

**“A STUDY TO ASSESS THE EFFECTIVENESS OF PUPPET PLAY
IN REDUCING PREOPERATIVE ANXIETY AMONG CHILDREN
6-12 YEARS OF AGE, UNDERGOING ABDOMINAL SURGERY
AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR
CHILDREN, EGMORE, CHENNAI-08.”**

**M. Sc (NURSING) DEGREE EXAMINATION
BRANCH –II CHILD HEALTH NURSING**

**COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE, CHENNAI – 03.**



A dissertation submitted to

**THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY,
CHENNAI – 600 032.**

In partial fulfillment of requirements for the degree of

MASTER OF SCIENCE IN NURSING

APRIL 2014

CERTIFICATE

This is to certify that this dissertation titled “**A STUDY TO ASSESS THE EFFECTIVENESS OF PUPPET PLAY IN REDUCING PREOPERATIVE ANXIETY AMONG CHILDREN 6-12 YEARS OF AGE, UNDERGOING ABDOMINAL SURGERY AT INSTITUTE OF CHILD HEALTH AND HOSPITAL FOR CHILDREN, EGMORE, CHENNAI -8**” is a bonafide work done by MRS.Sarala.S, College of Nursing, Madras Medical College, Chennai – 600003 submitted to **THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY, CHENNAI** in Partial fulfilment of the requirements for the award of Degree of Master of Science in Nursing, Branch II, CHILD HEALTH NURSING, under our guidance and supervision during the academic period from 2013 – 2014.

DR. MS. R.LAKSHMI, M. Sc (N),Ph.D.,
Principal,
College of Nursing,
Madras Medical College,
Chennai-3.

DR.R. JEYARAMAN, MS.,Mch.,
Dean,
Madras Medical College,
Rajiv Gandhi Govt. General Hospital,
Chennai-3.

ACKNOWLEDGEMENT

"A cheerful heart does good like a medicine"

Nothing concrete can be achieved without an optimal inspiration during the course of work. There are several hands and hearts behind this work to bring it to this final shape for which I would like to express my gratitude. Great and mighty is our Lord our God, to whom all thanks and praise for all wisdom, knowledge, guidance and strength throughout this work.

I wish to acknowledge my sincere and heartfelt gratitude to the almighty God for this marvelous grace shown from the beginning to the end of the study

The encouragement is a booster of the human life without this no one can achieve easily. I thank everyone encouraged me to achieve to complete this task effectively.

I express my heartfelt thanks to **Dr. Ms. R. Lakshmi., M. Sc (N)., M.B.A., Ph.D.**, Principal, College of Nursing, Madras Medical College, Chennai for her continuous support, constant encouragement and valuable suggestions helped in the fruitful outcome of this study.

I wish to express my sincere thanks to Prof. **Dr. V. Kanagasabai, MD.**, Dean, Madras Medical College, Chennai-3 and **Dr. J. Jeyaraman, MS., Mch.**, Dean, Madras Medical College, Chennai-3 for providing necessary facilities and extending support to conduct this study.

I deem it a great privilege to express my sincere gratitude and deep sense of indebtedness to my esteemed teacher **Mrs. S. Arul Mary, M. Sc (N).**, Reader, College of Nursing, Madras Medical College, Chennai for her timely assistance and guidance in pursuing the study.

It's my great pleasure and privilege to express my gratitude to my lecturers **Mrs.P.K. Santy, MSc(N).**, **Mrs P. Savithri, MSc(N).**, and all

other faculty members of College of nursing, Madras Medical College, Chennai-3 for the support and assistance given by them in all possible manners to complete this study.

I wish to express my special and heartfelt thanks to **Dr. Kannaki, M.D.**, Director of Institute of Child Health & Hospital for Children granting permission to conduct the study.

I render my deep sense of Privilege to **Prof. S. V.Senthilnathan, M.S., Mch.**, Head of the Department of surgery and other professors in the Department of surgery, Institute of Child Health & Hospital for Children, Egmore, Chennai, for helping me in constructing the semi structured schedule and tools for the study and completing my study in a successful manner.

I am extremely thankful to **Mr.A.Vengatesan,Msc., M. Phil. (Statistics) P.G.D.C.A** Lecturer in statistics Madras medical college, Chennai-3 for suggestion and guidance on statistical analysis.

It is my immense pleasure and privilege to express my deepest gratitude to **Mrs. Zealous Mary, C, M.Sc (N),M.phil.**, Reader - Child health nursing, Madha College of nursing, Chennai-69 for validating this tool.

I extend my thanks to **Mr. Ravi, M.A,B.L.I.Sc.**, Librarian, College of Nursing, Madras Medical College, Chennai-3 for his co-operation and assistance which built the sound knowledge for this study.

I am grateful to convey my thanks to all the members of the Medical records Department, Institute of Child Health & Hospital for Children, Egmore, Chennai for the useful information obtained from the department for the study.

Above all, I would like to express my deepest gratitude to all the staff members who worked in the surgical wards, specially the Children and

parents who had enthusiastically participated in this study without whom it was not possible for me to complete this study.

I extend my thanks to **Mr. John Sunil Manoha, M.A., Ph.D., (Eng lit)** who did the English edition for my study.

I am indebted a lot to the sacrifices of my beloved family members and friends for their immense love, support; prayer and encouragement inspired me to reach at this point in my life.

My whole hearted thanks and gratitude to one and all who came on my way to success.

TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE NO
I	INTRODUCTION	1
	1:1 Need for the study	3
	1:2 Statement of the problem	6
	1:3 Objectives of the study	6
	1:4 Operational definitions	7
	1:5 Assumption	8
	1:6 Hypothesis	8
II	REVIEW OF LITERATURE	
	2:1 Literature related to preoperative anxiety	9
	2:2 Literature related to Puppet play	12
	2:3 Literature related to other therapies for preoperative anxiety	13
	2:4 Conceptual framework	17
III	METHODOLOGY	
	3:1 Research approach	21
	3:2 Research design	22
	3:3 Variables	22
	3:4 Setting of the study	23
	3:5 Study population	23
	3:6 sample & Sample size	23
	3:7 Sampling technique	24
	3:8 Criteria for selection of samples	24
	3:9 Development & description of the tool	25
	3:10 Ethical consideration	26

CHAPTER	CONTENTS	PAGE NO
	3:11 Testing of the tool	27
	3:12 Pilot study	27
	3:13 Data collection procedure	28
	3:14 Plan for data analysis	29
IV	DATA ANALYSIS AND INTERPRETATION	31
V	DISCUSSION	63
VI	SUMMARY & CONCLUSION	
	6:1 Summary of the study	68
	6:2 Major findings of the study	71
	6:3 Implications	72
	6:4 Recommendations	74
	6:6 Conclusion	75
	REFERENCES	
	APPENDICES	

LIST OF TABLES

TABLE NO	TITLE	PAGE NO
1.	Schematic representation of research design	22
2.	Description Of Demographic profile Of Selected Sample	32
3.	Preassessment percentage of anxiety	44
4.	Preassessment level of anxiety	45
5.	Post assessment percentage of anxiety	46
6.	Post assessment level of anxiety score	47
7.	Comparison of mean anxiety score	50
8.	Comparison of overall anxiety score	52
9.	Comparison of preassessment and postassessment level of anxiety	54
10.	Comparison of overall anxiety score	55
11.	Effectiveness of puppet play on reduction of children anxiety	56
12.	Association between anxiety reduction and children demographic variables	57

LIST OF FIGURES

FIG NO	TITLE	PAGE NO
1.	Conceptualization of Nursing Practice	18
2.	Conceptual framework based on weidenbach's helping art of clinical nursing	20
3.	Schematic Representation of the research design	30
4.	Age distribution of the children	34
5.	Sex distribution of the children	35
6.	Place of residence of children	36
7.	Children's order of birth	37
8.	Children's educational status	38
9.	Type of family of children	39
10.	Previous history of surgery	40
11.	Religion of children	41
12.	Age of mothers of children	42
13.	Occupation of the mothers of children	43
14.	Pre & Post assessment Percentage of anxiety	48
15.	Pre&Post assessment level of anxiety	49
16.	Pre & post assessment anxiety score	53
16.	Association between level of anxiety reduction and children age	59
17.	Association between level of anxiety reduction and type of family	60
18.	Association of anxiety reduction with children's educational status	61
19.	Association of anxiety reduction with mothers age	62

LIST OF APPENDICES

APPENDIX NO	TITLE
A	Description of the tool (English version) 1. Demographic data 2. Modified Yale preoperative anxiety scale
B	Description of the tool (Tamil version) 1. Demographic data 2. Modified Yale Preoperative anxiety scale
C	Letter seeking permission for conducting the study Permission letter from Institutional ethical committee Certificate of content validity by Expert Institution Permission letter Research consent form Certificate of English Editing

ABBREVIATIONS

DF	Degree of Freedom
SD	Standard deviation
CI	Confidence interval
FIG	Figure
H1 H2	Research hypothesis
Msc(N)	Master of science in nursing
NO	Number
χ^2	Chi square

ABSTRACT

Title: A study to assess the effectiveness of Puppet play in reducing preoperative anxiety among children 6-12 years of age, undergoing abdominal surgery at Institute of child health & hospital for children, Egmore, Chennai-8.

A pre- experimental research design , one- group pretest -posttest design was used to assess the effectiveness of Puppet play in reducing preoperative anxiety among children 6-12 years of age, undergoing abdominal surgery at Institute of child health, Egmore, Chennai-8. The tool used for the study consists of demographic data, and Modified Yale preoperative anxiety scale. The population of this study were 60 children of both sexes in the age group of 6 to 12 year. Sample for the study were selected through convenient sampling technique. Conceptual framework used for the study was Wiedenbach's Helping art of Clinical Nursing Model. The findings of the study revealed that on average, children are having 27.5% of reduction in anxiety score. It shows the effectiveness of study. Puppet play in the form of hand puppet with doctor's play set was found to be effective in reducing the preoperative anxiety of the children undergoing surgery. Children need adequate information tailored to their needs, and hospital environments need to be made more children centered.

CHAPTER-I

INTRODUCTION

"The soul is healed by being with children."

-Fyodor Dostoevsky

Healthy children are the wealth and investment of any nation, Children are the most important age group in all societies, health status and health behaviour of later life are laid down at this stage.

"Children are our most valuable resources"

- Herbert Hoover, 31 st U.S. president

Healthy children are future healthy citizens of the countries, the nation's children are a supremely important asset, and their nurture and solicitude are our responsibility. Each child has to be cared properly so that our children grow up to become robust citizen, physically fit, mentally alert and morally healthy, endowed with the skills & motivations provided by society.

Surgery can be a threatening experience for everyone, especially for children. Children are more vulnerable due to their lack of knowledge of procedures, a lack of perceived control, a lack of explanation in child-appropriate terms, and a lack of pain management. Hospitalized children may experience high levels of anxiety due to many different factors both physical and psychological.

"Our anxiety does not empty tomorrow of its sorrows, but only empties today of its strength."

-Charles H. Spurgeon Preoperative anxiety is characterized by subjective feelings of tension, apprehension, nervousness, and worry. Preoperative anxiety (anxiety regarding impending surgical experience) in children is a common phenomenon that has been associated with a number of negative behaviours

during the surgery experience (e.g. Agitation, crying, spontaneous urination, and the need for physical restraint during anaesthetic induction). Preoperative anxiety has also been associated with the display of a number of maladaptive behaviours post surgery, including postoperative pain, sleeping disturbances, parent-child conflict, and separation anxiety.

One estimate suggests that 60% of children experience significant anxiety before anaesthesia induction and surgery, and literature from around the world indicates that preoperative anxiety is a global concern for health care providers, the challenge that nurse's face is to better manage children's anxiety in today's fast paced world.

Relief of anxiety is a basic need and right of children for these reasons, researchers have sought out interventions to treat or prevent childhood preoperative anxiety and possibly decrease the development of negative behaviours postsurgically.

Children from all cultures play. Play is one of the most important aspects of a Child's life & one of the most effective tools for managing stress, as with their other developmental needs, play does not stop when children are ill or in the hospital, the hospitalized child typically has lower energy levels than healthy children of the same age, therefore children may not appear engaged & enthusiastically about an activity, even though they are enjoying the experiences.

Play can be broadly defined as any activity in which children spontaneously engage and find pleasurable. For children in the hospital, specific forms of play can provide an effective venue for personal development and increased well-being. In particular, *therapeutic play* refers to specialized activities that are *developmentally Supportive* and facilitate the emotional well-being of a paediatric patient.

Almost any form of play can be used for diversion & recreation, puppet play is universally effective for communicating with children. Most children see them as peers & readily communicate with them. Children will tell puppet feelings that they hesitate to express to adults. Puppets can share children's own experiences & help them to find solutions to their problems. Puppets are usually best for direct conversation. Playing with puppets will help to prepare children for hospital and surgery by expressing feelings and learning what's involved.

Many interventions are designed just to reduce preoperative anxiety among children. By the way I wish to use puppet play as an intervention for reducing preoperative anxiety in children. So the investigator has proposed to conduct the following study.

1.1. NEED FOR STUDY

More than 5 million children undergo surgery in the United States every year, and it is reported that up to 50% of these children develop significant behavioural stress and anxiety before their surgery. Up to 25% of children have been noted to require physical restraint to facilitate anaesthetic induction a situation that can lead to increased stress and anxiety in both children and medical personnel.

The leading causes of surgical abdominal emergencies were typhoid perforation (TP) of the gastrointestinal tract (GIT), 68%; acute appendicitis, 16%; abdominal trauma and intestinal obstruction (including intussusception), 4.7% each; irreducible external hernias, 2.5%; primary peritonitis, 1.0%; gallbladder disease and gastric perforation, 0.8% each. This Statistical Brief presents data from the Healthcare Cost and Utilization Project (HCUP) State Ambulatory Surgery Databases (SASD) and State Inpatient Databases (SID). These databases provide information on hospital-based ambulatory and inpatient surgeries performed in short-term, acute-care hospitals.

Procedures related to the digestive system accounted for 40 percent of all ambulatory surgery.

A child's concept of illness is even more important than age & intellectual maturation on predicting the level of anxiety before hospitalization. It is estimated that 60% of children suffer anxiety in the preoperative period. School age children are particularly vulnerable to the effect of stress because of their striving for independence & productivity that may lessen their feeling of control and power.

These reactions reflect the child's fear of separation from parents and home environment, as well as of loss of control, unfamiliar routines, surgical instruments, and hospital procedures. High levels of anxiety have been identified as predictors of postoperative troubles that can persist for 6 months after the procedure. Both behavioural and pharmacological interventions are available to treat preoperative anxiety in children. Parental presence may increase children's anxiety because parental distress and anxiety could be uncontrollable during the preoperative period.

Preoperative anxiety has been shown to delay the induction of anaesthesia (Kain, Et Al.. 1996) and provoke the release of stress hormones, which can hinder recovery (McCann & Kain, 2001).

Visintainer and Wolfer (1975), in their classic study, classified five dimensions of the surgical experience that can evoke anxiety in children: (a) physical harm or bodily injury in the form of pain, mutilation, or even death; (b) separation from parents and absence of trusted adults, especially for preschool children; (c) fear of the unknown and unfamiliar; (d) uncertainty about "acceptable" and normative behaviour in a hospital setting; and (d) loss of control, autonomy, and competence.

Certain times during the process of undergoing invasive procedures are particularly hard on children. These "stress points" include veni puncture, separation from parents at the time of transport to the operating room, and anaesthesia induction (Le .Roy, et al., 2003).

Information's can be provided by a variety of methods, including verbal discussions with health team members, videotapes of a hospitalization or procedure, written information, picture books, preoperative class hospital tours, structured play sessions or puppet shows, via computer/net.

Since therapeutic play comprises activities that are dependent on the Developmental needs of the child as well as the environment, it can take many forms. For example, therapeutic play can be delivered through interactive puppet shows, Creative or expressive arts, puppet and doll play, and other medically oriented play. It can be directive or non-directive in approach and may include re-enactments of medical situations to facilitate children's adaptation to hospitalization.

During therapeutic play children are encouraged to ask questions to clarify misconceptions and express feelings related to their fears and concerns. In this way, 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 consists of following types of Activities: 1) the encouragement of emotional expression (e.g. re-enactment of Experiences through doll play), and 2) instructional play to educate children about medical experiences. The studies reviewed here predominantly address medically oriented play, including emotional expression and instructional play forms. Dramatic play is a well recognized technique for emotional release, allowing children to re-enact frightening or puzzling hospital experiences. Through the use of puppets, replicas of hospital equipment, or some actual hospital equipment, children can act out the situations that are a part of their hospital experience. Dramatic play enables children to learn about procedures and events that concern them, and to assume the roles of the adults in the hospital environment. Puppet dressed to represent figures in the child's environment –

for example, a physician, nurse, child patient, therapists, and members of the child's own family are especially useful.

DEPARTMENT OF PEDIATRIC SURGERY

The Department of pediatric Surgery, Institute of Child Health and Hospital for Children, Egmore, Chennai-8 is one of the best surgical department in India. There are 4 surgical units taking care of all surgical interventions among children.

1.2.STATEMENT OF PROBLEM

“A study to assess the effectiveness of puppet play in reducing preoperative anxiety among children 6-12 years of age, undergoing abdominal surgery at Institute of child Health and hospital for children, Egmore, Chennai-08.”

1.3.OBJECTIVES OF THE STUDY

- To assess the level of preoperative anxiety in children by using the Modified Yale preoperative anxiety scale before puppet play.
- To assess the level of preoperative anxiety in children by using Modified Yale Preoperative anxiety scale after puppet play.
- To determine the effectiveness of puppet play by comparing the pre assessment and post assessment score.
- To associate the selected demographic variables of the sample with the reduction of preoperative anxiety among children after Puppet play.

1.4.OPERATIONAL DEFINITION

Assess

To judge or form an opinion about the anxiety management through puppet play.

Effectiveness

In this study effectiveness is defined as a significant reduction in the level of preoperative anxiety of children, which is measured by using the modified Yale preoperative anxiety scale prior and after puppet play.

Puppetplay

In this study Puppet play refers to a play in which the actors are puppets and is used to prepare children for surgery by expressing feelings and learning what is involved.

Preoperative

In this study preoperative refers to the time duration between the time of admission to the time of surgery.

Anxiety

In this study it refers to a feeling of overwhelming sense of apprehension or fear regarding impending surgical experience.

Children

In this study children refer to between the age group of 6-12 years of age admitted in preoperative surgical ward for abdominal surgery.

Abdominal surgery

All the surgeries which involve an incision made in the abdomen.

