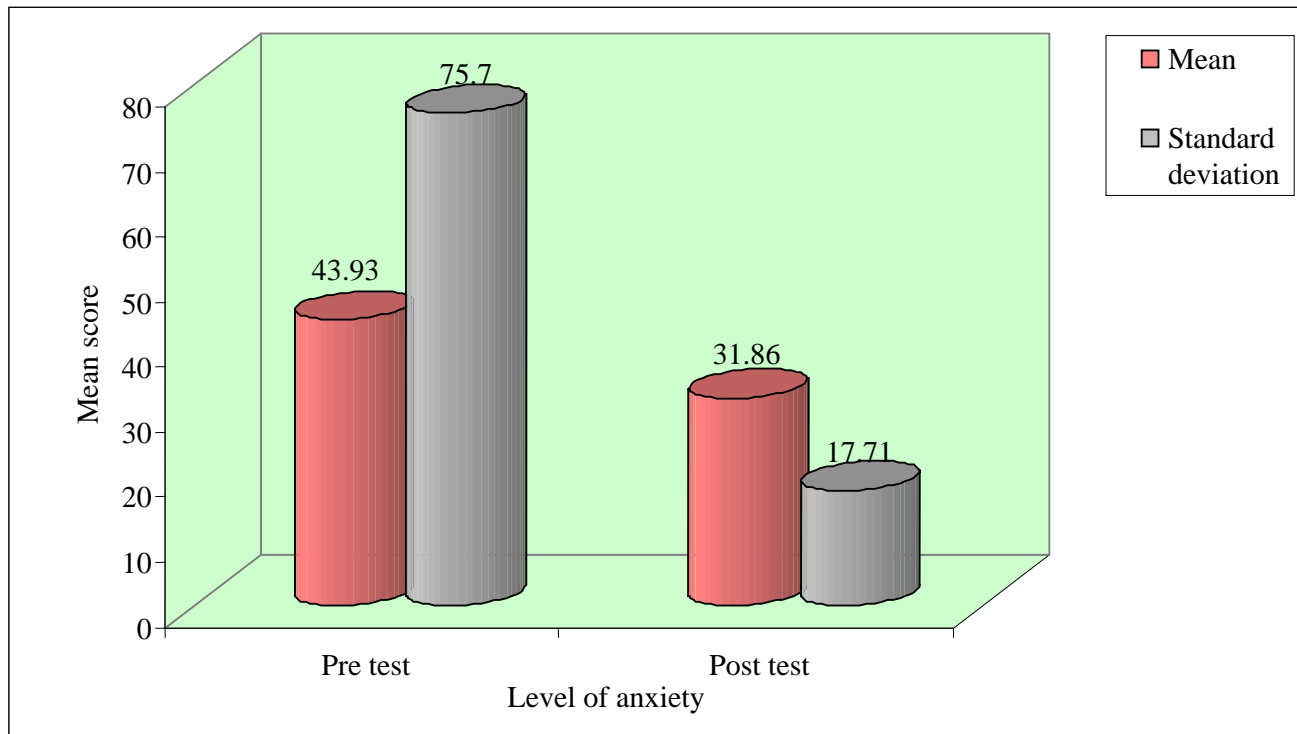
N=60

Level of anxiety	Mean	Standard deviation	Paired 't'test
Pre test	43.93	7.57	<b>18.47***</b>
Post test	31.86	17.71	

\*p<0.05 \*\*p<0.01 \*\*\*p<0.001

Table 5 projects the comparison of mean and standard deviation between pre and post test level of anxiety among hospitalized children between 3-6 years. The level of anxiety among hospitalized children between 3-6 years shows there was marked decrease in the mean value from 43.93 in the pre test level to 31.86 in the post test level of anxiety. The standard deviation is increased from 7.57 in pre test to 17.71 in post test. The 't' value at 18.47 is highly significant at p<0.005 level.

So there was significant decrease in the post test level of anxiety among hospitalized children between 3-6 years. It shows therapeutic play was effective in reduction of anxiety.



**Fig.13:** Comparison of pre test and post test level of anxiety among hospitalized children between 3-6 yrs

## SECTION - E

**Table 6: Association of the pre test level of anxiety among hospitalized children between 3-6 years with their selected demographic variable.**

N=60

S.No.	Demographic Variables	Mild		Moderate		Severe		Chi-square $\chi^2$
		N	%	N	%	N	%	
1	<b>Age in years</b>							
	3 -4	4	28.5	6	42.8	4	28.5	$\chi^2=8.24$
	4 -5	0	0	12	60	8	40	d.f =4
	5 -6	4	15.3	10	38.4	12	46.15	NS
2	<b>Sex</b>							$\chi^2=3.02$
	Male	2	5	18	52.9	14	41.17	d.f=2
	Female	6	23	10	38.4	10	38.46	NS
3	<b>Birth order</b>							$\chi^2=5.2$
	First born	4	18	6	27	12	54.5	d.f=2
	Second & above	4	10.5	22	57.8	12	31.5	NS
4	<b>Education of child</b>							$\chi^2=4.58$
	Pre KG	4	22.2	8	44.4	6	33.3	d.f=6
	LKG	0	0	6	60	4	40	NS
	UKG	0	0	4	50	4	50	
	First std	4	16.6	10	41.6	10	41.6	
5	<b>No. of days hospitalization</b>							
	1 -2	2	5.5	14	38.8	20	55.5	$\chi^2=22.68$
	3 -4	2	11.1	12	66.6	4	22.2	d.f=4
	5 -7	4	66.6	2	33.3	0	0	S***
6	<b>Type of family</b>							$\chi^2=10.24$
	Nuclear family	6	12.5	18	37.5	24	50	d.f=2
	Joint family	2	16.6	10	83.3	0	0	S**

\*p<0.05 \*\*p<0.01 \*\*\*p<0.001 NS-Non Significant S-Significant



Table 6 shows the association between demographic variables and the pre test level of anxiety among hospitalized children between 3-6 years. Only number of day's hospitalization and type of family is significantly associated with the pre test level of anxiety. The other demographic variables such as age, sex, birth order, education of child were not significantly associated with their pre test level of anxiety. Statistical significance was calculated by using chi square test.

## SECTION - F

**Table 7: Association of the post test level of anxiety among hospitalized children with their selected demographic variable.**

N=60

S.No.	Demographic Variables	Mild		Moderate		Severe		Chi-square $\chi^2$
		N	%	N	%	N	%	
1	<b>Age in years</b>							$\chi^2=11.06$ d.f=4 S*
	3 -4	14	100	0	0	0	0	
	4 -5	10	50	8	40	2	10	
	5 -6	16	61.53	6	23	4	15.38	
2	<b>Sex</b>							$\chi^2=0.288$ d.f=2 NS
	Male	22	64.7	8	23.5	4	11.76	
	Female	18	69.2	6	23.07	2	7.6	
3	<b>Birth order</b>							$\chi^2=3.308$ d.f=2 NS
	First born	12	54.54	8	36.36	2	9	
	Second & above	28	73.68	6	15.78	4	10.52	
4	<b>Education of child</b>							$\chi^2=14.455$ d.f=6 S*
	Pre KG	16	88.88	2	11.11	0	0	
	LKG	4	40	4	40	2	20	
	UKG	2	25	4	50	2	25	
	First std	18	75	4	16.66	2	8.33	
5	<b>No. of days hospitalization</b>							$\chi^2=13.75$ d.f=4 S**
	1 -2	14	46.66	12	40	4	13.33	
	3 -4	12	75	2	12.5	2	12.5	
	5 -7	14	100	0	0	8	0	
6	<b>Type of family</b>							$\chi^2=8.45$ d.f=2 S*
	Nuclear family	26	59.09	14	31.81	4	25	
	Joint family	14	87.5	0	0	2	12.5	

\*p&lt;0.05 \*\*p&lt;0.01 NS-Non significant S-Significant

Table 7 shows the association between demographic variables and the post test level of anxiety among hospitalized children between 3-6 years. The demographic variables such as age, education of child, number of day's hospitalization and type of family are significantly associated with their post test level of anxiety. Sex and birth order was not significantly associated with the post test level of anxiety. Statistical significance was calculated by using chi square test.

### DATA ANALYSIS AND INTERPRETATION

Data analysis is the categorizing, ordering, manipulating, and summarizing of data to reduce in to intelligible and interpretable form so that the researcher problem can be studied and tested including the relationship between variables. (Kerlinger 1976). This Chapter deals with analysis and interpretation of data collected to evaluate the effectiveness of therapeutic play on reduction of anxiety among hospitalized children between 3-6 years. The data was analyzed based on the objectives and hypothesis of the study.

The findings are based on the descriptive and inferential statistical analyses are presented under the following section.