1.5. ASSUMPTION:

- ❖ Children will get reduced to the level of preoperative anxiety after Puppet play.
- ❖ Children will get practiced to ventilate through acting when they are in anxiety and thereby reduce their anxiety.
- ❖ Children will be able to cope up with the surgery.

1.6. HYPOTHESIS

- **H-1:**There will be a significant difference in the preoperative anxiety among children before and after puppet play.
- **H-2:**There will be a significant association between anxietyreduction after puppet play and selected socio demographic variables.

CHAPTER II

REVIEW OF LITERATURE

Review of literature is an important step in the development of a research project. It involves the systematic identification, location, scrutiny and summary of written materials that contain information on research problems.

“The literature is reviewed to summarize knowledge for use in practice or to provide a basis for conducting study”

- (Nancy Burns 2002)

This chapter attempts to present a broad review of the studies conducted, the methodology adopted and conclusions drawn by earlier investigation, it helps to study the problem in depth. The literature reviewed in the present had been presented under the following heading.

- 2.1 Literature related to preoperative anxiety among children.
- 2.2 Literature related to puppet play.
- 2.3 Literature related to other therapies for preoperative anxiety.

2.1. LITERATURE RELATED TO PREOPERATIVE ANXIETY AMONG CHILDREN

Kim JE, et al., (2012) conducted a study on high anxiety, young age and long waits increase the need for preoperative sedatives in children. A total of 455 patients aged 2-12 years scheduled for surgery requiring general anaesthesia were enrolled in the study, the optimum mYPAS cut-off for requiring sedatives was 41.7 according to ROC curve analysis. Multivariate logistic regression analysis showed that age, mYPAS > 40 and waiting time were independent predictors of the requirement for sedative administration.

Klemetti S, Kinnunen et al., (2012) conducted a study on the effect of preoperative nutritional face-to-face counselling about the child's fasting on parental knowledge, preoperative need-for-information, and anxiety, in paediatric ambulatory tonsillectomy. The participants in the prospective, randomly allocated study were parents (intervention 62/control 62) with

children (4-10 years) admitted for ambulatory tonsillectomy, Their knowledge about the child's fast increased ($p=0.003$), and need-for-information and anxiety decreased ($p<0.0001$) significantly.

Nazanin Vaezzadeh, et al., (2011) conducted a study on the Effect of Performing Preoperative Preparation Program on School Age Children's Anxiety, A randomized controlled trial was performed on 122 children (7–12 years of age) admitted for elective surgery after pre-test baseline measurement had been taken. Analyzing was performed through independent t-test and χ^2 test. $P<0.005$ was considered statistically significant. The experimental group received therapeutic play and the control group received routine preoperative information preparation. Performing preoperative program by using therapeutic play intervention is effective in preparing children before surgery and decreases their anxiety.

Fortier MA, et al., (2010) conducted study on preoperative anxiety in children. The purpose of this investigation was to examine children's anxiety across the peri operative setting. Participants were 261 children ages 1-12. Anxiety was rated prior to surgery, immediately after surgery, and for 2 weeks at home following surgery. Low child sociability and high parent anxiety predicted peri operative anxiety.

MacLaren Jetal et al., (2009) conducted study on Prediction of preoperative anxiety in children: who is most accurate? Children's anxiety was assessed using a valid behavior observation tool the Modified Yale Preoperative Anxiety Scale. A total of 125 children aged 2-16 yr, their mothers, and their attending paediatric anaesthesiologists and resident anaesthesiologists were studied. We conclude that attending anaesthesiologists who practice in paediatric settings are better than mothers in predicting the anxiety of children during induction of anaesthesia.

Ospedale S. Chiara, Trento..., (1997) conducted a study on the anxiety of children before elective surgery: descriptive study 36 children aged 7-14 years, scheduled for an elective surgery, were administered a questionnaire-interview in order to identify and measure fear and anxiety experienced before and after the surgery. The same questionnaire was administered also to the mothers, the interview to the mother and the child represents an interesting study model that allows to identify problems too often under looked-undertreated by the health care personnel.

LaMontagne LL, etal., (1996) conducted a study on Children's preoperative coping and its effects on postoperative anxiety and return to normal activity, 90 children, ages 8 to 17, participated, Children who were older, more anxious, and more internal in locus of control exhibited more vigilant coping. Avoidant coping was associated with less anxiety 2 days postoperatively, and vigilant coping was associated with return to normal activities over the course of recovery.

Kennedy CM, Riddle II..., (1989) conducted a study on the influence of the timing of preparation on the anxiety of preschool children experiencing surgery. 23 children (3 to 6 years of age) were studied. The state anxiety mean score of the children in the morning preparation group at each time point was lower than the mean score of the children in the afternoon preparation group at each time point.

2.2. STUDIES RELATED TO PUPPET PLAY

Athanassiadou E, Tsiantis J, Christogiorgos S, Kolaitis G., (2009) conducted a study to assess the effectiveness of psychological preparation of children for minor surgery by puppet play and brief mother counseling.

Smarrito S, Fechant C, Haddad R, Pavy B., (2001) conducted a study on a new approach to hand dressings in young children: the puppet dressing first, we recall the general principles of a postoperative dressing adapted for young children. Then, we explain a method of applying a dressing in the shape of a puppet, which at first can appear to be funny, but seriously which is completely adapted to a young child.

Zahr's, (1998) study supported the use of puppet shows, as therapeutic play, to decrease anxiety in hospitalized preschoolers. The results of this study support our group's research utilization project to educate 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.

Zahr LK, (1998) conducted a study on Therapeutic play for hospitalized preschoolers in Lebanon. Therapeutic play in the form of an interactive puppet show was administered to 50 preschool children one day before surgery in a hospital in Lebanon. A control group of 50 preschool children received routine care, but no therapeutic play, the children who had received therapeutic play had significantly lower scores on all six factors of the Post Hospital Behavior Questionnaire.

Linn S, Beardslee W, Patenaude AF (1986) conducted a study to assess the effectiveness of puppet therapy with pediatric bone marrow transplant patients.

Schulz JB, Raschke D, Dedrick C, Thompson M. (1981) conducted a study on the effects of a preoperative puppet show on anxiety levels of hospitalized children, Subjects were 28 children, ages 2-7 years inclusive,

randomly assigned to treatment and non treatment groups. Treatment consisted of a puppet show designed to familiarize patients with hospital routines and operational procedures. Two PSI measures were collected for each subject. Treatment was associated with a significant reduction in anxiety from the time of admission to the period immediately following the puppet show.

Johnson PA, Stockdale DF (1975) conducted a study on effects of puppet therapy on Palmar sweating of hospitalized children. The study investigated the effects of a puppet presentation on anxiety levels of hospitalized children as measured by the Palmar Sweat Index (PSI); Subjects were 43 children, ages 5-8 years inclusive, allocated randomly to treatment and non treatment groups, The treatment was associated with a significant reduction in anxiety from the time of admission to both (1) the period immediately after the puppet show, and (2) the evening after surgery.

2.3. STUDIES RELATED TO OTHER THERAPIES FOR PREOPERATIVE ANXIETY

Lee J, et al., (2012) conducted a study on Cartoon distraction alleviates anxiety in children during induction of anaesthesia. 130 children aged 3 to 7 years with ASA physical status I or II were enrolled. Subjects were randomly assigned to 1 of 3 groups: group 1 (control), group 2 (toy), and group 3 (animated cartoon) Allowing the viewing of animated cartoons by paediatric surgical patients is a very effective method to alleviate preoperative anxiety.

BergmansJ, et al., (2012) conducted a study on audiovisual aid viewing immediately before paediatric induction moderates the accompanying parents' anxiety. 120 parents whose children were scheduled for day-care surgery entered this randomized, controlled study. On the state anxiety subscale, APAIS parental anxiety at T2 (P = 0.015) and T3 (P = 0.009) was lower in the AVA intervention group than in the control group. After induction, the child's anxiety

rating by the anaesthetist was significantly lower than by the parent, in both intervention and control groups.

Hosseinpour M, Memarzadeh M (2010) conducted a study on the use of a preoperative playroom to prepare children for surgery. The playroom had colour toys and cars appropriate for different ages and a TV and video to show the cartoons. The anxiety levels of the children were compared using the modified Yale Preoperative Anxiety Scale (In this study 200 children were evaluated). Preoperative anxiety was significantly decreased in all categories of the anxiety score as assessed by m-YPAS questionnaire.

Weber FS(2010) conducted a study on the influence of playful activities on children's anxiety during the preoperative period. The modified Yale Preoperative Anxiety Scale (mYPAS) was administered to 50 children between 5 and 12 years of age undergoing medical procedures soon after the individuals arrived at the outpatient surgical centre (minute 0) and 15 minutes after the first measurement. The children in the recreation group had reduced anxiety levels and those in the control group remained anxious. During the preoperative period, children who participate in playful activities in the recreation room have their anxiety reduced in comparison with those that only stay in the preoperative holding area for at least 15 minutes.

Li HC (2007) conducted a study on evaluating the effectiveness of preoperative interventions: This study aimed to compare the effectiveness of two preoperative nursing interventions and examining the appropriateness of using the Children's Emotional Manifestation Scale in evaluating the effectiveness of preoperative interventions. Children (7-12 years of age; n = 203) admitted for elective day surgery during a 13-month period, were recruited. Children receiving therapeutic play preparation reported statistically significant lower anxiety levels, fewer negative emotions and lower heart rates and mean arterial blood pressures than children receiving information preparation.

Brewer, S et al... (2006) conducted a study on Paediatric anxiety: child life intervention in day surgery. The purpose of this double-blind intervention study was to determine if children prepared for day surgery by a child life specialist exhibited less anxiety than those who received the routine standard of care. One hundred forty-two children, aged between 5 and 11 years old, undergoing elective Otolaryngology surgery completed the study.

Golden L, et al... (2006) conducted a study on Giving toys to children reduces their anxiety about receiving premedication for surgery. Children have an increased anxiety during the preoperative period. The administration of oral premedication to children is often met with apprehension, reluctance, or refusal. This was a prospective study involving 100 children 3-6 yr of age, randomized into two equal groups. The anxiety of each child was assessed using the Modified Yale Preoperative Anxiety Scale. The results showed significantly less anxiety in children who received a toy before oral administration of midazolam.

Vagnoli L, Caprilli S, Robiglio A, Messeri A. (2005) conducted a study on Clown doctors as a treatment for preoperative anxiety in children: a randomized, prospective study. The sample was composed of 40 subjects (5-12 years of age) who had to undergo minor day surgery and were assigned randomly to the clown group (N = 20), in which the children were accompanied in the preoperative room by the clowns and a parent, or the control group (N = 20), in which the children were accompanied by only 1 of his/her parents. This study shows that the presence of clowns during the induction of anaesthesia, together with the child's parents, was an effective intervention for managing children's and parents' anxiety during the preoperative period.

Clatworthy, Simon, and Tiedeman (1999) Child Drawing: Hospital - An instrument designed to measure the emotional status of hospitalized school-aged children. Eighty children received formal preparation for their surgeries by a child life specialist and 62 received no intervention. The increase in

anxiety scores in the nonintervention group suggests that children could benefit from preoperative preparation.

Demarest DS, Hooke JF, Erickson MT (1984) conducted a study on Preoperative intervention for the reduction of anxiety in paediatricsurgery patients in the present study compared an in vivo preparation in which 3- to 9-year-old patients who were about to undergo tonsillectomy/ adenoidectomy surgery experienced a preview of the procedures and equipment, a slide show condition depicting hospitalization and surgery, or a standard nursing care control group. The in vivo group was rated as significantly less anxious than the slide show and control groups at each of the three assessment points.

Schreier A, Kaplan D. (1983) conducted a study on the effectiveness of a pre operation preparation program in reducing anxiety in children. Three groups of mothers and children who were to undergo tonsillo-adenoidectomy were tested, The IPAT Anxiety Scale revealed that the anxiety of mothers of children who did not attend the preoperative preparation program was the highest of all three groups.

Clatworthy S. (1981) conducted a study on Therapeutic play and its effects on hospitalized children. In an attempt to demonstrate therapeutic play as a potential treatment of hospital-induced anxiety in 5- to 11-year-old children, 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. The results of this study demonstrate that therapeutic play is a valuable Intervention with hospitalized children.

2.4. CONCEPTUAL FRAMEWORK

A conceptual framework or model is made up of concepts that are mental image of a phenomenon. These concepts are linked together to express their relationship between them.

A model is used to denote the symbolic representation of concepts

- Jacqueline Fawcett, 1987

The study is based on the concept to assess the effectiveness of Puppet play in reducing the preoperative anxiety among children. The investigator adopted the **Wiedenbach's Theory of helping art of clinical Nursing, 1964** for a conceptual framework.

Wiedenbach's prescriptive theory directs action toward an explicit goal. It consists of three factors central purpose, prescription and realities. A Nurse develops a prescription based on a central purpose and implements it according to the realities of the situation.

Ernestine Wiedenbach's view nursing practice as an art based on goal directed care; her vision of nursing practice closely parallels the assessment, implementation and evaluation steps of the nursing process. She identifies seven levels of awareness (sensation, perception, assumption, realization, insight, design and decision).

The conceptualization of nursing practice according to this theory consists of three steps as follows.

Step I:Identifying the need for help

Step II:Administering the needed help

Step III:Validating the need for help was met



(Fig: 1) Conceptualization of nursing practice

This theory views nursing as an art based on the goal or central purpose. It consists of 3 factors, Central purpose, Prescription and realities

➔ Central purpose:

It refers to what the nurses want to accomplish: According to this study the central purpose is to assess the effectiveness of puppet play in reducing preoperative anxiety among children 6-12 yrs of age undergoing abdominal surgery.

STEP I: IDENTIFYING THE NEED FOR HELP

This step involves determining the need for help. The nurse identifies the need for help by assessing the demographic variables and the pre assessment of the level of anxiety among children posted for surgery.

STEP II: ADMINISTRATION OF THE NEEDED HELP

This refers to the provision of required help to fulfill the identified need. It has two components

- ➔ Prescription
- ➔ Realities

PRESCRIPTION

In this study prescription refers to Puppet play

REALITIES

Agent: The nurse investigator, who renders the puppet play

Recipient : The children posted for surgery (6 to 12 years)

Goal: To reduce the level of preoperative anxiety

Means: Puppet play (Hand puppet (2 in no) with doctors play kit)

Framework: Denotes the setting in which the care is rendered (i.e. Surgical ward,

Pre operative holding area in OT)

STEP III: VALIDATION OF THE NEED FOR HELP WAS MET:

It is accomplished by means of measuring the post assessment level of anxiety after Puppet play. This was done by modified Yale preoperative anxiety scale for children and identified whether there is a reduction in the level of preoperative anxiety among children undergoing abdominal surgery.

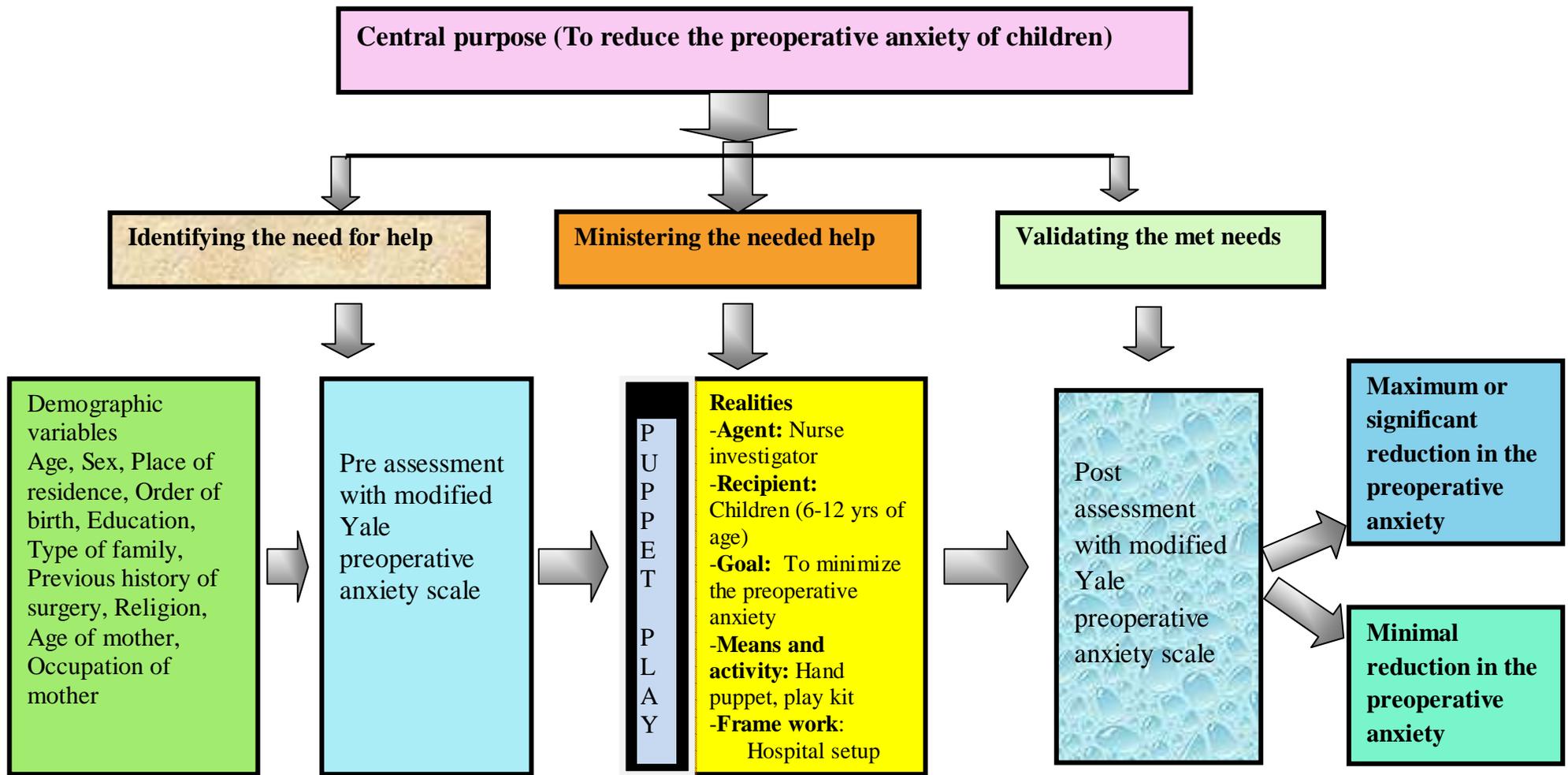


Fig.2 CONCEPTUAL FRAME WORK BASED ON MODIFIED WEIDENBACH'S HELPING ART OF CLINICAL NURSING

CHAPTER III

METHODOLOGY

The methodology of research indicates the general pattern of organizing the procedure of gathering valid and reliable data for an investigation (Kothari C.R., 2004). This chapter provides a brief description of the methods adopted by the investigator in the study. It includes the research approach, research design, the setting, sample and sampling technique it further deals with the development of the tool and procedure for data collection and plan for data analysis.

This chapter deals with the description of methodology and different steps that are taken for gathering and organizing data for the investigator to assess the effectiveness of Puppet play in reducing preoperative anxiety among children posted for surgery.

3.1.RESEARCH APPROACH

The research approach tells the researcher from where the data is to be collected, what to collect, how to collect and how to analyze them. It also suggests a possible conclusion and helps the researchers in answering specific research questions in an accurate and efficient way.

This study aims at assessing the effectiveness of Puppet play in reducing the preoperative anxiety among children 6-12 yrs of age, posted for abdominal surgery. The research approach used in this study is Quantitative approach

3.2. RESEARCH DESIGN

According to Kothari.C.R. (2003) “A research design is defined as the overall plan for collecting and analyzing data, including a specification for enhancing the internal and external validity of the study.

The research design used for this study is one group pre test post test design which belongs to the pre experimental research design was selected to assess the effectiveness of puppet play in reducing preoperative anxiety among children posted for abdominal surgery.

GROUP	Pre Test	Intervention	Post Test
Experimental Group	01	X	02

Tab-1: Schematic representation of research design

01 – Preassessment anxiety score in experimental group

X - Puppet play

03- Post assessment anxiety score in experimental group

3.3. VARIABLES

The variable is “an attribute of a person or object that varies, that is taken a different values” (Polit and Hungler).

Independent variable:

The independent variable is the variable that stands alone and is not dependent on another. It is the cause for an action.

In the present study, the independent variable is the Puppet play.

Dependent variable:

The dependent variable is the effect of the action of the independent variable and cannot exist by itself.

In the present study, the dependant variable is preoperative anxiety among children 6-12 yrs of age, posted for abdominal surgery.

Extraneous variables:

Extraneous variables are those variables that are present in a research environment that may interfere with research findings by acting as an unwanted independent variable.

In the present study, it refers to the selected variables such as severity of illness, loss of child's freedom, atmosphere of surrounding and parental care.

3.4.SETTING OF THE STUDY

The setting is the physical location and condition in which data collection takes place in the study. (Polit and Hungler, 1995)

The study was conducted in preoperative surgical ward and preoperative holding area in OT at Institute of Child Health and Hospital for children, Egmore, Chennai-08; it is one of the biggest hospital in the south east Asia. It is a 537 bedded hospital, the bed occupancy rate is 125%.

3.5. STUDY POPULATION

The population is defined as the entire aggregation of cases that meet a designed criterion.

Target population: The target population is the entire population in which the researcher is interested and to which he or she would like to generalize the respect of a study.

The target population of the present study comprises of 6-12 yrs of children admitted for abdominal surgery in surgical wards at Institute of Child Health and Hospital for children, Egmore, Chennai.

3.6. SAMPLE AND SAMPLE SIZE

Polit and Hungler (1995)

The sample is a subset of the population selected to participate in a research study.

The sample size for the present study is composed of 60 children (6- 12 yrs) who are admitted in preoperative surgical wards for abdominal surgery at Institute of Child Health and Hospital, Egmore, Chennai-08.

3.7. SAMPLING TECHNIQUE

Sampling is the process of selecting a portion of the population to represent the entire population. Non-probability convenient sampling technique was used to select the 60 subjects from the target population.

3.8. CRITERIA FOR SELECTION OF SAMPLES

Inclusion criteria

The study includes the children of 6 to 12 years, both boys and girls

- Children in the age group of 6 to 12 years
- Children who are undergoing for abdominal surgery at surgical ward
- Children who are mentally healthy
- Children who can understand and able to speak Tamil

Exclusion Criteria

- Children who are not able to understand Tamil
- Children who are critically ill
- Those children who are admitted for only observation

3.9. DEVELOPMENT & DESCRIPTION OF THE TOOL

Data collection tools are the procedures or instruments used by the researcher to observe or measure key variables in the research problem. Modified Yale Preoperative anxiety Scale was selected to assess the preoperative anxiety level of children. The following steps were carried out in the preparation of the tool.

1. Literature review
2. Conceptual framework
3. Discussion with experts
4. Preparation of blue print

The tool was organized into two sections. They are

Section –A: Deals with demographic data

Section A consist of demographic variables of age, sex, place of residence, order of birth, education of the child, type of family, previous history of surgery, religion, the age of the mother, occupation of the mother.

Section -B: Modified Yale preoperative anxiety scale

Modified Yale preoperative anxiety scale consists of 30 items to rate, anxiety responses of school age children to surgery, health personnel, medical equipments and procedures. The investigator modified the item suitable to the age group of children, total of 30 items brought under 7 categories namely the activities, vocalization, expressing emotions, state of arousal, use of parents, psychosomatic response, and biological response

Each item is observed and the observation is scored as below

Positive items

Never: 0

Occasional: 1

Always: 2

Negative items

Never: 2

Occasional: 1

Always: 0

Scoring key:The total score is 60

Scoring procedure

The scoring system is divided into following categories

0 to 20 – Severe anxiety

21 to 40 – Moderate anxiety

41 to 60 – Mild anxiety

3.10. ETHICAL CONSIDERATION

This study was conducted after the approval from the ethical committee madras medical college, Chennai-3. All respondents were carefully informed about the purpose of the study and their part during the study and how the privacy was guarded to ensure confidentiality of the study result. Thus the investigator followed the ethical guidelines which were issued by the research committee. Written permission was obtained from all participants.

3.11. TESTING OF THE TOOLS

Validity of the Tool

“Validity is the degree to which an instrument measures what is intended to measure “(Polit and Hungler. 1995)

The content of the tool was validated by the experts in the field of medicine and Nursing. The suggestions of the experts were incorporated in the study. Minimal modification was made in the section A & Section B of the tool. After the change the tool was finalized. The refined tool was used for data collection and content validity was obtained.

3.12. PILOT STUDY

A pilot study is a small scale version or a trial run for the major study. The function of this pilot study was to obtain information for improving the project or for assessing its feasibility.

The pilot study was conducted after getting formal administrative permission and ethical clearance. The pilot study was conducted in a preoperative surgical ward at Institute of Child Health and Hospital for children, Egmore, Chennai-08 for the period of one week. Formal permission was obtained from the Director of Institute of Child Health and Hospital for children, Egmore and from the Head of the Department of Surgery. Six samples those who fulfilled the inclusion criteria were chosen by using the convenience sampling technique. Informed consent was obtained from the mothers of the sample and data was collected. The instrument was found reliable for proceeding with the main study. The other opinion and suggestion were incorporated in the main study to accomplish the objectives of the study.

Reliability of the tool

After pilot study the reliability of the tool was assessed by using the split half method. Anxiety score reliability correlation coefficient value is 0.82. This correlation coefficient is very high and it is a good tool for assessing the effectiveness of puppet play on reducing preoperative anxiety among children 6-12 years of age, undergoing abdominal surgery at Institute of child Health & Hospital for Children.

3.13. DATA COLLECTION PROCEDURE

After obtaining written permission from the Medical Superintendent and Nursing Superintendent, the investigator started the study in surgical ward. On the first day of data collection, the investigator introduced herself and explained the nature and purpose of the study to the mothers of children undergoing abdominal surgery. Informed Consent was obtained from the mothers to participate in the study and confidentiality of their responses was assured.

- As the first part of the study, on the day of surgery in the morning a preassessment was conducted using preoperative anxiety scale for 10-15 min for the child.
- After the preassessment, hand puppet was given to the child, and I asked the child to assume the role of the puppet doctor to express the feelings as a doctor, then puppet play interaction was carried out in between the nurse investigator with the child for 15-20 minutes.
- Followed by the interaction the post assessment was conducted with the modified Yale preoperative anxiety scale to know the level of anxiety of the children to check out for the reduction of anxiety after Puppet play.
- The same procedure was followed for the data collection for the rest of the children subsequently. The findings were documented

for data analysis. The total duration for one session should be around 35 minutes.

3.14. PLAN FOR DATA ANALYSIS

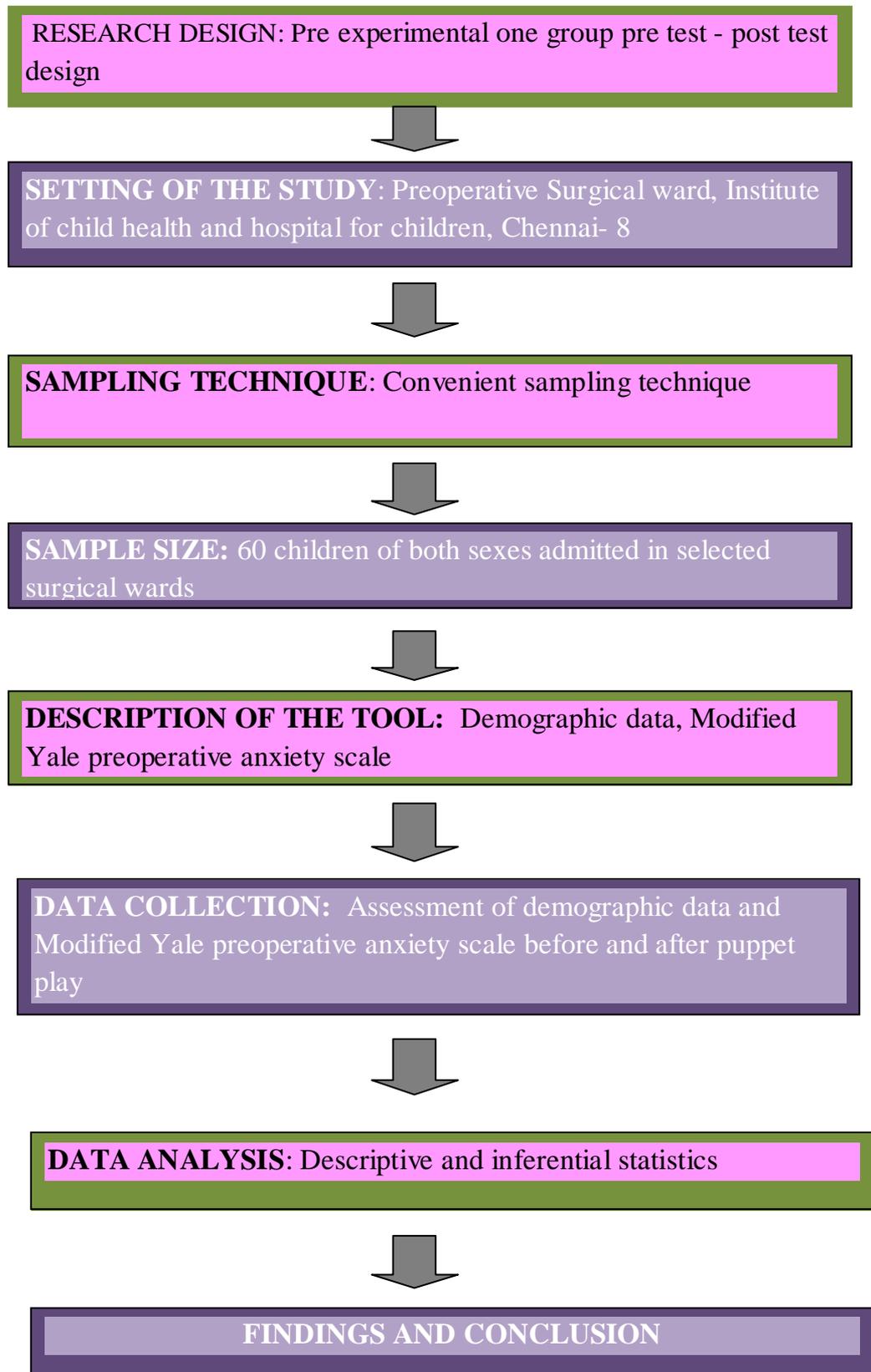
The data were planned to be analyzed in terms of the objectives of the study using descriptive and inferential statistics.

- Demographic variables in categories were given in frequencies with their percentages.
- Anxiety score were given in mean and standard deviation.
- Association between demographic variables and Anxiety score were analysed using chi-square test
- Pre assessment and post assessment Anxiety score were compared using student's paired t-test.
- Differences between pretest and posttest score was analysed using proportion with 95% CI and mean difference with 95% CI.
- Simple bar diagram, multiple bar diagram, doughnut diagram, Pie diagram and Box plot were used to represent the data.
- $P < 0.05$ was considered statistically significant. All statistical tests are two tailed test.

Summary

This chapter dealt with the methodology undertaken for the study. It includes research approach, research design, setting of the study, population, sample and sampling techniques, selection and development of the tool, pilot study, data collection methods and plan for data analysis.

3.13. (FIG-3) SCHEMATIC REPRESENTATION OF THE RESEARCH DESIGN



CHAPTER - IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis of data collected from 60 children in the age group of 6 to 12 years of age admitted for abdominal surgery at Institute of Child Health and Hospital for children, Egmore, Chennai-8. The data findings have been tabulated and interpreted according to the plan for data analysis.

ORGANIZATION OF THE DATA

Section - I : Description of demographic profile of selected samples.

Section -II : To assess the level of preoperative anxiety in children by using the Modified Yale preoperative anxiety scale before puppet play.

Section -III : To assess the level of preoperative anxiety in children by using Modified Yale Preoperative anxiety scale after puppet play.

Section-IV : To determine the effectiveness of puppet play by comparing the pre assessment and post assessment score.

Section –V: To associate the selected demographic variables of the sample with the reduction of preoperative anxiety among children after Puppet play.

SECTION-I DEMOGRAPHIC PROFILE OF SELECTED SAMPLES

Table 2: Demographic profile

Demographic variables	Categories	No. Of children	Percentage (%)
Age	6-8 yrs	10	16.7%
	9-10 yrs	15	25.0%
	11-12 yrs	35	58.3%
Sex	Male	41	68.3%
	Female	19	31.7%
Place of residence	Rural	24	40.0%
	Urban	22	36.7%
	Semi urban	14	23.3%
In order of birth	First	32	53.3%
	Second	17	28.3%
	Third	7	11.7%
	Fourth	4	6.0%
Education of the child	1-2 STD	7	11.7%
	3-4 STD	18	30.0%
	5-6 STD	22	36.7%
	7 th STD	13	21.6%
Type of family	Nuclear family	41	68.3%
	Joint family	19	31.7%
Previous history of surgery	Nil	45	75.0%
	One time	11	18.3%
	Two times	4	6.7%
Religion	Hindu	54	90.0%
	Muslim	3	5.0%
	Christian	3	5.0%

Demographic variables	Categories	No. Of children	Percentage (%)
Age of the mother	20-25 yrs	3	5.0%
	26-30 yrs	20	33.3%
	31-35 yrs	27	45.0%
	36- 40 yrs	10	16.7%
Occupation of the mother	Housewife	35	58.3%
	Daily wager	17	28.4%
	Private	8	13.3%

Table 2 shows the demographic information of children those who are participated in this study: Majority of children, 58.3% are between 11-12 yrs of age, 68.3% children are male children, most of them 40.0% children live in rural areas, 53.3% children are born as a first child in their family, 36.7% children's are studying 5-6 standard, 68.3% families are nuclear family, majority of children 75.0% are not having history of surgery, 90.0% children's are Hindus, 45.0% mothers are belongs to middle adulthood, majority of the mothers 58.3% are homemakers.