**Section A:** Distribution of demographic variables of hospitalized children between 3-6 years.

**Section B:** Assessment of the pre test level of anxiety among hospitalized children between 3-6 years.

**Section C:** Assessment of the post test level of anxiety among hospitalized children between 3-6 years.

**Section D:** Assessment of pre test and post test level of anxiety among hospitalized children between 3-6 years.

**Section E:** Comparison of mean and standard deviation between pre test and post test level of anxiety among hospitalized children between 3-6 years.

**Section F:** Association of the pre test level of anxiety among hospitalized children with their selected demographic variable.

**Section G:** Association of the post test level of anxiety among hospitalized children with their selected demographic variable.

**SECTION - A**

**Table 1: Frequency and percentage distribution of hospitalized children between 3-6 years by age, sex etc.**

**N=60**

<b>S.No.</b>	<b>Demographic Variables</b>	<b>Frequency</b>	<b>Percentage</b>
1	<b>Age in years</b>		
	3 -4	14	23.3
	4 -5	20	33.3
	5 -6	26	43.3
2	<b>Sex</b>		
	Male	34	56.7
	Female	26	43.3
3	<b>Birth order</b>		
	First born	22	36.7
	Second & above	38	63.3
4	<b>Education of child</b>		
	Pre KG	18	30
	LKG	10	16.7
	UKG	8	13.3
	First std	24	40
5	<b>No. of days hospitalization</b>		
	1 -2	30	50
	3 -4	16	26.7
	5 -7	14	13.3
6	<b>Education of parents</b>		
	Literate	44	73.3
	Illiterate	16	26.7
7	<b>Occupation</b>		
	Coolie	60	100
	Employed	0	0
8	<b>Family income</b>		
	< Rs.2000	12	20
	> Rs.2000	48	80

9	<b>Type of family</b>		
	Nuclear family	44	73
	Joint family	16	26.7

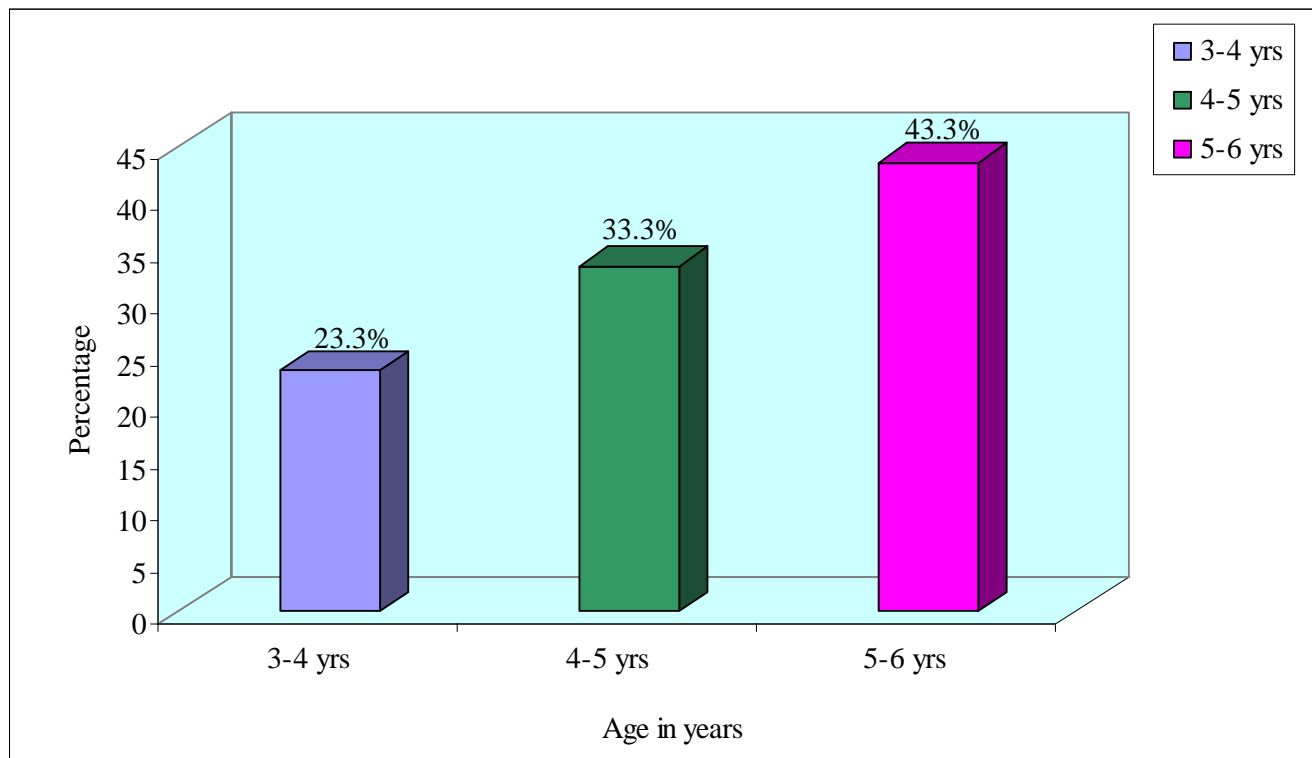
33

Table 1 shows the frequency and percentage distribution of hospitalized children between 3-6 years. With regard to age of children 14 (23.3%) were in the age group between 3 and 4. 20(33.3%) children were in the age group between 4 and 5 years. 26(43.3%) Children were in the age group between 5 to 6 years. It was found that 34(56.7%) were male and 26(43.3%) were female in both groups.

With regard to educational status, a maximum of 24(40%) were studying in 1st Standard, whereas 18(30%) were studying in Pre-Kg, 10 (16.7%) were studying in L.K.G, 8(13.3%) were studying in U.K.G. It was found that 44(73.3%) were educated parents, whereas 16 (26.7%) were illiterate. Majority of parents were Coolie. With regard to family income 12(20%) were getting <Rs.2000 per month, where as 48(80%) were getting >Rs.2000.

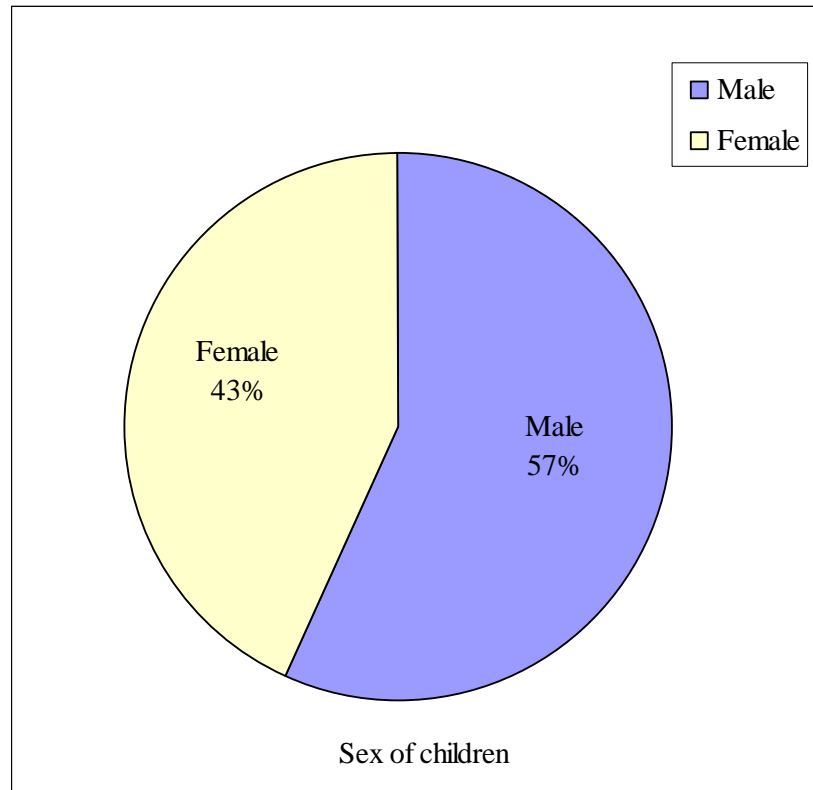
Regarding the birth order of the children 22(36.7%) are first born, whereas 38(56.3%) are 2nd and above born. With regard to type of family 44(73.3%) were belongs to nuclear family, where as 16(26.7%) belongs to joint family. It was found that 30(50%) children were hospitalized for 1-2 days, whereas 16(26.7%) were 3-4 days and 14(13.3%) were 5-7 days.