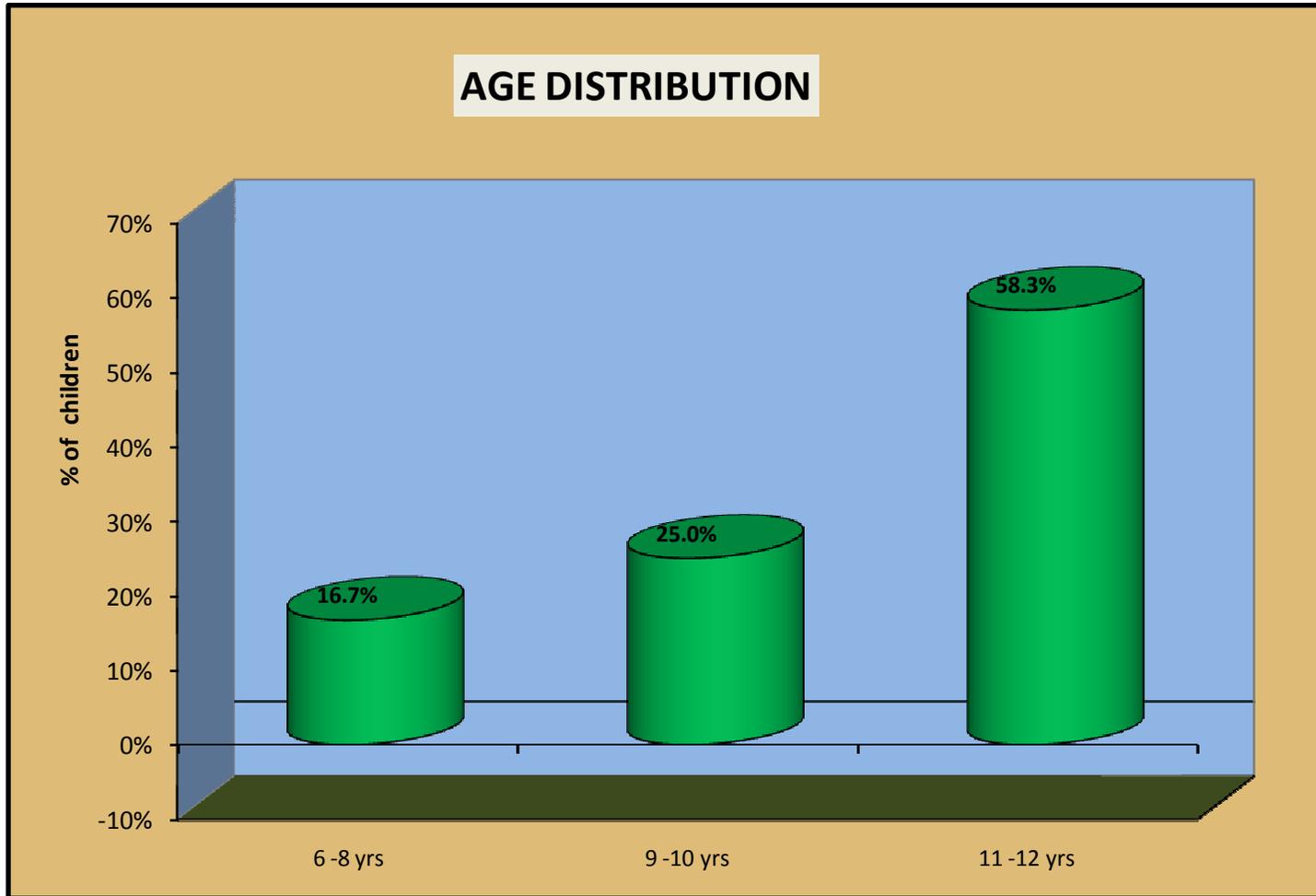


Figure 4: Age distribution of the children

SEX DISTRIBUTION

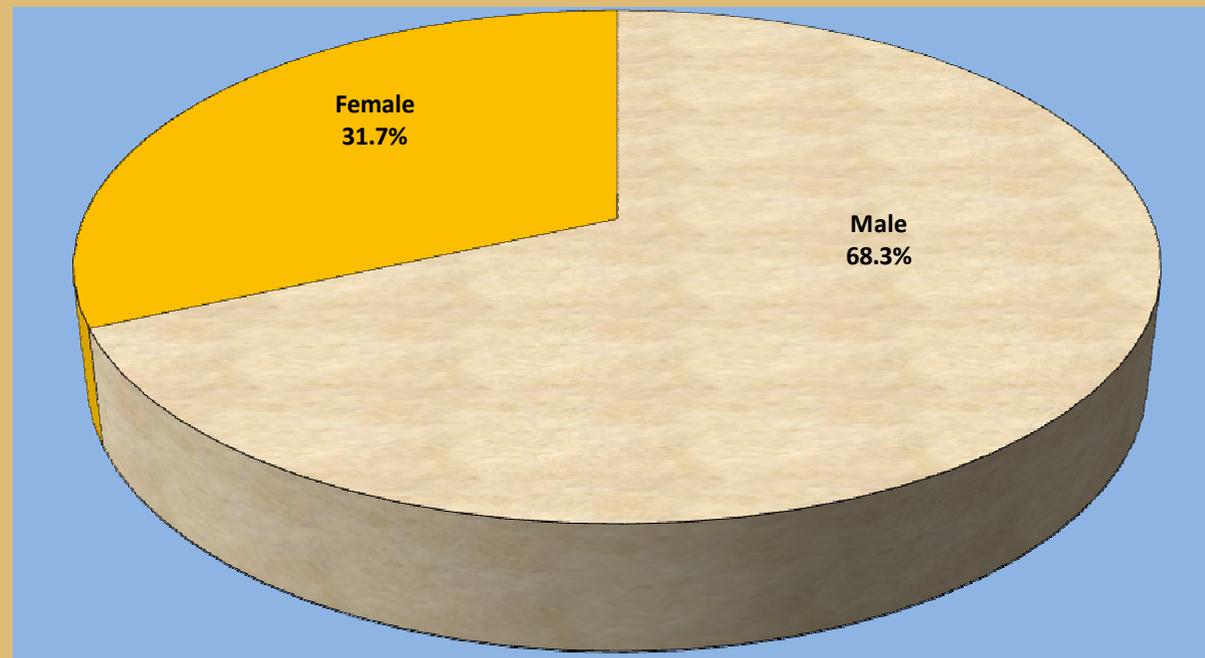


Figure 5: Sex distribution of the children

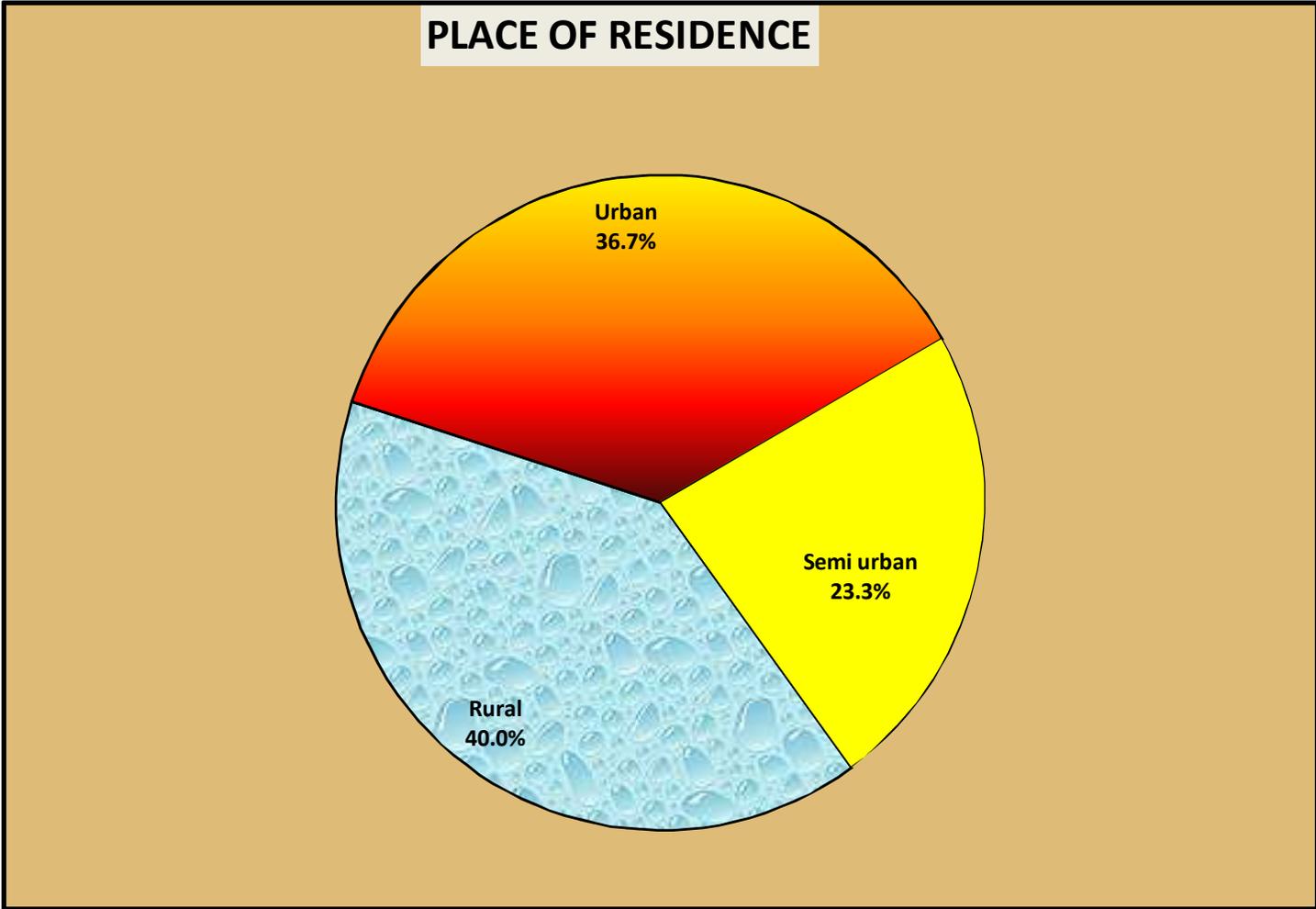


Figure 6: Place of residence of children

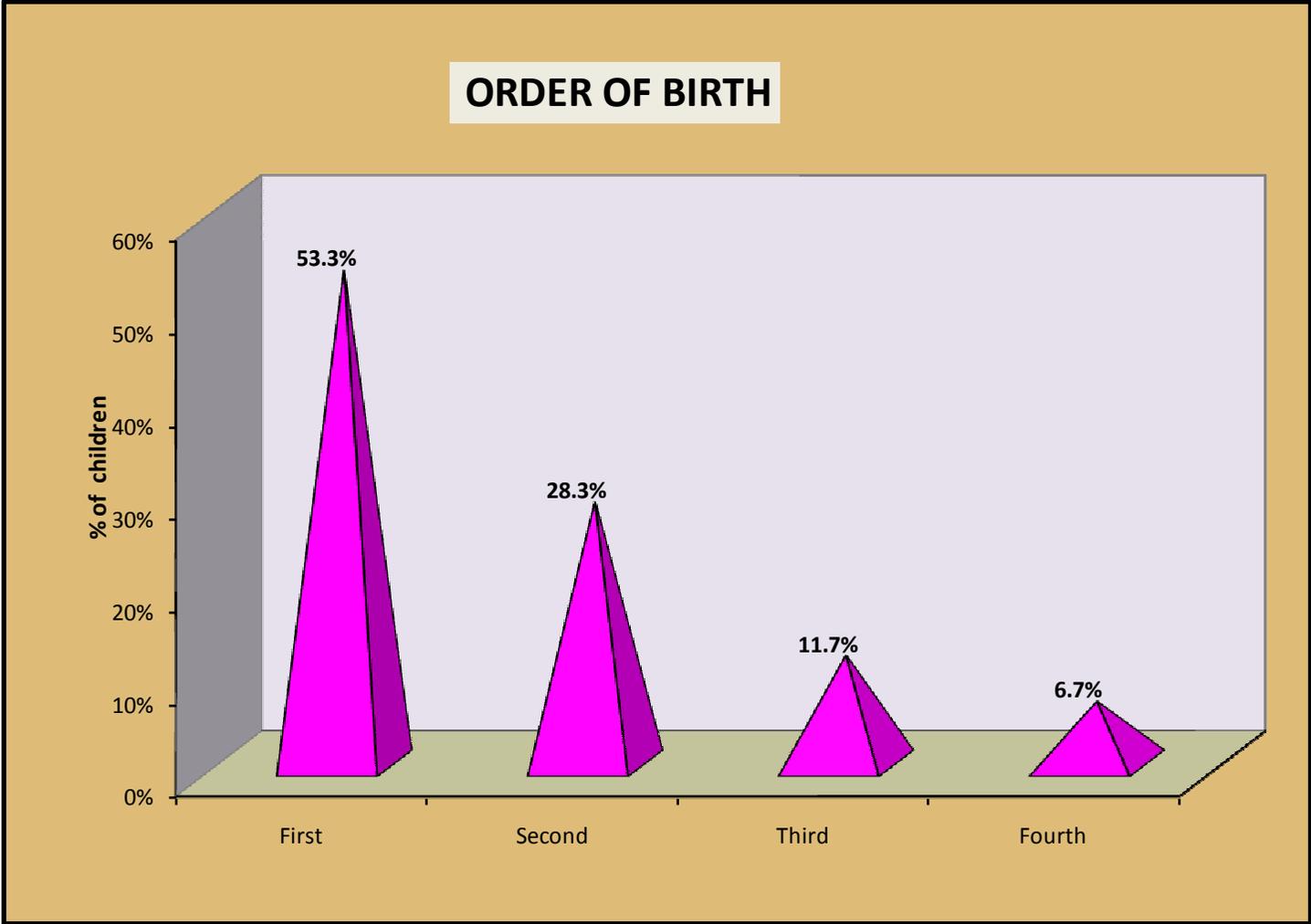


Figure 7: Children's order of birth

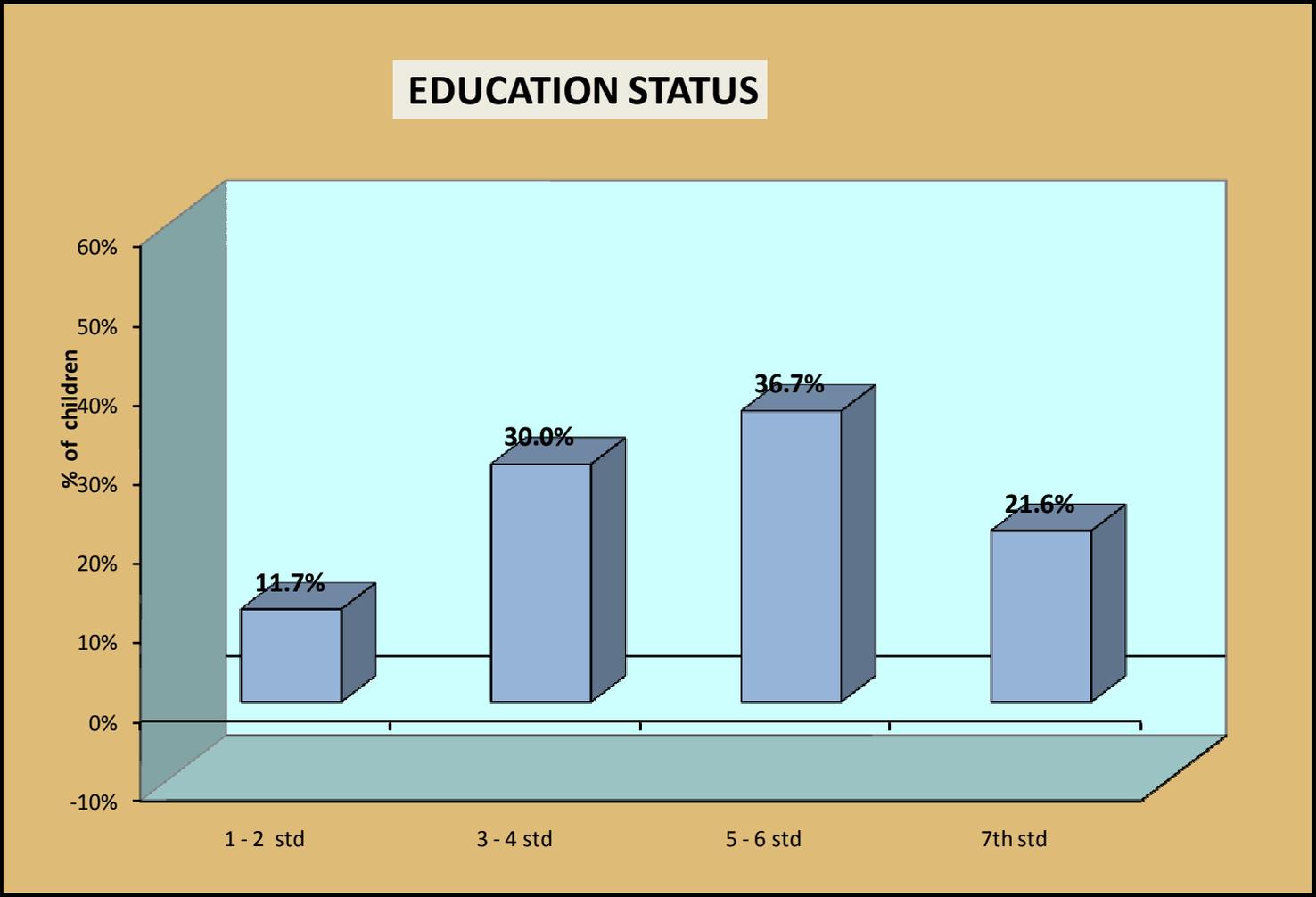


Figure 8: Children’s Educational status

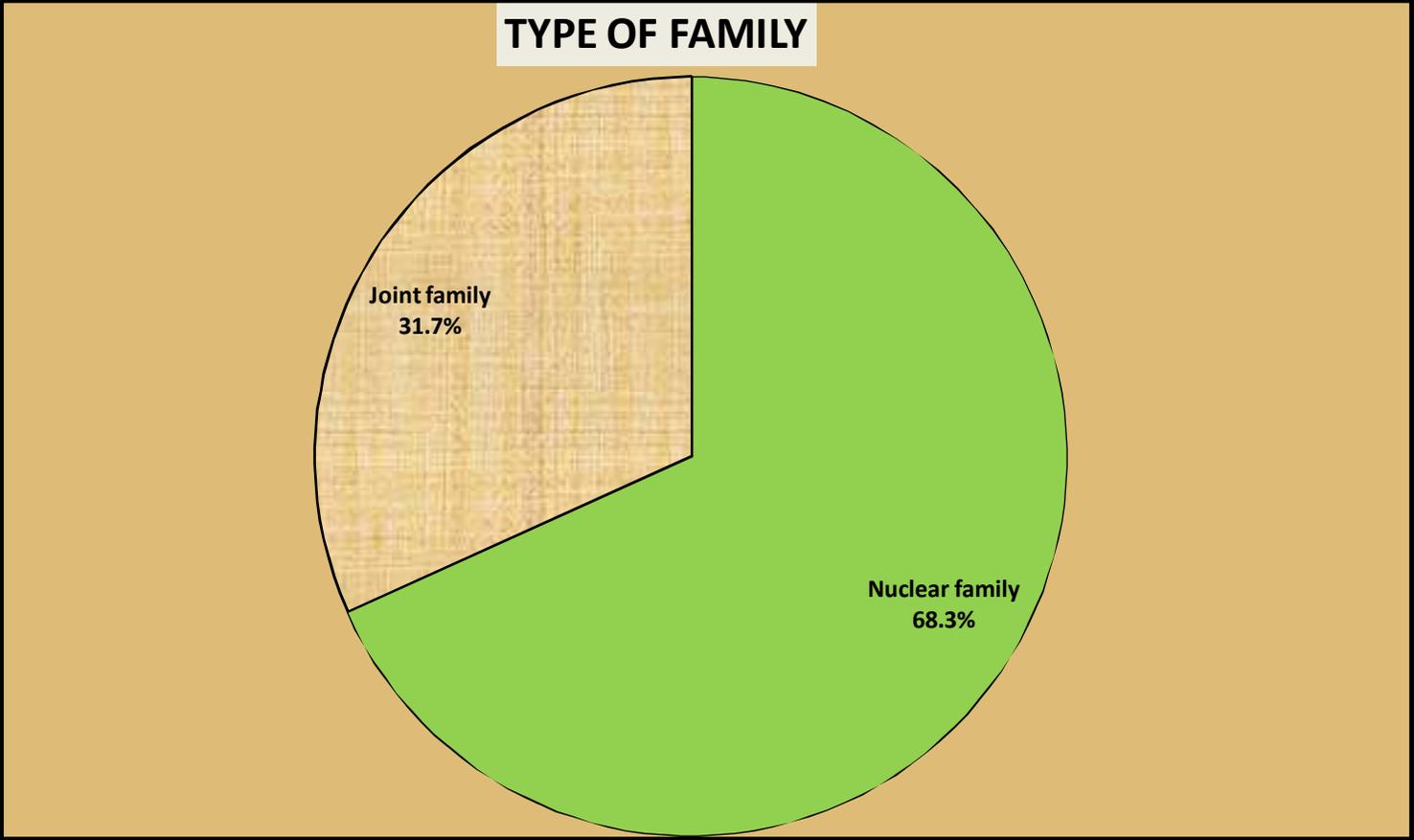


Figure 9: Type of family in which children's live in

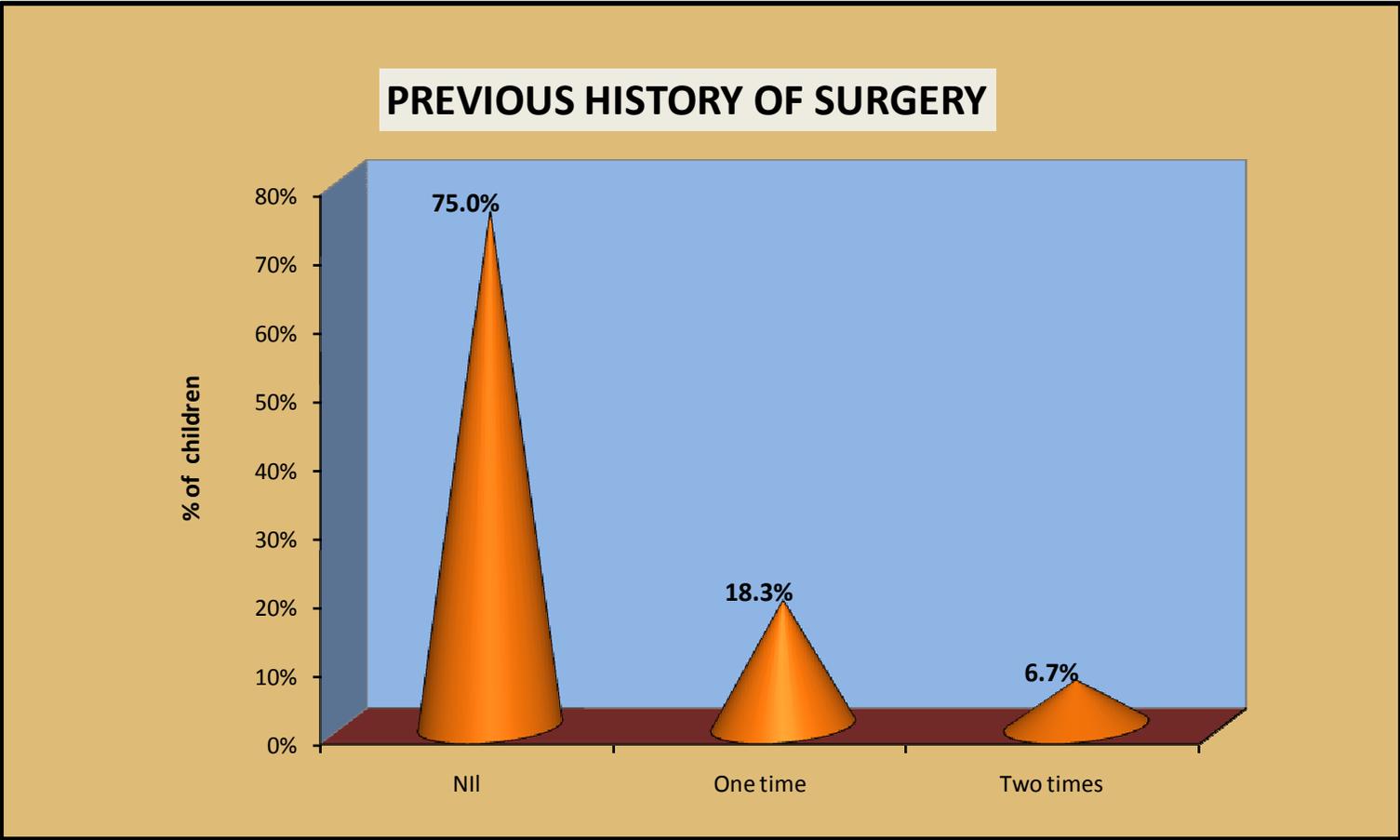


Figure 10: Children’s previous history of surgery

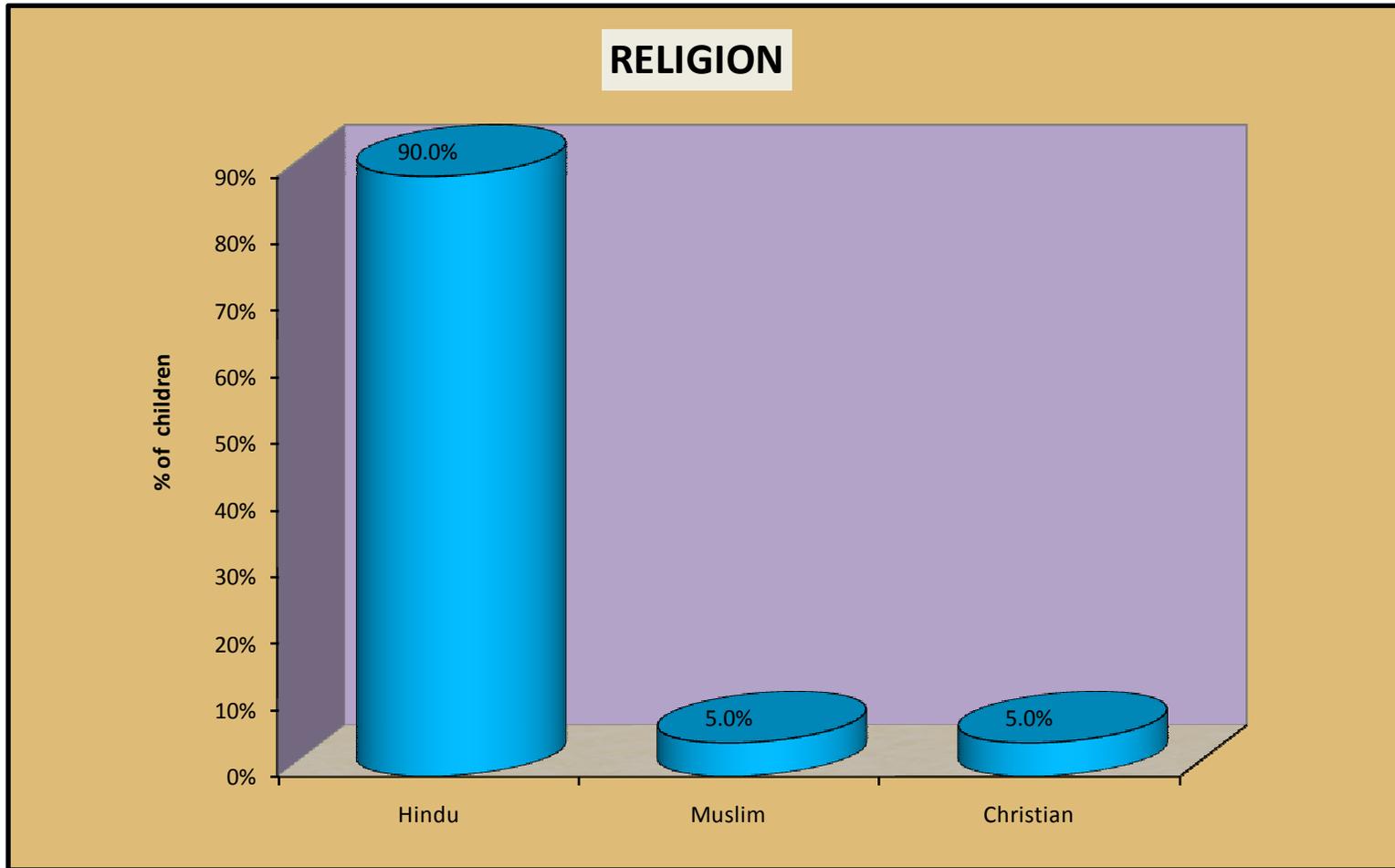


Figure 11: Religion of children

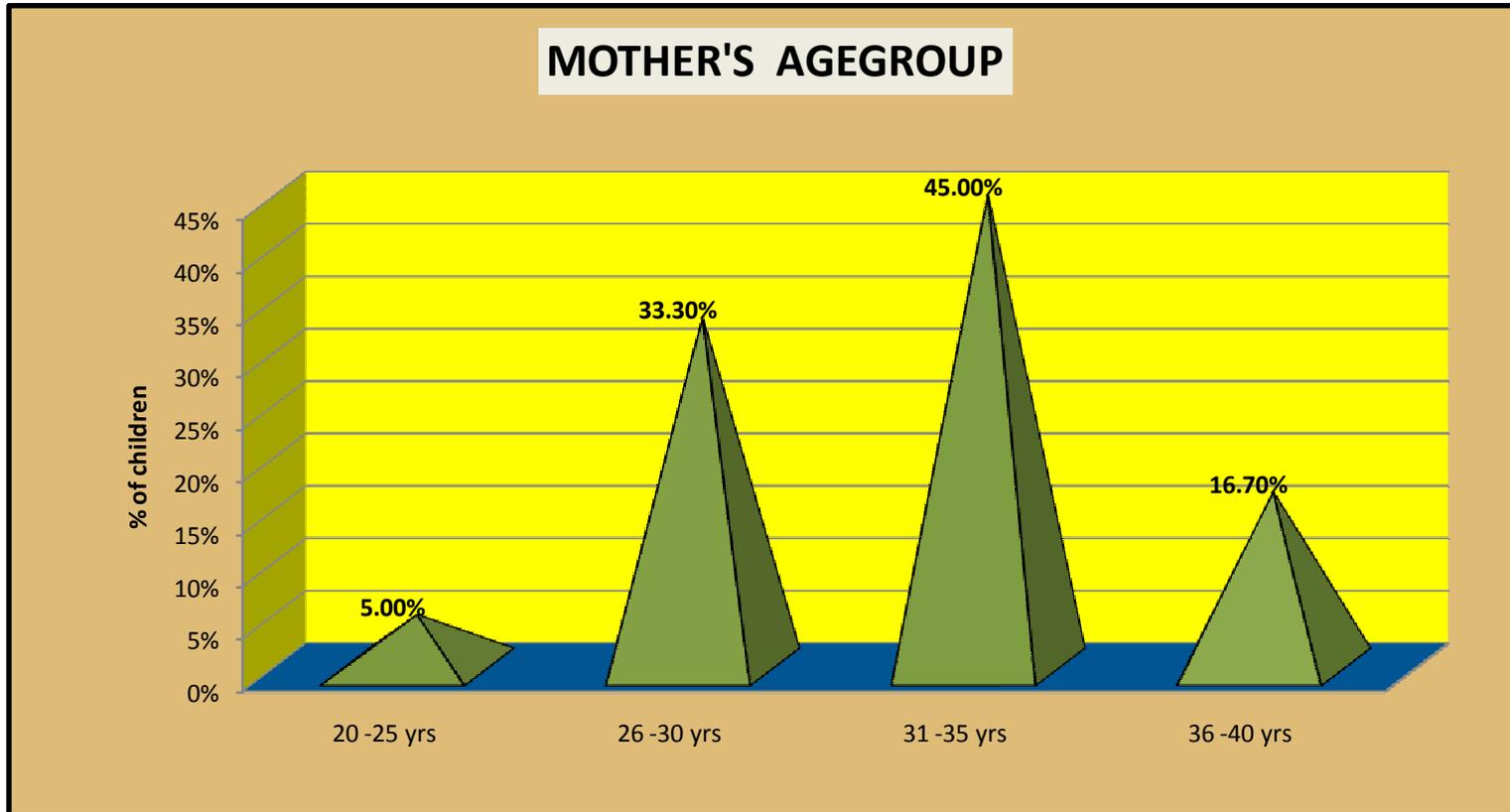


Figure12: Age of mothers of children

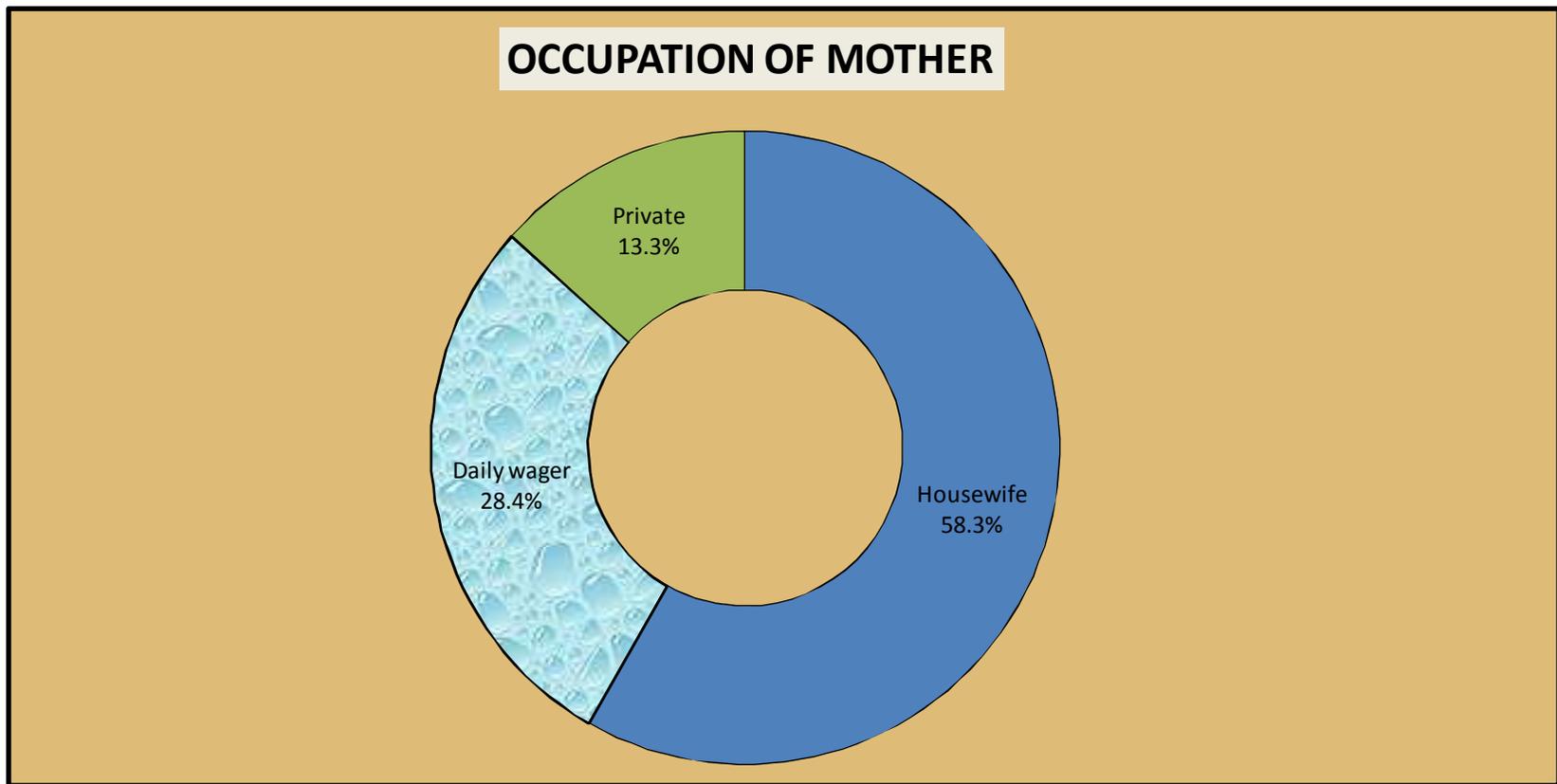


Figure 13: Occupation of the mothers of children

SECTION -II: PRE ASSESSMENT LEVEL OF PREOPERATIVE ANXIETY IN CHILDREN

Table 3: Pre assessment percentage of anxiety

Categories	No. of questions	Min – Max score	Mean	SD	% of mean score
Activities	6	0 -12	7.25	2.06	60.4%
Vocalization	6	0 -12	6.55	1.79	54.6%
Expressing emotions	4	0-4	4.50	1.00	56.3%
State or Arousal	4	0-4	3.05	.89	38.1%
Use of parents	4	0-4	3.05	.89	38.1%
Psychosomatic response	4	0-4	4.15	1.56	51.9%
Biological response	2	0-2	1.93	.78	48.3%
OVERALL	30	0-60	30.48	7.10	50.8%

Table No-3 represents the each aspects wise pre assessment percentage of preoperative anxiety score. They are having more anxiety in **activities** (60.4%) and less anxiety in Use of parents/ State or Arousal (38.1%). Overall, they are having 50.8% of anxiety score.