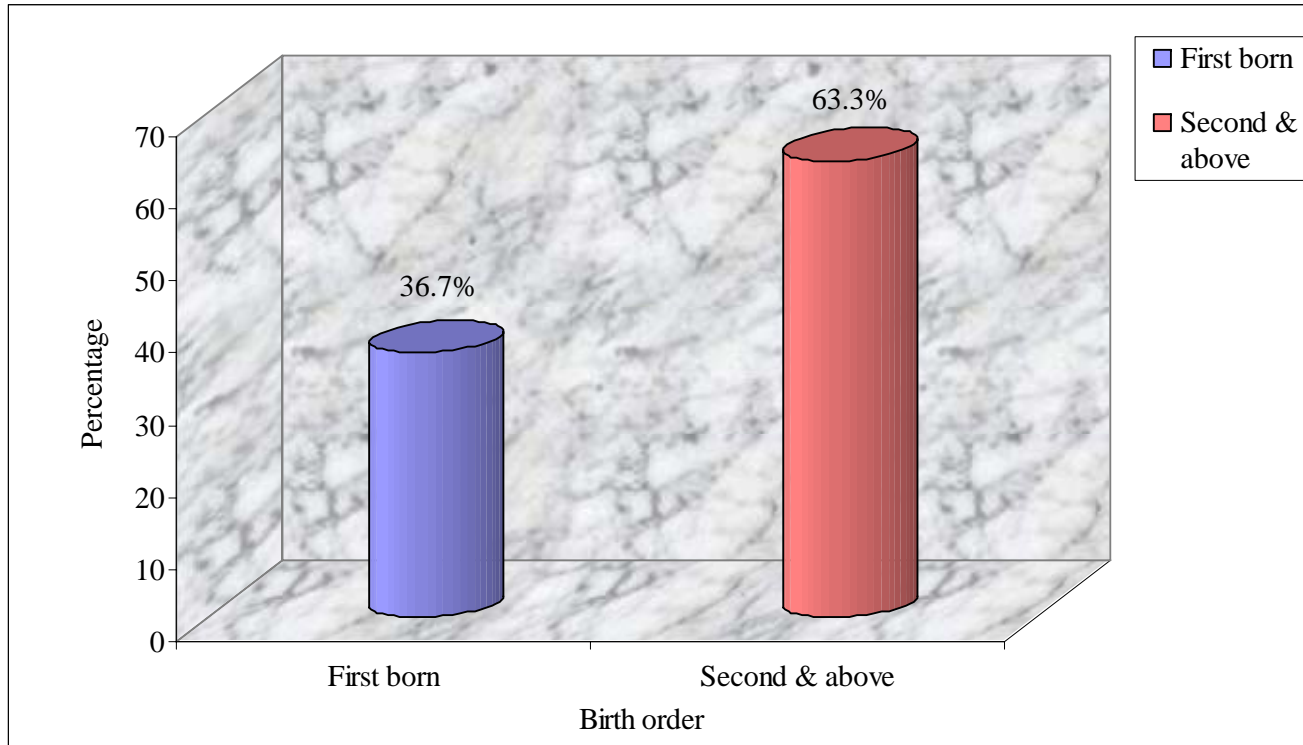


**Fig.2:** Percentage distribution of age of hospitalized children between 3-6 yrs.

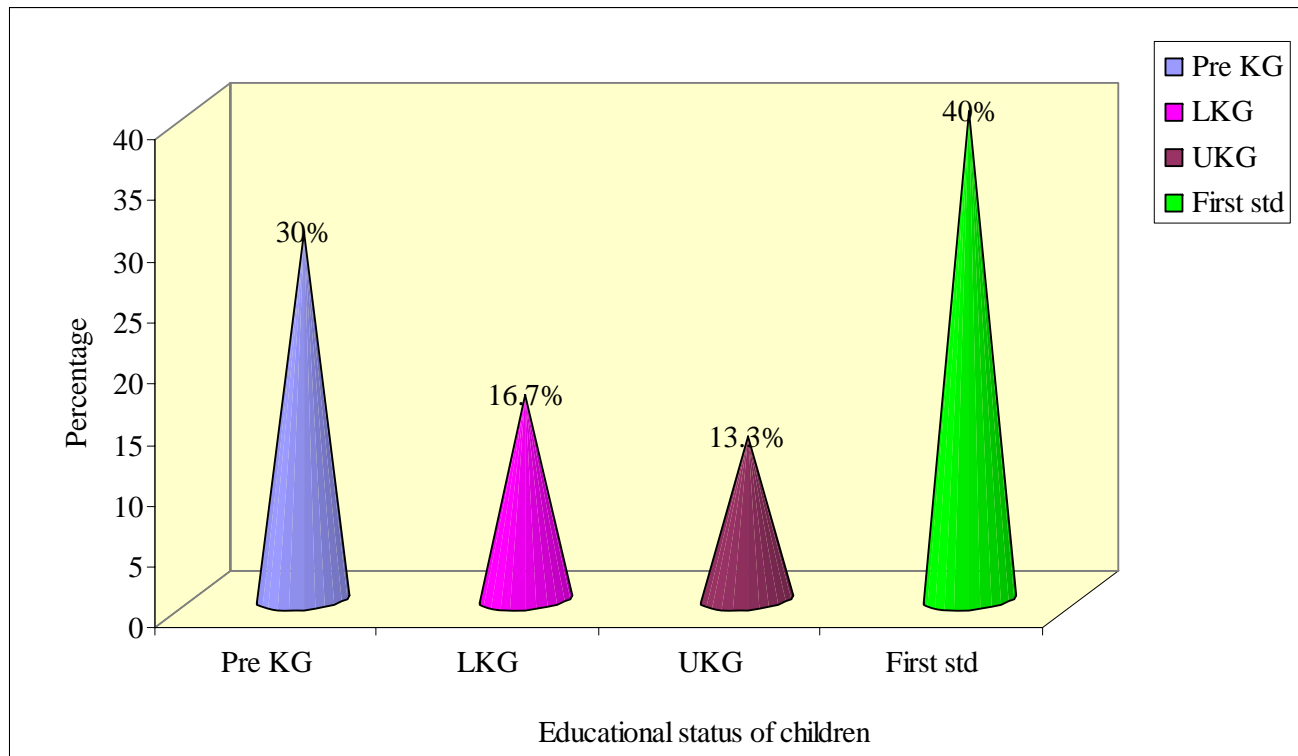




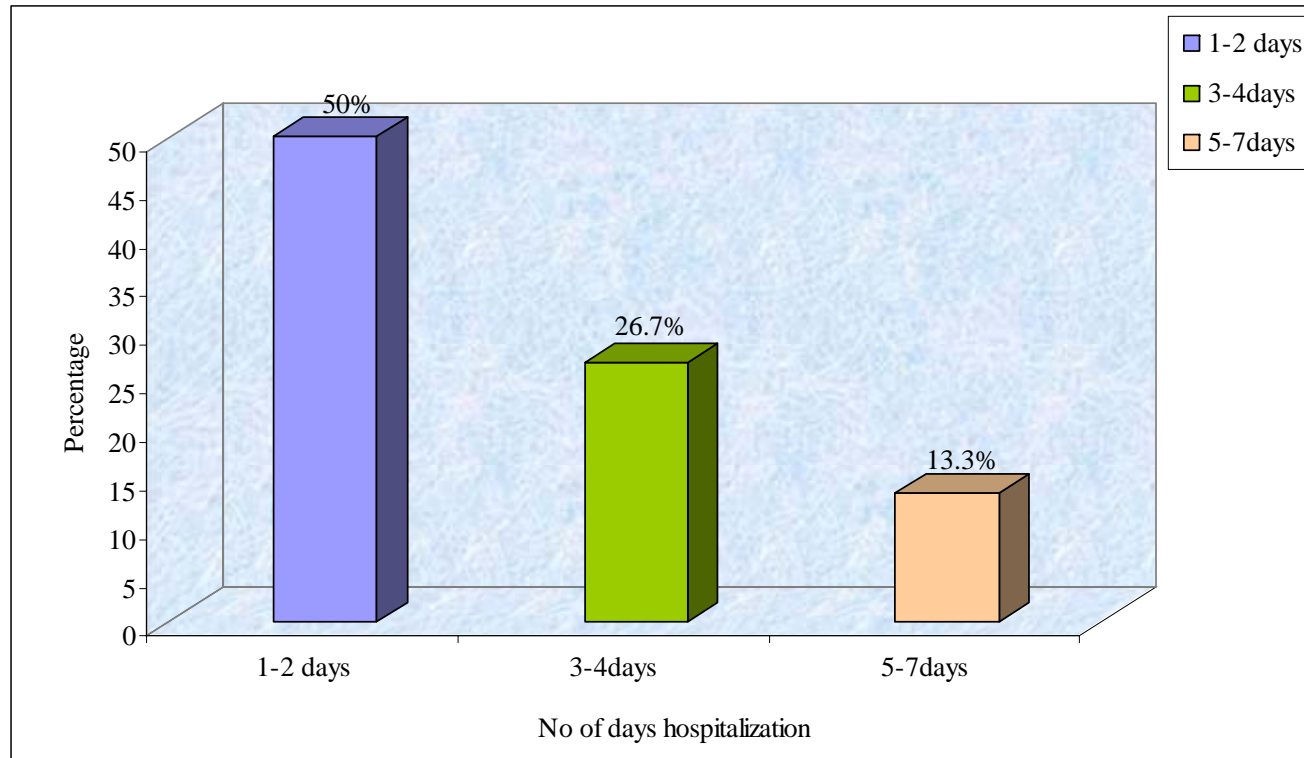
**Fig. 3:** Percentage distribution of sex of hospitalized children between 3-6 yrs.



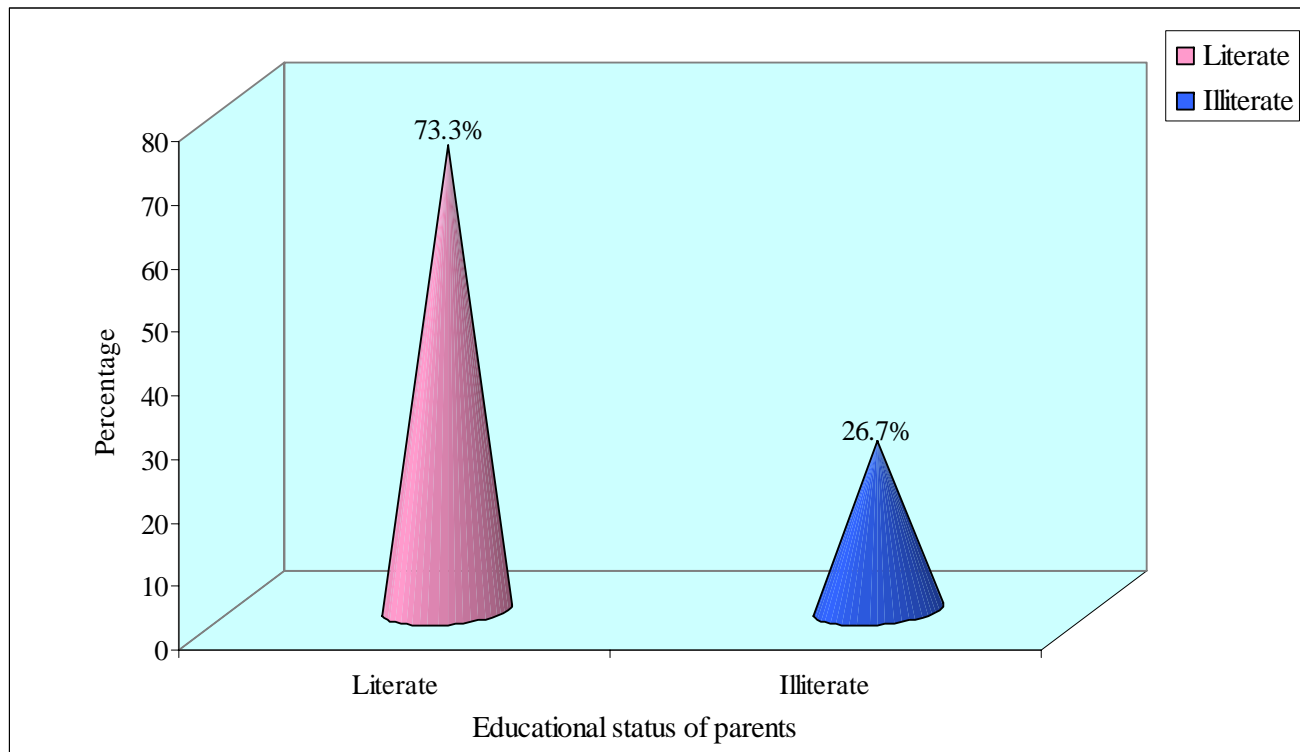
**Fig.4:** Percentage distribution of birth order of hospitalized children between 3-6 yrs.



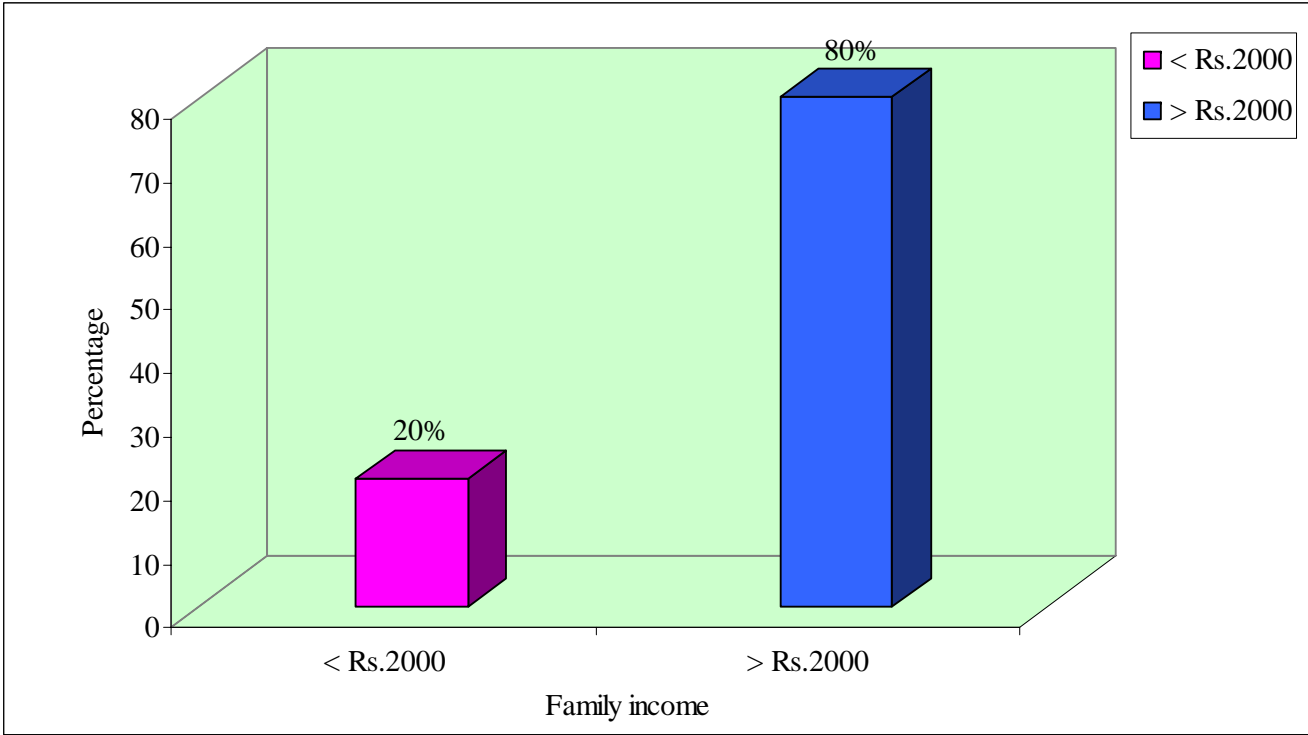
**Fig.5:** Percentage distribution of educational status of hospitalized children between 3-6 yrs.