Table 4: Pre assessment level of anxiety

Level of anxiety	No. of children	%
Severe	10	18.3%
Moderate	50	81.7%
Mild	0	0.0%
Total	60	100%

Table No-4 shows the pre assessment level of preoperative anxiety among children 6-12 years of age.18.3% of the children are having severe anxiety, 81.7% of them are having moderate anxiety and none of them are having mild anxiety.

SCORE INTERPRETATION:

Minimum score= 0, Maximum score =2, questions= 30 Total score=60

S no.	Grade	Score	%
1.	Severe	1-20	0-33%
2.	Moderate	21-40	34-67%
3.	Mild	41 -60	68-100%

SECTION-3: POST ASSESSMENT LEVEL OF PREOPERATIVE ANXIETY IN CHILDREN

Table 5: Post assessment percentage of anxiety

categories	No. of questions	Min – Max score	Mean	SD	% of mean score
Activities	6	0 -12	10.63	1.37	88.6%
Vocalization	6	0 -12	10.03	1.90	83.6%
Expressing emotions	4	0-4	5.95	.96	74.4%
State or Arousal	4	0-4	5.67	1.20	70.9%
Use of parents	4	0-4	5.77	.95	72.1%
Psychosomatic response	4	0-4	5.57	1.48	69.6%
Biological response	2	0-2	3.38	.88	84.5%
OVERALL	30	0-60	47.00	5.39	78.3%

Table No-5 shows the each aspects wise post assessment percentage of preoperative anxiety score. They are having more anxiety in **activities** (88.6%) and less anxiety in **Psychosomatic response**(69.6%). Overall, they are having 78.3% of anxiety score.

Table 6: Post assessment level of anxiety

Level of anxiety	No. of children	%
Severe	0	0.0%
Moderate	13	21.7%
Mild	47	78.3%
Total	60	100%

Table No-6 shows the post assessment level of preoperative anxiety among children 6-12 years of age. None of the children are having severe anxiety, 21.7% of them are having moderate anxiety and 78.3% of them are having mild anxiety.

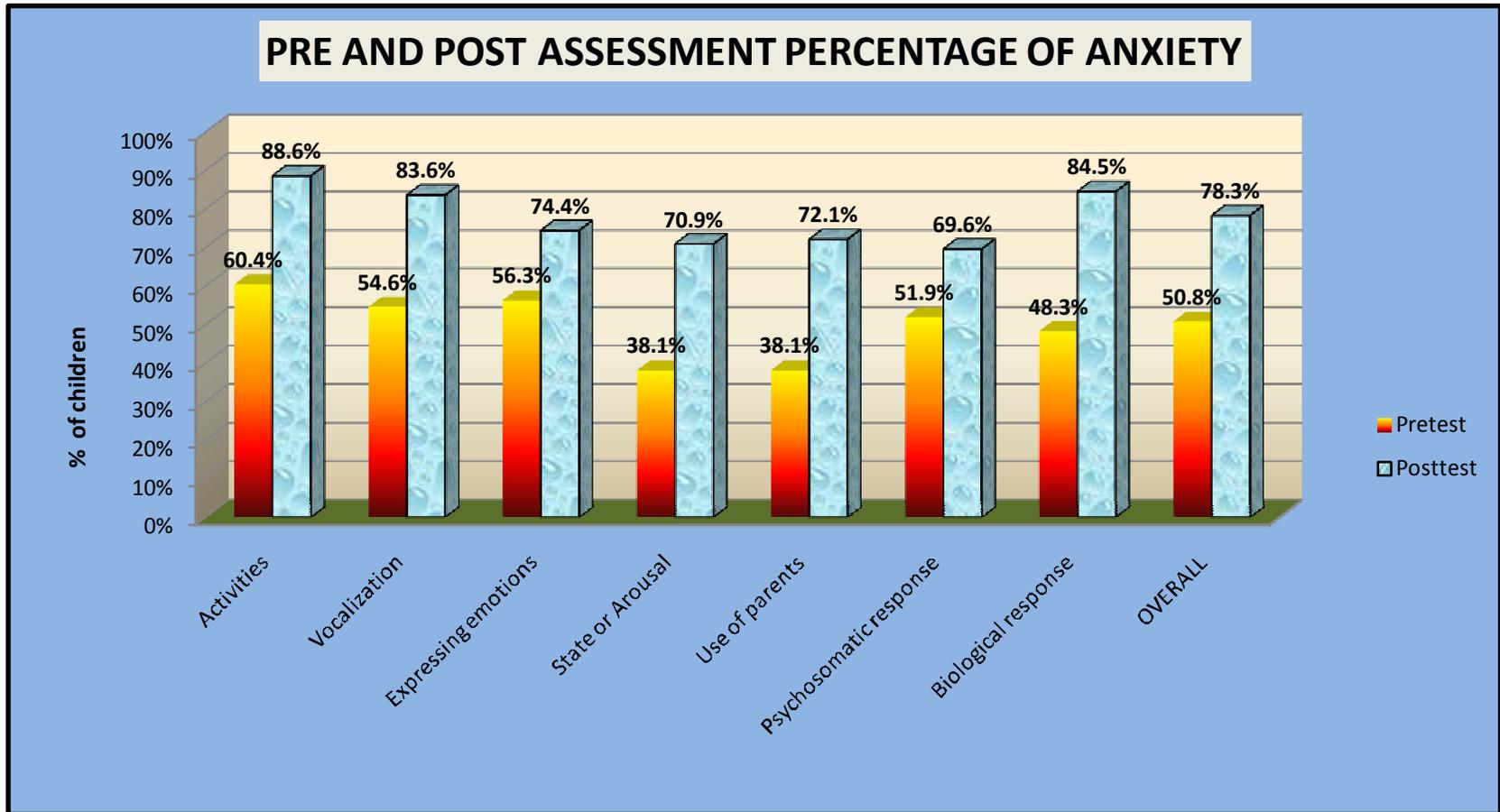


Figure 14: Pre and post assessment percentage of anxiety

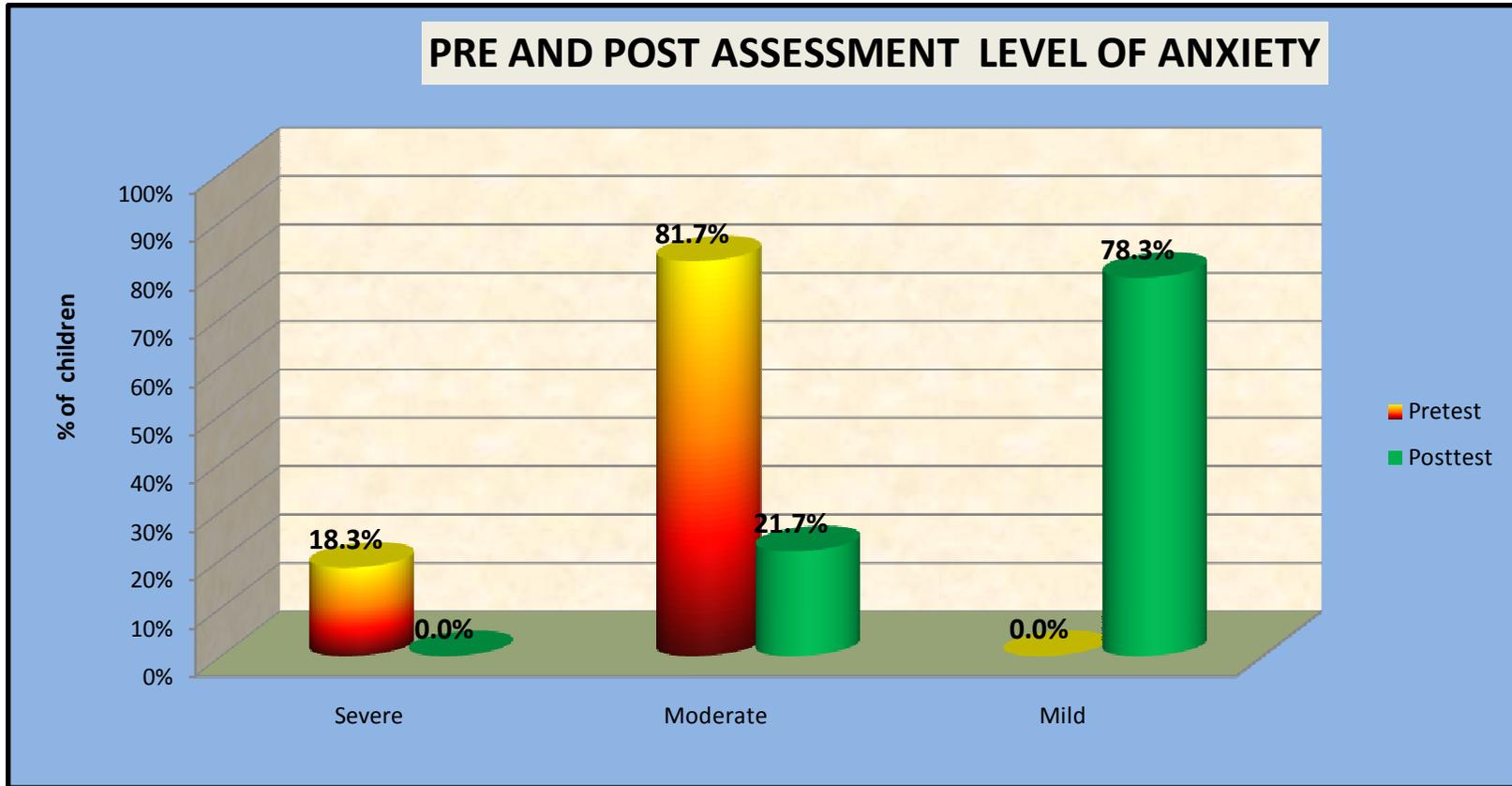


Fig 15: Pre and post assessment level of anxiety

Table 7: Comparison of mean anxiety score

Categories	Anxiety scores				Student's Paired t-test
	Pre assessment		Post assessment		
	Mean	SD	Mean	SD	
Activities	7.25	2.06	10.63	1.37	t=17.37, P=0.001*** Significant
Vocalization	6.55	1.79	10.03	1.90	t=21.04, P=0.001*** Significant
Expressing emotions	4.50	1.00	5.95	.96	t=18.04, P=0.001*** Significant
State or Arousal	3.05	.89	5.67	1.20	t=15.87, P=0.001*** Significant
Use of parents	3.05	.89	5.77	.95	t=21.19, P=0.001*** Significant
Psychosomatic response	4.15	1.56	5.57	1.48	t=13.57, P=0.001*** Significant
Biological response	1.93	.78	3.38	.88	t=13.49, P=0.001*** Significant

* Significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.001$

Table No. 7 compares pre assessment and post assessment mean anxiety score.

Considering **Activities** aspects, in the pre assessment, children are having 7.25 score where as in post assessment, they are having 10.63 scores, so the difference is 3.38. This difference between pre and post assessment is large and it is statistically significant.

Considering **Vocalization** aspects, in the pre assessment, children are having 6.55 score where as in post assessment; they are having 10.03 scores, so the difference is 3.48. This difference between pre and post assessment is large and it is statistically significant.

Considering **Expressing emotions**, in pre assessment, children are having 4.50 score where as in post assessment they are having 5.95 score, so the difference is 1.45. This difference between pre and post assessment is large and it is statistically significant.

Considering **State or Arousal aspects**, in pre assessment, children are having 3.05 score where as in post assessment they are having 5.67 score, so the difference is 2.62. This difference between pre and post assessment is large and it is statistically significant.

Considering **Use of parents aspects**, in pre assessment, children are having 3.05 score where as in post assessment they are having 5.77 score, so the difference is 2.72. This difference between pre and post assessment is large and it is statistically significant.

Considering **Psychosomatic response aspects**, in pre assessment, children are having 4.15 score where as in post assessment they are having 5.57 score, so the difference is 1.42. This difference between pre and post assessment is large and it is statistically significant.

Considering **Biological response aspects**, in the pre assessment, children are having 1.93 score where as in post assessment, they are having 3.38 scores, so the difference is 1.45. This difference between pre and post assessment is large and it is statistically significant.

Statistical significance was calculated by using student's paired 't' test.

Table 8: Comparison of overall anxiety

	No. of children	Mean \pm SD	Student's paired t-test
Pre assessment	60	30.48 \pm 7.09	t=41.12 P=0.001***
Post assessment	60	47.00 \pm 5.39	Significant

* significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.001$

Table no 8 shows the comparison of overall anxiety score between pre assessment and post assessment. Considering **overall**, in pre assessment, children are having 30.48 score where as in post assessment they are having 47.00 score, so the difference is 16.52. The difference between pre and post assessment knowledge score is large and it is statistically significant. Differences between pretest and posttest knowledge was analyzed using paired t-test.

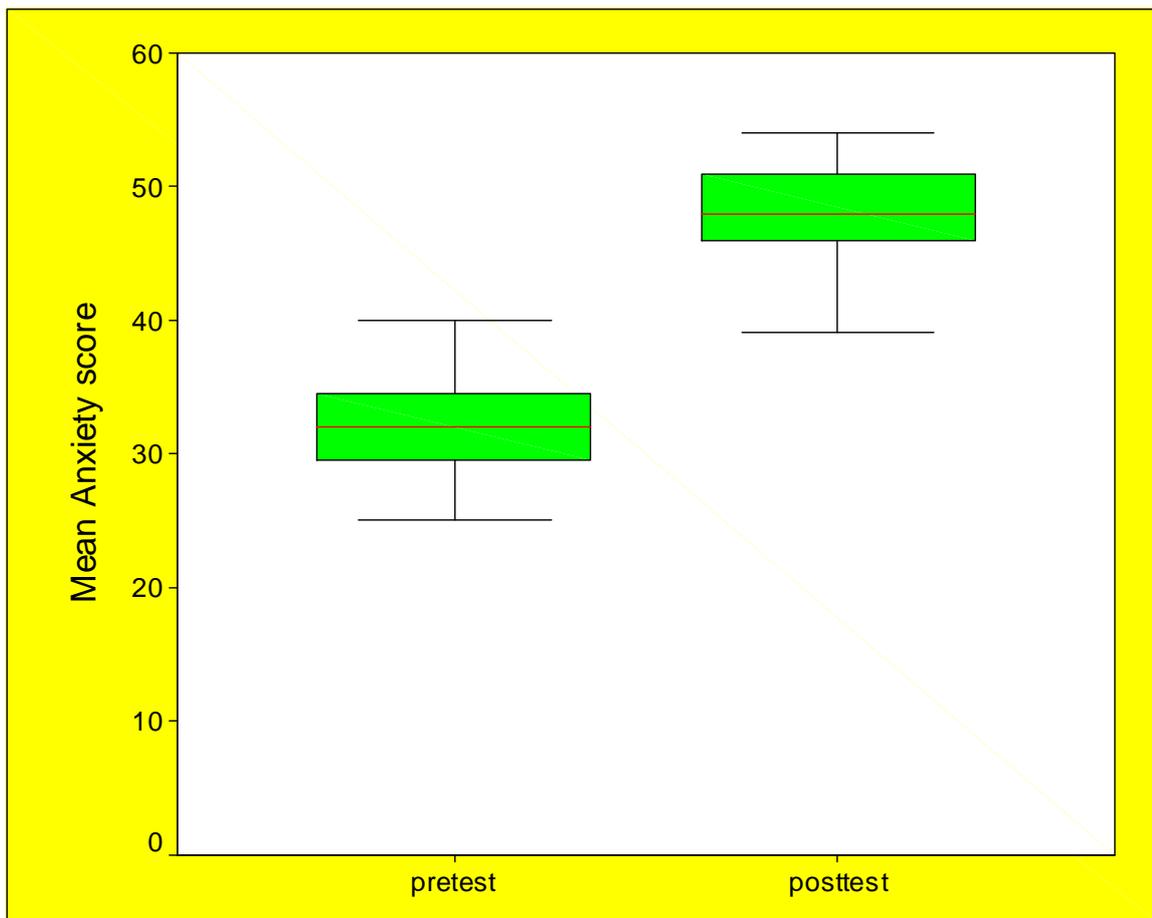


Fig 16: Box plot compares the pre assessment and a post assessment anxiety score of preoperative children

Table 9: Comparison of pre and post assessment level of anxiety

	Pre assessment		Post assessment		Chisquare test
	No. of children	%	No. Of children	%	
Severe	10	18.3%	0	0.0%	$\chi^2=146.51$ P=0.001*** Significant
Moderate	50	81.7%	13	21.7%	
Mild	0	0.0%	47	78.3%	
Total	60	100%	60	100%	

* Significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.001$

Table no.9 shows *the* pre and post assessment anxiety score among preoperative children.

Before **puppet play**, 18.3% of the children are having severe anxiety, 81.7% of them are having moderate anxiety and none of them are having mild anxiety. After the administration of puppet **play**, none of the children are having severe anxiety, 21.7% of them are having moderate anxiety and 78.3% of them are having mild anxiety.

Chisquare test was used to test statistical significance.

Table 10: Comparison of overall anxiety score

	<i>Max score</i>	<i>Mean anxiety score</i>	Mean Difference in Anxiety with 95% Confidence interval	Percentage of anxiety reduction with 95% Confidence interval
Pre assessment	60	30.48	16.52(15.71 – 17.32)	27.5%(26.2% – 28.8%)
Post assessment	60	47.00		

* significant at $P \leq 0.05$ ** highly significant at $P \leq 0.01$ *** very high significant at $P \leq 0.001$

Table no 10 shows the comparison of overall anxiety score between pre and post assessment. On an average, in post assessment, children are **reduced** 27.5% of anxiety after having **puppet play**, Differences between pre assessment and post assessment score was analysed using proportion with 95% CI and mean difference with 95% CI.

SECTION-4: THE EFFECTIVENESS OF PUPPET PLAY IN CHILDREN (6-12 YRS) ANXIETY REDUCTION

Table 11: Effectiveness of puppet play on reduction of children anxiety

categories	Pre assessment anxiety	Post assessment anxiety	% of anxiety reduction
Activities	60.4%	88.6%	28.2%
Vocalization	54.6%	83.6%	29.0%
Expressing emotions	56.3%	74.4%	18.1%
State or Arousal	38.1%	70.9%	32.8%
Use of parents	38.1%	72.1%	34.0%
Psychosomatic response	51.9%	69.6%	17.7%
Biological response	48.3%	84.5%	36.2%
OVERALL	50.8%	78.3%	27.5%

Table No-11 shows each categories wise anxiety

In Activities aspect they are gained 28.2%% of knowledge

In Vocalization aspect they are gained 29.0%% of knowledge

In Expressing emotions aspect they are gained 18.1%% of knowledge

State or Arousal aspect they are gained 32.8%% of knowledge

In Use of parents aspects aspect they are gained 34.0%% of knowledge

In Psychosomatic response aspect they are gained 17.7%% of knowledge

In Biological response aspects the physiological parameters 36.2% comes to normal.

Overall they reduced 27.5% anxiety when comparing pretest and posttest score.

This shows the effectiveness of **Puppet play on anxiety reduction**

SECTION-5: ASSOCIATION BETWEEN PREOPERATIVE ANXIETY REDUCTION WITH THE DEMOGRAPHIC VARIABLES

Table12: Association between Anxiety reduction and children demographic variables

Demographic variables	categories	Anxiety reduction score				Total	Chi square test
		Below average (< 16.5)		Above average (>16.5)			
		n	%	n	%		
Age	6-8 yrs	2	20.0%	8	80.0%	10	$\chi^2=6.51$ $p=0.04^*$
	9-10 yrs	6	40.0%	9	60.0%	15	
	11-12 yrs	22	62.9%	13	37.1%	35	
Sex	Male	21	51.2%	20	48.8%	41	$\chi^2=0.07$ $p=0.78$
	Female	9	47.4%	10	52.6%	19	
Place of residence	Rural	12	50.0%	12	50.0%	24	$\chi^2=0.46$ $p=0.79$
	Urban	12	54.5%	10	45.5%	22	
	Semi urban	6	42.9%	8	57.1%	14	
Order of birth	First	14	43.8%	18	56.3%	32	$\chi^2=2.84$ $p=0.41$
	Second	8	47.1%	9	52.9%	17	
	Third	5	71.4%	2	28.6%	7	
	Fourth	3	75.0%	1	25.0%	4	
Education of the child	1-2 std	1	14.3%	6	85.7%	7	$\chi^2=7.66$ $p=0.05^*$
	3-4 std	8	44.4%	10	55.6%	18	
	5-6 std	11	50.0%	11	50.0%	22	
	7 th std	10	76.9%	3	23.1%	13	
Type of family	Nuclear family	25	60.9%	16	39.1%	41	$\chi^2=6.24$ $p=0.01^{**}$

Demographic variables	Categories	Anxiety reduction score				Total	Chi square test
		Below average (< 16.5)		Above average (>16.5)			
		n	%	n	%		
	Joint family	5	26.3%	14	73.7%	19	
Previous history of surgery	Nil	23	51.1%	22	48.9%	45	$\chi^2=0.11$ p=0.94
	One time	5	45.5%	6	54.5%	11	
	Two times	2	50.0%	2	50.0%	4	
Religion	Hindu	25	46.3%	29	53.7%	54	$\chi^2=3.63$ p=0.16
	Muslim	3	100.0%	0	0.0%	3	
	Christian	2	66.7%	1	33.3%	3	
Age of the mother	20-25 yrs	3	100.0%	0	0.0%	3	$\chi^2=8.73$ p=0.03*
	26-30 yrs	13	65.0%	7	35.0%	20	
	31-35 yrs	12	44.4%	15	55.6%	27	
	36-40 yrs	2	20.0%	8	80.0%	10	
Occupation of the mother	House wife	16	45.7%	19	54.3%	35	$\chi^2=2.22$ p=0.32
	Daily wager	11	64.7%	6	35.3%	17	
	Private	3	37.5%	5	62.5%	8	

Anxiety = postassessment score- preassessment score

Table No-12 shows the association between anxiety reduction and children demographic variables. Younger, less standard education, joint family and elder mother's children are reduced in the anxiety more than others. Statistical significance was calculated using chi square test.