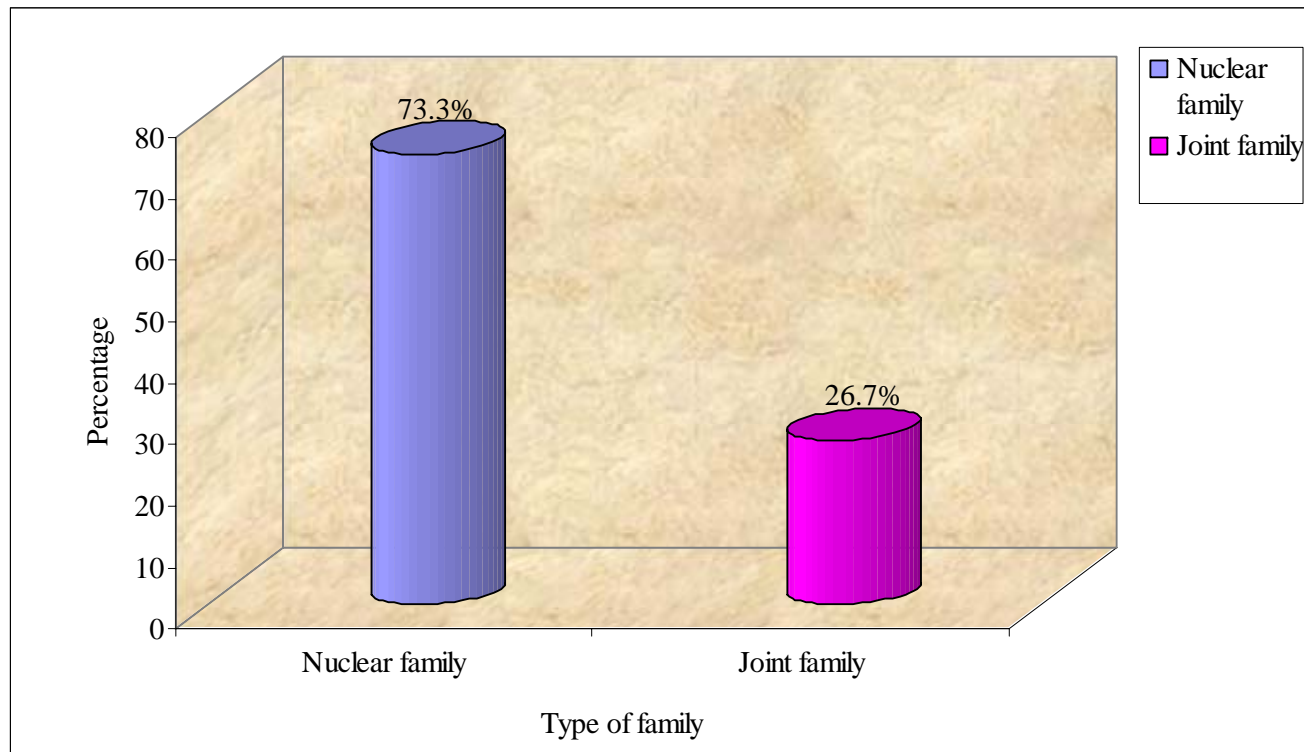
**Fig.6:** Percentage distribution of number of days of hospitalization of children between 3-6 yrs.



**Fig.7:** Percentage distribution of educational status of parents of hospitalized children between 3-6 yrs.



**Fig.8:** Percentage distribution of family income of hospitalized children between 3-6 yrs.



**Fig. 9:** Percentage distribution type of family of hospitalized children between 3-6 yrs.

## SECTION – B

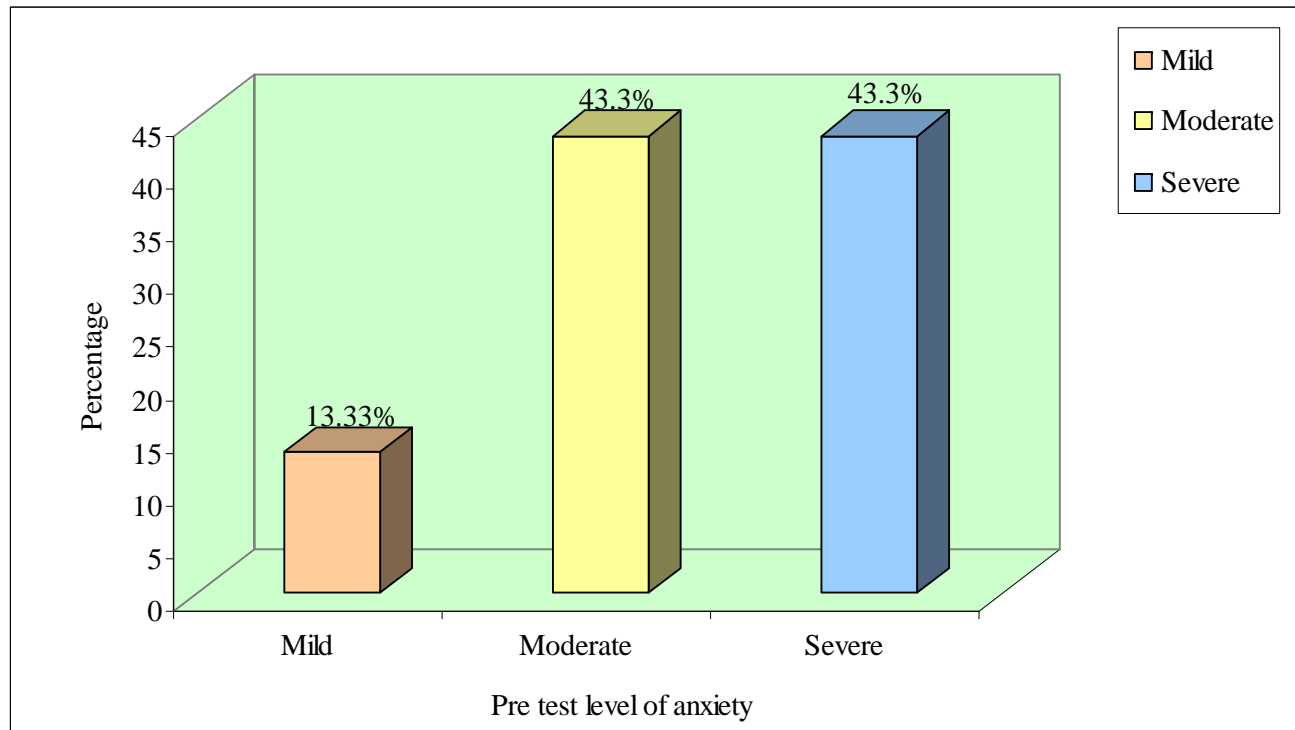
**Table 2: Frequency and percentage distribution of pre test level of anxiety among hospitalized children between 3-6 years.**

N=60

Level of anxiety	Pre test	
	Frequency	Percentage
Mild	8	13.3
Moderate	26	43.3
Severe	26	43.3

Table 2 shows, frequency and percentage distribution of pre test level of anxiety among hospitalized children between 3-6 years. It indicates that majority 26(43.3%) children had severe level of anxiety, 26(43.3%) had moderate level of anxiety and 8(13.3%) of the children had mild anxiety.





**Fig.10:** Percentage distribution of pre test level of anxiety among hospitalized children between 3-6 yrs.

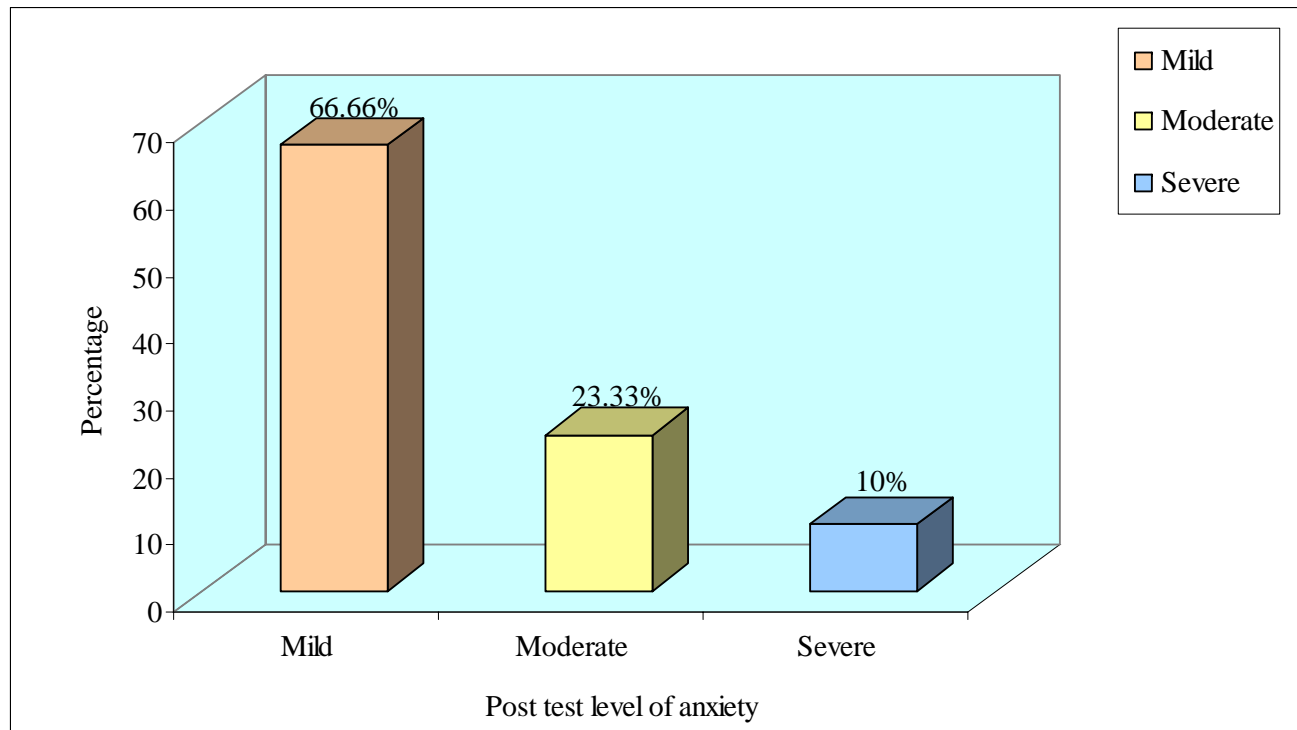
## SECTION - C

**Table 3: Frequency and percentage distribution of post test level of anxiety among hospitalized children between 3-6 years.**

N=60

Level of anxiety	Post test	
	Frequency	Percentage
Mild	40	66.66
Moderate	14	23.33
Severe	6	10

Table 3 represents the frequency and percentage distribution of post test level of anxiety among hospitalized children between 3-6 years. In the post test majority 40(66.66%) of the children had mild anxiety, 14(23.33%) of the children had moderate anxiety and 6(10%) of the children had severe anxiety.