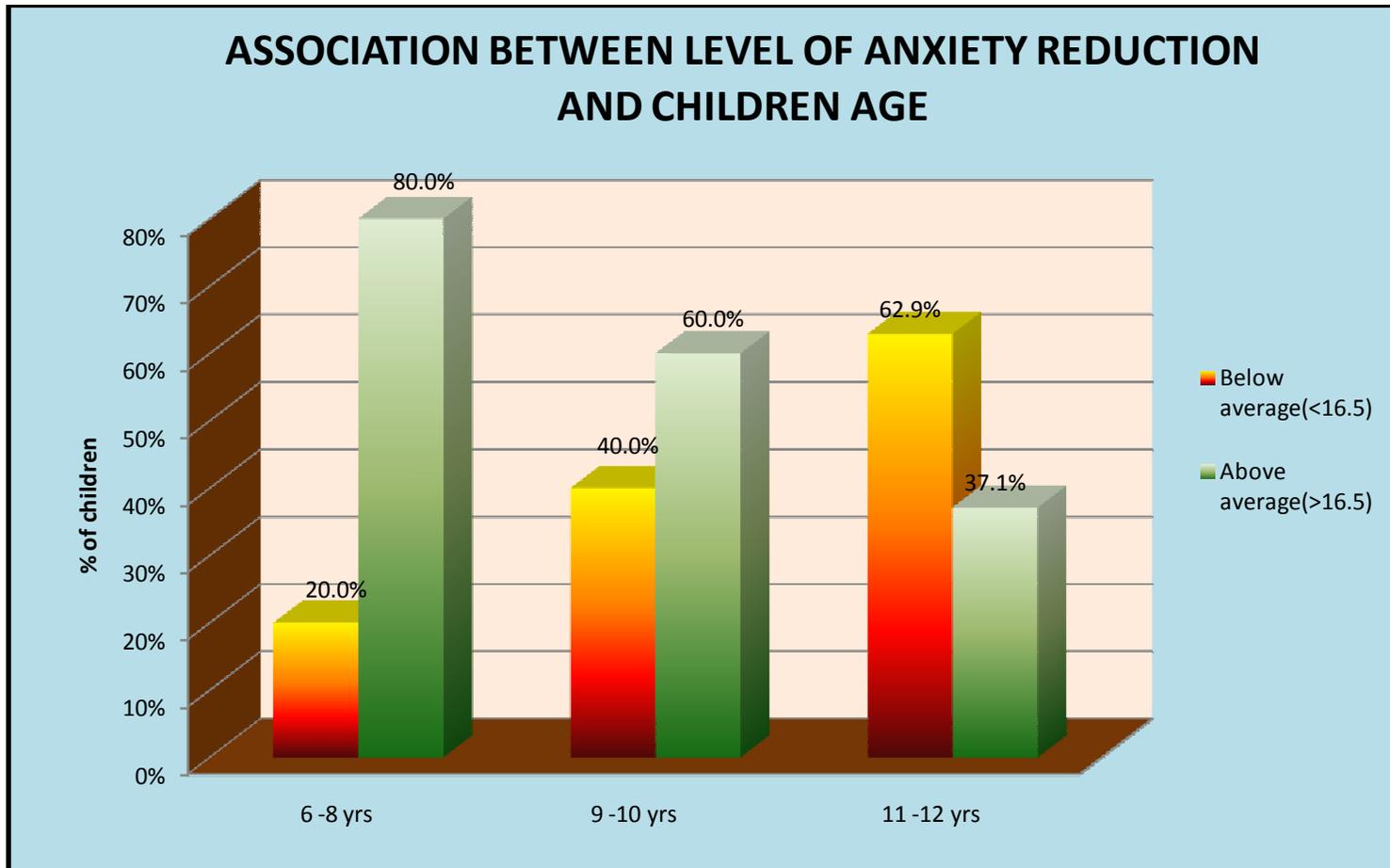


Figure 17: Anxiety reduction with children's age

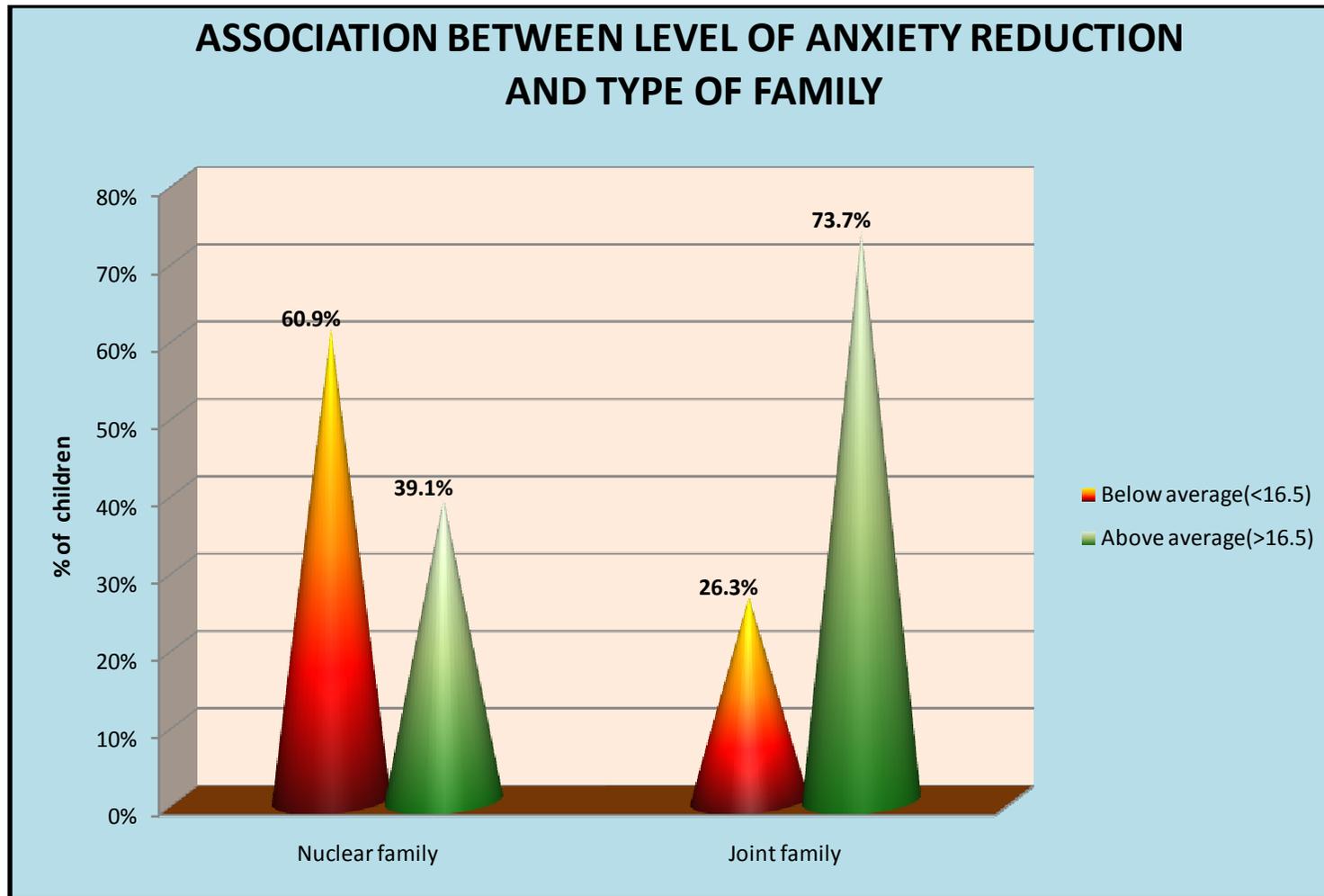


Figure 18: Association of anxiety reduction with type of family

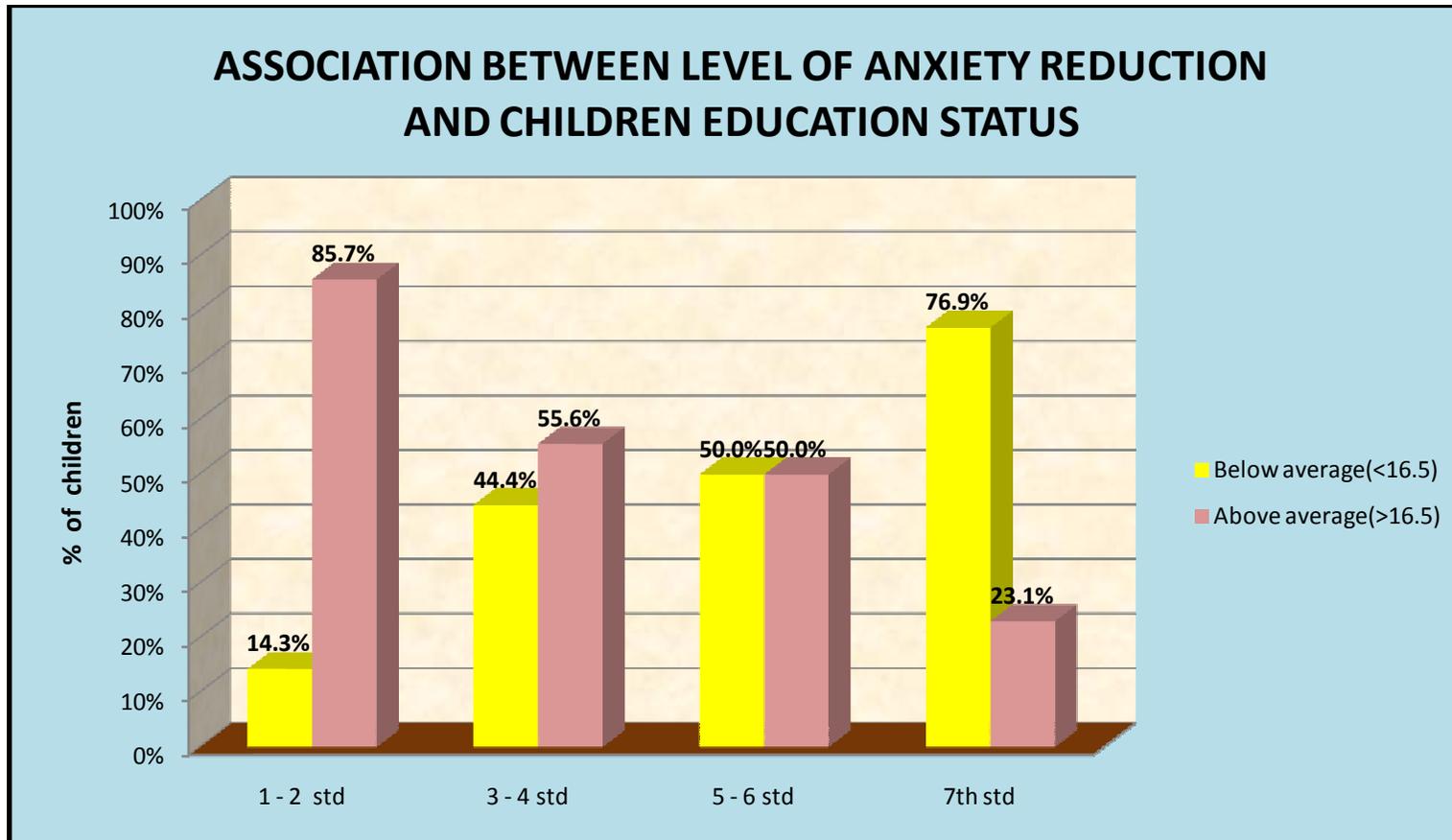


Figure 19: Association of anxiety reduction with children education status

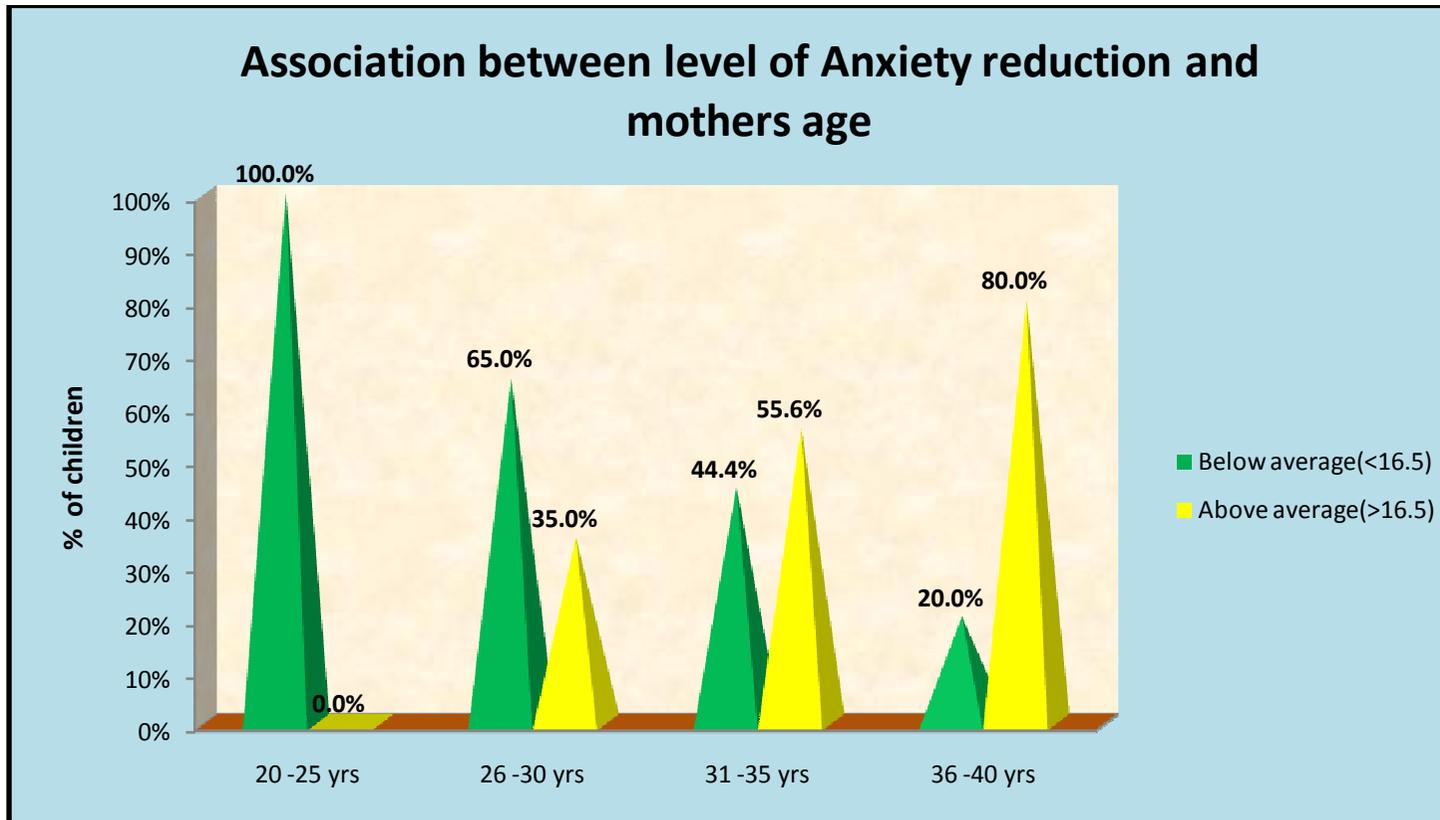


Figure20: Anxiety reduction with mother age

CHAPTER -V

DISCUSSION

This chapter deals with the findings of the study based on the interpretation of the statistical analysis. The findings are discussed in relation to the objectives of the study. The findings are supported by the review of literature.

The purpose of the study was to assess the Effectiveness of Puppet play in reducing the preoperative anxiety among children 6-12 yrs of age undergoing abdominal surgery at ICH& HC, Egmore, Chennai-8.

Demographic details of the study:

In considering **the age** wise distribution of children, 58.3% of children were in 11 to 12 years of age, 9 to 10 years of age grouped children were 25.0% of children and 16.7% of children were in 6 to 8 years of age.

In **the sex** wise distribution, 68.3% of children were male children and 31.7% were female children participated in the study.

In considering the **place of residence** of the study participants, 40% of children's lives in a rural area and 36.7% of children's are from urban area and 23.3% of children lives in semi urban areas.

In **the order of birth** 53.3% of children are first order, 28.3% of children are second order children, third order children are 11.7%, and fourth order children are 6.7%.

In considering **education of the child**, 36.7% are 5 to 6th standard studying children, 3 to 4 standard children are 30.0% of children, 21.6% are 7th std studying children, and 11.7% are 1-2 std studying children.

In considering **type of family** 68.3% of subjects are from the nuclear family, and 31.7% of children are from joint family.

In considering the **previous history of surgery** 75.0% of children has no experience of surgery, the children having experience of surgery once are 18.3%, having experience of surgery twice are 6.7%.

In considering **religion** 90.0% of children are Hindus, Christians are 5.0% of children, and 5.0% children are Muslims.

When considering **the mothers age** 5.0% of mothers are from the age group of 20-25 years, 33.3% of mothers are between the age group of 26 to 30 years of age, and 45.0% of mothers are from the age group of 31-35 years, and 16.7% are of mothers of age group 36 to 40 years of age.