**Fig.11:** Percentage distribution of post test level of anxiety among hospitalized children between 3-6 yrs.

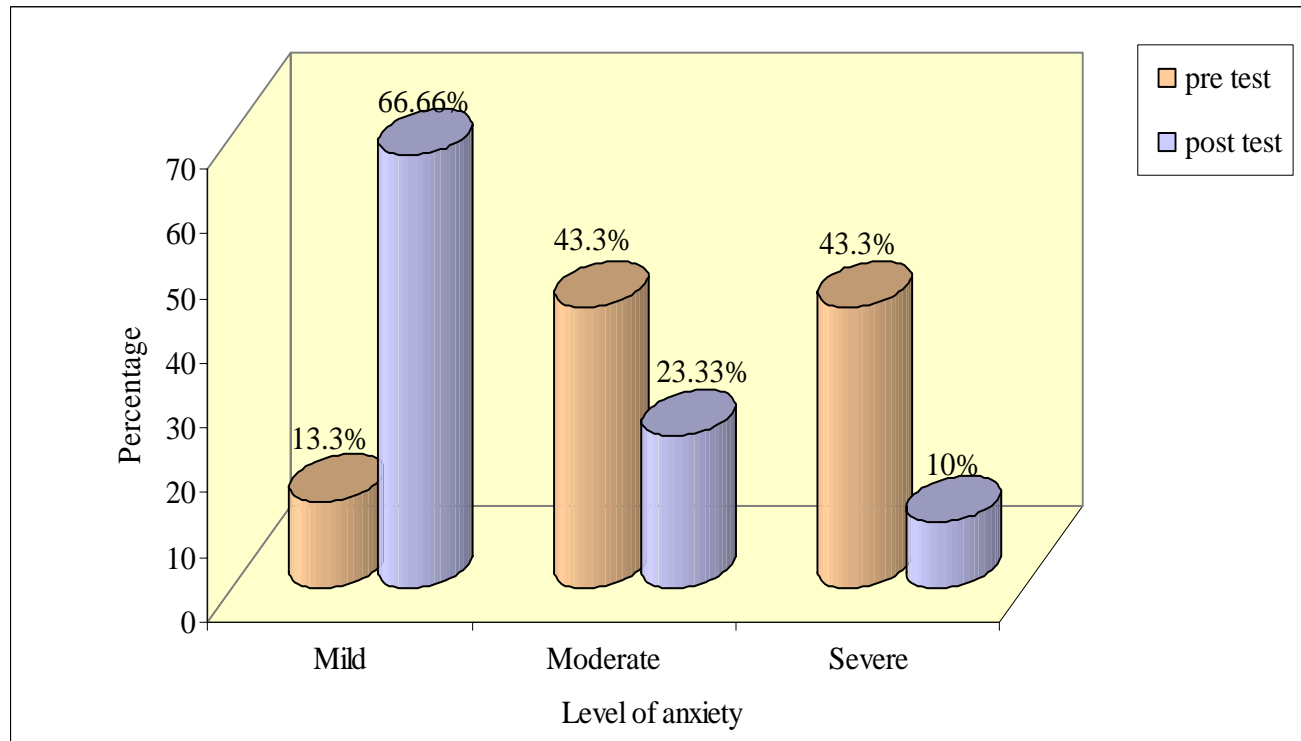
## SECTION D

**Table 4: Frequency and percentage distribution of pre test and post test level of anxiety among hospitalized children between 3-6 yrs.**

N=60

Level of anxiety	Pre test		Post test	
	Frequency	Percentage	Frequency	Percentage
Mild	8	13.3	40	66.66
Moderate	26	43.3	14	23.33
Severe	26	43.3	6	10

Table 4 shows the frequency and percentage distribution of pre test and post test level of anxiety among hospitalized children between 3-6 yrs. In pre test 43.3% had severe level of anxiety during hospitalization and in post test only 10% had severe level of anxiety which shows that therapeutic play was effective.



**Fig. 12:** Percentage distribution of pre and post test level of anxiety among hospitalized children between 3-6 yrs.

## SECTION - E

**Table 5: Comparison of mean and standard deviation between pre and post test level of anxiety among hospitalized children between 3-6 years.**

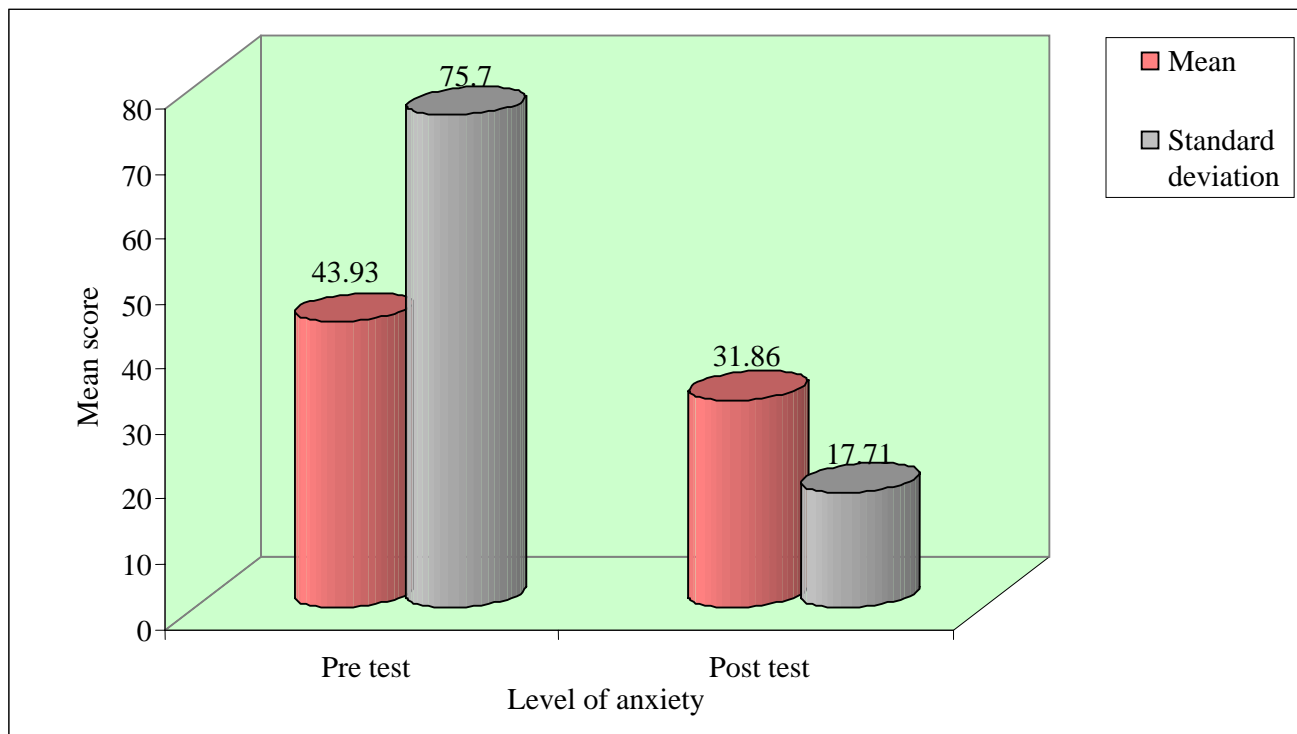
N=60

Level of anxiety	Mean	Standard deviation	Paired 't'test
Pre test	43.93	7.57	<b>18.47***</b>
Post test	31.86	17.71	

\*p<0.05 \*\*p<0.01 \*\*\*p<0.001

Table 5 projects the comparison of mean and standard deviation between pre and post test level of anxiety among hospitalized children between 3-6 years. The level of anxiety among hospitalized children between 3-6 years shows there was marked decrease in the mean value from 43.93 in the pre test level to 31.86 in the post test level of anxiety. The standard deviation is increased from 7.57 in pre test to 17.71 in post test. The 't' value at 18.47 is highly significant at p<0.005 level.

So there was significant decrease in the post test level of anxiety among hospitalized children between 3-6 years. It shows therapeutic play was effective in reduction of anxiety.



**Fig.13:** Comparison of pre test and post test level of anxiety among hospitalized children between 3-6 yrs

## SECTION - E

**Table 6: Association of the pre test level of anxiety among hospitalized children between 3-6 years with their selected demographic variable.**

N=60

S.No.	Demographic Variables	Mild		Moderate		Severe		Chi-square $\chi^2$
		N	%	N	%	N	%	
1	<b>Age in years</b>							
	3 -4	4	28.5	6	42.8	4	28.5	$\chi^2=8.24$
	4 -5	0	0	12	60	8	40	d.f =4
	5 -6	4	15.3	10	38.4	12	46.15	NS
2	<b>Sex</b>							$\chi^2=3.02$
	Male	2	5	18	52.9	14	41.17	d.f=2
	Female	6	23	10	38.4	10	38.46	NS
3	<b>Birth order</b>							$\chi^2=5.2$
	First born	4	18	6	27	12	54.5	d.f=2
	Second & above	4	10.5	22	57.8	12	31.5	NS
4	<b>Education of child</b>							$\chi^2=4.58$
	Pre KG	4	22.2	8	44.4	6	33.3	d.f=6
	LKG	0	0	6	60	4	40	NS
	UKG	0	0	4	50	4	50	
	First std	4	16.6	10	41.6	10	41.6	
5	<b>No. of days hospitalization</b>							
	1 -2	2	5.5	14	38.8	20	55.5	$\chi^2=22.68$
	3 -4	2	11.1	12	66.6	4	22.2	d.f=4
	5 -7	4	66.6	2	33.3	0	0	S***
6	<b>Type of family</b>							$\chi^2=10.24$
	Nuclear family	6	12.5	18	37.5	24	50	d.f=2
	Joint family	2	16.6	10	83.3	0	0	S**

\*p<0.05 \*\*p<0.01 \*\*\*p<0.001 NS-Non Significant S-Significant



Table 6 shows the association between demographic variables and the pre test level of anxiety among hospitalized children between 3-6 years. Only number of day's hospitalization and type of family is significantly associated with the pre test level of anxiety. The other demographic variables such as age, sex, birth order, education of child were not significantly associated with their pre test level of anxiety. Statistical significance was calculated by using chi square test.

## SECTION - F

**Table 7: Association of the post test level of anxiety among hospitalized children with their selected demographic variable.**

N=60

S.No.	Demographic Variables	Mild		Moderate		Severe		Chi-square $\chi^2$
		N	%	N	%	N	%	
1	<b>Age in years</b>							$\chi^2=11.06$ d.f=4 S*
	3 -4	14	100	0	0	0	0	
	4 -5	10	50	8	40	2	10	
	5 -6	16	61.53	6	23	4	15.38	
2	<b>Sex</b>							$\chi^2=0.288$ d.f=2 NS
	Male	22	64.7	8	23.5	4	11.76	
	Female	18	69.2	6	23.07	2	7.6	
3	<b>Birth order</b>							$\chi^2=3.308$ d.f=2 NS
	First born	12	54.54	8	36.36	2	9	
	Second & above	28	73.68	6	15.78	4	10.52	
4	<b>Education of child</b>							$\chi^2=14.455$ d.f=6 S*
	Pre KG	16	88.88	2	11.11	0	0	
	LKG	4	40	4	40	2	20	
	UKG	2	25	4	50	2	25	
	First std	18	75	4	16.66	2	8.33	
5	<b>No. of days hospitalization</b>							$\chi^2=13.75$ d.f=4 S**
	1 -2	14	46.66	12	40	4	13.33	
	3 -4	12	75	2	12.5	2	12.5	
	5 -7	14	100	0	0	8	0	
6	<b>Type of family</b>							$\chi^2=8.45$ d.f=2 S*
	Nuclear family	26	59.09	14	31.81	4	25	
	Joint family	14	87.5	0	0	2	12.5	

\*p&lt;0.05 \*\*p&lt;0.01 NS-Non significant S-Significant

Table 7 shows the association between demographic variables and the post test level of anxiety among hospitalized children between 3-6 years. The demographic variables such as age, education of child, number of day's hospitalization and type of family are significantly associated with their post test level of anxiety. Sex and birth order was not significantly associated with the post test level of anxiety. Statistical significance was calculated by using chi square test.

# CHAPTER – V

## DISCUSSION

This chapter deals with the discussion of results of the data based on the objectives and hypothesis of the study. The problem statement is a study to assess the effectiveness of therapeutic play on the level of anxiety among hospitalized children between 3- 6 years in Stanley Hospital, Chennai.

Today's children are tomorrow's citizen, so the health of the children is very important in determining the prosperity of a country. Indian journal of pediatrics (2005) indicated that 20% of children have some form of psychological problem and that of 70% of these are helped through the use of psychological based therapies such as play and creative arts. According to Jean Piaget, Knowledge arises neither from objects nor the child, but from interactions between the child and those objects. Therapeutic play is one type of play therapy. Constructive play helps to relieve anxiety of the child. Play is essential for a child to be healthy as well as to grow healthy.

The present study has been undertaken to evaluate the effectiveness of therapeutic play on the level of anxiety among hospitalized children between 3- 6 years in Stanley Hospital. The population of the study was all the children between 3-6 years who are admitted in the hospital. Sample size consists of 60 hospitalized children between 3-6 years. Convenient sampling technique was used by the investigator to select the participants. The children between 3-6 years who were admitted in the medical ward and who meets the inclusive criteria was selected. Data collection was done a period of four weeks.

The investigator was used observation checklist to assess the level of anxiety among hospitalized children between 3-6 years children. The investigator started the data collection procedure for the main study in Stanley hospital from 1.5.10 to 31.5.10. The investigator was selected the sample according to the criteria and availability. Every day 3 participants were selected. The brief introduction was given

and explained the purpose of study to the mother. Formal written permission was obtained from the director of the hospital.

During pre test the required data were collected by using the observation checklist. Therapeutic play was given to the child for 2 hours on each day for 3 days. The play material includes musical toys, drawing, painting, puzzles and building blocks. Play materials were selected according to the age and interest of the children. After the intervention completes post test was conducted by using the same observation checklist for children. The investigator worked from morning 9am to evening 3 pm for 6 days in a week during the data collection.

The analysis revealed that there was marked decrease in the mean value from 43.93 in the pre test level to 31.86 in the post test level of anxiety. The standard deviation is increased from 7.57 in pre test to 17.71 in post test. The 't' value at 18.47 is highly significant at  $p < 0.001$  level. So there was significant decrease in the post test level of anxiety among hospitalized children between 3-6 years. It shows therapeutic play was effective on reduction of anxiety.

The frequency and percentage distribution of demographic variables revealed that, the majority 26(43.3%) were in the age group of 5-6 years. Related to sex majority 34(56.7%) were male children, regarding birth order majority 38(63.3%) were second & above born children, considering educational qualification majority 24(40%) were 1<sup>st</sup> standard and 44(73.3%) were illiterate. Regarding occupation all of them are coolie, regarding family income majority 48(80%) were getting more than Rs.2000/-, considering type of family 44(73.3%) belongs to nuclear family.

The findings of the study are discussed based on the objectives.

**The first objective of the study was to assess the pre test level of anxiety among hospitalized children between 3- 6 years.**

The study finding shows that majority 26(43.3%) children had severe level of anxiety, 26(43.3%) had moderate level of anxiety and 8(13.3%) of the children had mild anxiety.

The study findings are consistent with the Patricia short Tomlinson et al., (2004), conducted an 8 week placebo-controlled study. They were selected 80 children to participate in the study. They assessed the anxiety level of children for one week. Strait trait anxiety scale was used to assess anxiety of children. The results found that 71% of children experience anxiety during hospitalization.

Landreth,(2002) stated that through play therapy children learn to communicate with others, express feelings, modify behavior, develop problem solving skill and learn a variety of ways of relating to others. Play provides a safe psychological distance from their problems and allows expression of thoughts and feelings appropriate to their development.

**The second objective of the study was to assess the post test level of anxiety among hospitalized children between 3- 6 years.**

The result shows that 40(66.66%) of the children had mild anxiety, 14(23.33%) of the children had moderate anxiety and 6(10%) of the children had severe anxiety.

The study findings are supported by Margaret (1993) conducted a study on play therapy for hospitalized children. She stated that non directed therapeutic play provides opportunities for the hospitalized children to act out fearful situations and consequently to master them. The children anxiety was reduced by interaction with children and diverting their mind from medical procedure and engages in play therapy. Michael S. Jellinek said that young children are more comfortable by using dolls to express their feelings about worries and life events.

**The third objective of the study was to determine the effectiveness of therapeutic play on the level of anxiety among hospitalized children between 3- 6 years.**

The comparison of pre test and post test level of anxiety among hospitalized children between 3-6 years was done by using Paired't' test. It shows that there was marked decrease in the mean value from 43.93 in the pre test level to 31.86 in the post test level of anxiety. The standard deviation is increased from 7.57 in pretest to 17.71

in post test. The 't' value at 18.47 is highly significant at  $p < 0.001$  level and thus it indicates the effectiveness of therapeutic play.

The study shows that anxiety was reduced by providing play therapy in hospital. Play therapy helps the child to co-operate during medical procedure and mingling with other children in the ward. Wongs (2002) mentioned the various functions of play in hospital. According to him, it provides diversion and brings about relaxation helps the child to feel more secure in a strange environment, helps to lessen the stress of separation and the feelings of home sickness, provides a means for release of tension and expression of feelings, encourages interaction and development of positive attitudes towards other.

**The fourth objective of the study was to associate the pre and post test level of anxiety among hospitalized children between 3- 6 years with their selected demographic variable.**

Chi square test was used to associate demographic variables with pre and post test level of anxiety among hospitalized children between 3-6 years. Only number of day's hospitalized and type of family was significantly associated with the pre test level of anxiety. The other demographic variables such as age, sex, birth order, education of children were not significantly associated with their pre test level of anxiety.

Association between demographic variables and the post test level of anxiety among hospitalized children between 3-6 years shows that age, education of child, number of day's hospitalized and type of family are significantly associated with their post test level of anxiety. Sex and birth order was not significantly associated with the post test level of anxiety.

The findings of the study concluded that the anxiety level of the hospitalized children was reduced after giving therapeutic play, when compared with the pre test level of anxiety. Hence the hypothesis was rejected which was stated that there is no significant association between the therapeutic play and level of anxiety among hospitalized children. So therapeutic play is as an effective method to decrease the anxiety level of hospitalized children among 3- 6 years.

## **CHAPTER – VI**

### **SUMMARY, CONCLUSION, NURSING IMPLICATIONS, RECOMMENDATIONS AND LIMITATION**

This is the most creative and demanding part of the study. This chapter gives a brief account of the present study including the conclusion drawn from the findings, recommendations, limitation of the study, suggestions for the study and nursing implications.

#### **SUMMARY**

Therapeutic play is a specific counselling approach in which games, toys and medium such as clay, drawings and paint were used to help a child or adolescent to express their emotions, thoughts, wishes and needs. It helps them to understand muddled feelings and upsetting events that they have not had the chance or the skills to sort out properly. Rather than having to explain what is troubling them, as adult therapy usually expects, children use play to communicate at their own level and at their own pace, without feeling interrogated or threatened.

The present study was conducted to determine the effectiveness of therapeutic play among hospitalized children between 3-6 years. The purpose of the study was helping the children on reducing the anxiety by providing therapeutic play.

#### **The objectives of the study were**

1. To assess the pretest level of anxiety among hospitalized children between 3- 6 years.
2. To assess the post test level of anxiety among hospitalized children between 3- 6 years.
3. To determine the effectiveness of therapeutic play on the level of anxiety among hospitalized children between 3- 6 years.
4. To associate the pre and post test level of anxiety among hospitalized children between 3- 6 years with their selected demographic variable.



The hypothesis formulated was there is no significant relationship between the therapeutic play and the level of anxiety among hospitalized children between 3-6 yrs. The review of literature includes related studies which provide a strong foundation for the study including the basis for conceptual framework and formation of the tool. Modified Kings Goal attainment theory was adopted for the study. The tool was given to the experts for validity and reliability of the tool was tested by using test retest method. Pilot study was conducted to find out the flexibility of the study.

The study was conducted for one month period in Stanley Hospital. The observation checklist was used to assess the anxiety level of children. Sample size was 60. Pre test was conducted by using observational checklist for 30 min for each child. The therapeutic play was given for 2 hours per day for 3 days. After the intervention completes post test was conducted by using the same observation checklist. Data analysis was done based on the comparison of pre test and post test level of anxiety. The paired 't'-test was performed to know the significant level of anxiety. The result indicated that after therapeutic play, the children had a significant reduction in the level of anxiety.

The major findings shows that in Pre test majority 26 (43.3%) children had severe anxiety, 26(43.3%) children had moderate anxiety and 8(13.3%) children had mild anxiety. In Post test majority 40(66.66%) children had mild anxiety, 14(23.33%) children had moderate anxiety and 6(10%) children had severe level of anxiety.

Comparison of pre and post test level of anxiety among hospitalized children between 3-6 years was done by paired 't'-test. The level of anxiety among hospitalized children between 3-6 years shows there was marked decrease in the mean value from 43.93 in the pre test level to 31.86 in the post test level of anxiety. The standard deviation is increased from 7.57 in pre test to 17.71 in post test. The 't' value at 18.47 is highly significant at  $p < 0.001$  level. So there was significant decrease in the post test level of anxiety among hospitalized children between 3-6 years. It shows therapeutic play was effective in reduction of anxiety.

## **CONCLUSION**

The present study was conducted to assess the effectiveness of therapeutic play in reduction of anxiety among the hospitalized children between 3-6 years. During the pre test, majority of the children had severe level of anxiety. The post test revealed that mild level of anxiety among the children. The result of the study shows that the hospitalized children anxiety level was reduced by providing therapeutic play. Hence the investigator concluded that therapeutic play was very important to meet the psychological needs of the children during hospitalization and helps to reduce anxiety.

## **NURSING IMPLICATIONS**

### **Nursing Practice**

The pediatric nurse plays a major role in identifying the stress and anxiety of children and plays a significant role in reduction of anxiety during hospitalization of all age group. Nurses and other health care providers working in hospital, community and clinical settings should have adequate knowledge about therapeutic play. As a nurse they should know about stressors of hospitalization and the way of solving them. The nurse should be given special training on measures of reducing anxiety, counseling the mothers and placement should be provided in respective areas.

They should support family and children to maintain self esteem during hospitalization. Studies had proved the beneficial effects of structured teaching programs to mothers on therapeutic play. The nurse can utilize the evidence based practice in improving the quality and standard of care given to the children. This study helps the nurse practitioners to use therapeutic play for pain reduction and behavior modification also.

### **Nursing Education**

Education plays a vital role in the modification of behavior and practice among the nurse as well as student nurses. Non-Pharmacological management of anxiety reduction to the children should be included in the Nursing curriculum and in formulating the procedure in "Nursing Procedure Manual". Thereby they can learn about the therapeutic play and its effectiveness on reduction of anxiety in hospital and they will apply in the clinical setting.

Developmental needs of hospitalized children should be included in the curriculum. The educational institution must provide opportunities for nursing students to visit different pediatric hospitals which help them to learn about their problems, needs, assess and plan of care, participate and implement in the care of hospitalized children. The nursing curriculum should include more practical and theory hours in the field of pediatric nursing. The nursing students should be educated about the stressors and reaction of hospitalization.

### **Nursing Administration**

The nurse administrator can formulate policy and protocol for using therapeutic play as one of the anxiety reduction measure for the hospitalized children. Nurse administrator also can conduct workshops and in-service education related to therapeutic play as this will update the knowledge and practice of nurses and it requires collaborative effort and support from the medical experts in pediatrics.

Also the nurse administrator plays a vital role in implementing the practice with technological advances. The administrator has responsibilities to provide substantive continuing educational opportunities to nurses. This enables the nurses to update their knowledge, skills and quality of care.

### **Nursing Research**

This study revealed that a great need for extensive research in this area in different settings like outpatient department, school and community setup. It will update the knowledge of nursing personnel in everyday practice. The professional responsibility of the nurse is to strengthen their profession by means of safe practice which is based on evidence based practice. Further researches on therapeutic play will help to strengthen its facts and promoting the children well being by reducing their anxiety during hospitalization.

### **RECOMMENDATIONS**

On the basis of the study the following recommendations have been made for further study.

- A similar study can be done on a larger sample for broader generalization.
- Experimental study can be done to assess the effectiveness of therapeutic play on reduction of pain during procedures.
- Comparative studies can be done on different age groups of children such as toddlers, preschoolers and adolescent.
- A study on practice and attitude of nurses on therapeutic play can be done.
- Comparative studies can be done on puppet show & musical toys on reduction of anxiety during hospitalization.

### **LIMITATION**

During the period of study the investigator has faced difficulty in selecting the participants. The investigator has faced the difficulty in providing playtherapy in a separate room.

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