In considering **occupation of the mother** 58.3% of mothers are homemaker, 28.4% of mothers are daily wager, and 13.3% of mothers work in private organization.

The first objective of the study is to assess the level of preoperative anxiety using modified Yale preoperative anxiety scale.

It represents the pretest score of the level of preoperative anxiety of the children. Data were analysed using descriptive statistics Means and standard deviation of the level of anxiety. The data findings reveals that the mean anxiety score and SD is 30.48 and 7.10

On pre assessment the level of preoperative anxiety score is 18.3%(10) children are in severe anxiety due to surgery, 81.7%(50) children are in moderate level of anxiety, no children are in mild anxiety, It shows that children undergoing abdominal surgery have mostly moderate level of anxiety.

In my study it has been recognized that the more anxiety is activities is 7.25 mean value, there are other categories which predicted the anxiety like vocalization is 6.55 mean value, while expressing emotions is 4.50 mean value, In state of arousal is 3.05 mean value, In use of parents is 3.05 mean value, In psycho somatic response is 4.15 mean value, and biological response is 1.93 mean value.

MacLaren Jetal etal.. (2009) conducted a study on Prediction of preoperative anxiety in children: who is most accurate? Children's anxiety was assessed using a valid behavior observation tool the Modified Yale Preoperative

Anxiety Scale. A total of 125 children aged 2-16 yr, their mothers, and their attending paediatric anaesthesiologists and resident anaesthesiologists were studied. We conclude that attending anaesthesiologists who practice in paediatric settings are better than mothers in predicting the anxiety of children during induction of anaesthesia.

Nazanin Vaezzadeh, et al., the Effect of Performing Preoperative Preparation Program on School Age Children's Anxiety Iranian J Paediatrics. 2011 December; 21(4): 461–466. A randomized controlled trial was performed on 122 children (7–12 years of age) admitted for elective surgery after pre-test baseline measurement had been taken. Analyzing was performed through independent t-test and χ^2 test. $P < 0.005$ was considered statistically significant. The experimental group received therapeutic play and the control group received routine preoperative information preparation. Performing preoperative program with using therapeutic play intervention is effective for preparing children before surgery and decreases their anxiety.

The second objective of the study is to assess the level of preoperative anxiety in children using same Modified Yale preoperative anxiety scale after puppet play.

The post assessment anxiety mean score and SD are 47.00 and 5.39; it is proved that there is statistically significant difference between pre test and post test.

In my study the post assessment level of anxiety, is around 78.3 % (47) children are in mild anxiety and 21.7% (13) children are in moderate anxiety, no children are in severe anxiety after the children are exposed to Puppet play.

These findings are consistent with the study findings done by **Ky nurse (2002)** noted the value of puppet play, as therapeutic play, to decrease anxiety in hospitalized preschoolers Children require that the Puppet play is to express themselves about their feelings regarding surgery. Child life specialist

may also be able to assess changes in function as it is represented in the child's activities.

The third objective is to assess the effectiveness of puppet play by comparing the pre assessment and the post assessment level of preoperative anxiety.

In pre assessment, none of them are having mild anxiety, 81.7% (50) children of them are having moderate anxiety, and 18.3% (10) children's are having severe anxiety.

In post assessment, 78.3% of them are having mild anxiety, and 21.7% of them are having moderate anxiety, and none of them are having severe anxiety.

In pre assessment the mean anxiety score is 30.48, after exposing to puppet play the mean anxiety score is 47.00, so the difference is 16.52

In my study on an average, children are reduced 27.5% anxiety score after having puppet play it shows the effectiveness of the study. Differences between pre assessment and post assessment score was analysed using proportion with 95% Confidence interval and mean difference with 95% Confidence interval.

Schulz JB, Raschke D, Dedrick C, Thompson M. (1981) conducted a study on effects of a preoperative puppet show on anxiety levels Of hospitalized children, Subjects were 28 children, ages 2-7 years inclusive, randomly assigned to treatment and non treatment groups. Treatment consisted of a puppet show designed to familiarize patients with hospital routines and operational procedures. Two PSI measures were collected for each subject. Treatment was associated with a significant reduction in anxiety from the time of admission to the period immediately following the puppet show.

The fourth objective is to associate the reduction of preoperative anxiety with the selected demographic profiles.

Here in my study the anxiety is associated with the children age, education of the child, Type of family and Age of mothers.

In **children age**, the anxiety reduction score is 80.0% for the children of age group of 6 to 8 years, its 60.0% for children of age group 9 to 10 yrs, and its 37.1% for children of age group 11 to 12 years. In **Type of family**, the reduction of anxiety score is around 73.7% for joint family than nuclear family which is around 39.1%. In **education of the child**, the anxiety reduction score is around 85.7% those who are in 1-2 std, its 55.6% for children of 3-4 std, its 50.0% for children studying 5-6 std, and its 23.1% for children those who are in 7 th std. In this study, In **mothers age** the anxiety reduction score is 80.0% for 36-40yrs, its 55.6% those mothers children of 31-35 yrs, its 35.0% for 26-30 yrs, and its 0.0% for the mothers of children belong to 20-25 yrs.

In my study it is proved that children with younger age, less standard education, joint family and elder mother's children having significant anxiety reduction.

It is consistent with the study conducted by **Bossert (1994)** on factors influencing the coping of hospitalized school aged children, indicated that a priority area of paediatrics nursing interventions is the alleviation of fears and anxieties of hospitalized children and their parents. The most anxious children were male, black, and rural

CHAPTER -VI

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter deals with the summary of the study and the conclusions drawn. It clarifies the limitations of the study. The implications and recommendations are given for different areas of Nursing such as practice, education, research and administration in the Health care delivery system.

6.1 SUMMARY OF THE STUDY

Hospital admission and surgery for children inevitably provokes feelings of anxiety for both parent and child, to everybody, adult or child, admission to hospital and/ or surgery may cause concern and fear, because we are afraid of what we do not know. Being informed and prepared in a manner appropriate to age and understanding reduces fear and distress. Since 50% of children go to hospital at least once before they are 14, and 2/3 of these cases are taken to the emergency service, a very useful and pleasant form of preventing the trauma of hospitalization is to provide the necessary information about hospital and surgery in child appropriate terms, in a fruitful co-operation among health care professionals and parents.

Hence, this study was undertaken to determine the effectiveness of Puppet play in reducing preoperative anxiety among children of age group 6 to 12 years of age undergoing abdominal surgery at , ICH, Egmore, Chennai - 8”.

The following objectives were set for the study:

- To assess the level of preoperative anxiety by using Modified Yale preoperative anxiety scale before puppet play.
- To assess the level of preoperative anxiety by using modified Yale preoperative anxiety Scale after puppet play.

- To assess the effectiveness of Puppet play by comparing the pre assessment and post assessment score
- To associate the reduction of preoperative anxiety with the selected demographic profiles.

The study was based on the assumption that:

- Children will get reduced in the level of anxiety after Puppet play
- Children will get practiced to ventilate through puppet play when they are in anxiety

The following hypothesis was formulated:

H1 - There will be a significant difference in the anxiety of preoperative children before and after puppet play

H2 - There will be a significant association between level of anxiety and selected socio demographic variables

The variables studied were

Independent variable ——— ~~Puppet play~~

Dependent variable ~~Preoperative anxiety~~ of children

Extensive literature review and studies from primary and secondary focus regarding the effects of Puppet play on anxiety of children undergoing abdominal surgery provided evidence based guidance for the study. This has helped to design the methodology, develop the tool for data collection and the protocol for administering message. The conceptual framework developed for the study was based on the **Modified Wiedenbach's theory of helping art of clinical Nursing theory (1964).**

The tool used for data collection was validated by the experts in the department of Paediatric Surgery and Nursing. Reliability of the tool was assessed by using splithalf method. The instrument was found to be reliable. Pilot study was conducted on six samples to find out the appropriateness and feasibility of conducting the study and it was found feasible.

The data collection was done for 6 weeks in the Selected Preoperative surgical wards, at Institute of Child Health and Hospital for children, Egmore, Chennai-8. Formal permission was obtained from the Director of the Institute and Head of the Department of Pediatric Surgery at Institute of Child health and Hospital for children, Egmore, Chennai-8.

The researcher adopted the Pre-experimental research design to assess the effectiveness of Puppet play on anxiety of children undergoing abdominal surgery. Convenience sampling technique was used to select 60 samples based on the inclusion criteria.

Parents were explained about the purpose of the study and were assured of confidentiality of the data collected. On the first day of sample selection, the demographic data and pre assessment of anxiety by Modified Yale Preoperative anxiety scale were obtained. Adequate privacy was provided during the procedure. Hand puppet (2 no), Doctors play set, were given to the selected subjects, interaction form of therapeutic play taken place between nurse investigator and patient for 15-20minutes. Post assessment on level of anxiety was done after with the same Modified Yale preoperative Anxiety scale was obtained.

Descriptive (percentage distribution, mean, standard deviation) and inferential statistics (t- test, Pearson chi square test) were used to analyze the data and to test hypothesis. The data were then interpreted and discussed based on the objectives of the study, hypotheses and relevant studies from literature reviewed.

6.2 MAJOR FINDINGS OF THE STUDY

Description of the demographic variables

In considering **the age** wise distribution of children, 58.3% of children were in 11 to 12 years of age, 9 to 10 years of age grouped children were 25.0% of children and 16.7% of children were in 6 to 8 years of age.

In **the sex** wise distribution, 68.3% of children were male children and 31.7% were female children participated in the study.

In considering **the place of residence** of the study participants, 40% of children lives in rural area and 36.7% of children are from urban area and 23.3% of children lives in semi urban areas.

In **the order of birth** 53.3% of children are first order, 28.3% of children are second order children, third order children are 11.7%, and fourth order children are 6.7%.

In considering **education of the child**, 36.7% are 5 to 6th std studying children, 3 to 4 std children are 30.0% of children, 21.6% are 7th std studying children, and 11.7% are 1-2 std studying children.

In considering **type of family** 68.3% of subjects are from the nuclear family, and 31.7% of children are from joint family.

In considering the **previous history of surgery** 75.0% of children has no experience of surgery, the children having experience of surgery once are 18.3%, having experience of surgery twice are 6.7%.

In considering **religion** 90.0% of children are Hindus, Christians are 5.0% of children, and 5.0% children are Muslims.

When considering the **mothers age** 5.0% of mothers are from the age group of 20-25 years, 33.3% of mothers are between the age group of 26 to 30 years of age, and 45.0% of mothers are from the age group of 31-35 years, and 16.7% are of mothers of age group 36 to 40 years of age.

In considering **occupation of the mother** 58.3% of mothers are housewife, 28.4% of mothers are daily wager, and 13.3% of mothers work in private organization.

In pre assessment the level of anxiety score is around 10 children (18.3%) who are in severe anxiety due to surgery, 50 children (81.7%) who are in moderate level of anxiety, no children are in mild anxiety. It shows that children undergoing abdominal surgeries have moderate level of anxiety.

In post assessment the level of anxiety score is, around 47 children (78.3%) are in mild anxiety and 13 children (21.7%) are in moderate anxiety, no children are in severe anxiety after the children are exposed to Puppet play.

On an average, children are having **27.5%** of Reduction in anxiety score. It shows the effectiveness of study. Differences between pretest and posttest score was analysed using proportion with 95% Confidence interval and mean difference with 95% Confidence interval.

6.3. IMPLICATIONS

The implications drawn from the study are of vital concern to the field of Nursing including Nursing service, Nursing Education, Nursing Research and Nursing Administration.

Implications for Nursing practice

1. Nurse as a primary caregiver has a supreme responsibility in applying holistic approach while giving care to the patient. Puppet play is to be included as a supplementary Nursing care which helps to reduce preoperative anxiety of the children who are undergoing abdominal surgery and also it helps the children to express their fears through dramatic playing.

2. The study findings will help the Nursing personnel to include Puppet play as a Nursing intervention in the management in reducing the preoperative anxiety of children undergoing abdominal surgery.

3. Regular timings of puppet play should be maintained in preoperative care settings.

Implications for Nursing Education

Nursing is an evolving profession where there is a need for evidence based quality care with adequate knowledge. Hence the Nurse Educators are responsible to incorporate the complementary alternate therapy in to the Nursing curriculum, thereby promoting interest for student Nurse.

1. The Nurse educators should include the diversion technique and Puppet play as a relief measures.

2. Nurse Educators can provide, In service education to the health personnel's regarding alternative systems of therapies it can meet the needs of the health care system.

3. Nurse educators can conduct Seminars, Workshop, Conferences, Symposium, Demonstration and Micro teaching programme regarding Puppet play in relieving preoperative anxiety.

4. It provides an opportunity for nursing students to participate in various dramatic playfor anxiety management strategies.

Implications for Nursing research

1. Helps the Nursing researchers to focus and develop an insight on comprehensive alternative therapy.

2. Management and administration should give encouragement, motivation and financial support to do research on the effect of Puppet play for children undergoing abdominal surgery.

3. Further more effective study can be made by future research by the Nursing personnel.
4. Helps to do much research on various speciality departments.
5. Researchers can be done in various expressive therapies like dramatic play, music, painting therapy.

Implications for Nursing Administration

1. Nursing administrators can organize in-service education and can conduct conference regarding the benefits and techniques of Puppet play.
2. Nurse administrators should prepare a procedure manual and protocols regarding Puppet play for children undergoing surgery.
3. Nurse administrators must be assertive enough to discuss with hospital management in formulating policies regarding Puppet play for children's undergoing surgery. They can utilize the study for better quality care

6.4. RECOMMENDATIONS

1. A similar study can be conducted for a larger sample using random selection.
2. Similar study can be conducted among different age groups.
3. A comparison study with Play and drawing, or, Playing and music, can be done to determine the effect of these Puppet play in the level of anxiety
4. Same study can be conducted to assess the anxiety level of children undergoing various types of other surgery.
5. A longitudinal study can be conducted to assess the effect of Puppet play on anxiety of the children.
6. Similar study can be conducted using true experimental design.

7. This study can be done along with anxiolysis to improve the efficacy of the drugs.
8. A comparative study can be carried out to ascertain the effectiveness if different non pharmacological methods are used.

6.5.CONCLUSION

This study attempted to find out the Effectiveness of Puppet play in reducing the preoperative anxiety among children 6-12 years of age, undergoing abdominal surgery at ICH& HC,Egmore, Chennai-08.

The following conclusions were drawn from the study:

- Puppet play was found to be effective in reducing preoperative anxiety of children undergoing abdominal surgery.
- The post test score of the level of anxiety after Puppet play is less when compared to the pretest level of anxiety.
- There was association between selected demographic variables and the level of anxiety of the children undergoing abdominal surgery.

REFERENCES.

- 1) Abbott, K. (1990). Therapeutic use of play in the psychological preparation of preschool children undergoing cardiac surgery. *Issues Comprehensive Pediatrics*.
- 2) Alderson, P. (2006) *Children's consent to surgery*. Buckingham [England]: Open University Press.
- 3) Basavanthappa, B T. (2006) *Nursing Research*. 2nd edition. New Delhi: Jaypee brothers Medical publisher.
- 4) Bhaskar Rao, T. (2004) "Methods of Biostatistics", 2nd edition, Hyderabad : Paras Publishing.
- 5) Darbyshire, P. (2003) Guest editorial: From research on children to research with children. *Neonatal, Paediatric and Child Health Nursing*. 3(1):2-3.
- 6) Donna Koller, preparing children and adolescents for medical procedures, child life council evidence based practice statement Canada.
- 7) Eugenia and Jane, (1997) *Nursing care of the Children*. 10th Edition .Lippincott Publishers, Philadelphia.
- 8) Gerwe, C. (2001). *The orchestration of joy and suffering* Portland. OR; Algora publishing.
- 9) Golden, B. (1983) *Play therapy for hospitalized child*. hand book of play therapy. New York.
- 10) Hogan, A. & Harkerder, H. (2000) *Fundamentals of Family Members During Critical Judgement* . 2nd Edition. New York : Saunders Publication.
- 11) Kozler, Et Al., (2000) *Fundamentals Of Nursing Concepts Process And Practice* . Edition. New Delhi : Pearson Education.

- 12) Kothari, C. R. (2004) International Methodology : Methods And Techniques . 2nd Edition. New Age International Pvt Ltd.
- 13) Laban ,Y.M. (2002) Introduction to Maternity And Pediatric Nursing. 2nd Edition. Philadelphia: W .B. Saunders.
- 14) Lamontagane, Et Al., (1996) Children's preoperative coping and its effect on postoperative anxiety and return to normal activity.
- 15) Landreth, G. (2002) play therapy: The art of the relationship 2nd edition Newyork.
- 16)Mahajan, B K. (2006)Methods in Biostatistics. 6thed. New Delhi: Jaypee Brothers Medical Publisher.
- 17) Margeret, G. (1998), "Brouaribb's Introductory Pediatric Nursing", 5thedition , Lippincott publications, Philadelphia, Page No 47.
- 18) Marlow and Redding.(1998) Textbook of Pediatric Nursing. Harcourt India Pvt..Ltd., New Delhi, Pp 321-322.
- 19)Mondelo U.S, (2000), Brouaribb's Introductory Pediatric Nursing", 5th Edition, Lippincott Publishers, Philadelphia, Page No.47.
- 20)Morrow,V. & Richards, M. (2008) The Ethics of Social Research with Children:AnOverview, *Children & Society*. 6:10(2):90-105.9
- 21)Polit and Hunger, (1997), Essentials of Nursing Research – Methods Appraisal And Utilization", 4th edition, Lippincott publications, Philadelphia, Page No.451.
- 22)Richard M.lerner et al, Hand book of Applied developmental Science, child psycho therapy.
- 23)Wong, (2005) Wong's Essentials of Pediatric nursing. 7th- edition.Harcout, Pvt,Ltd., New Delhi, India, Page No.646.

JOURNAL REFERENCE

- 1) Athanassiadou E, Tsiantis J, Christogiorgos S, Kolaitis,G. (2009) An evaluation of the effectiveness of psychological preparation of children for minor surgery by puppet play and brief mother counseling. *PsychotherPsychosom.* 78 (1): 62-3.
- 2) Brewer S, Gleditsch SL, Syblik D, Tietjens ME, Vacik, HW. (2006) Pediatric anxiety: Child life intervention in day surgery. *Journal of pediatric nursing.* Feb; 21 (1): 13-22.
- 3) Bowmer, N. (2002) Therapeutic play and the impact on anxiety in hospitalized children. *Ky Nurse.* 2002 Jan-Mar; 50 (1) : 15.
- 4) Clatworthy, S. (1981) Therapeutic play: effects on hospitalized children. *Journal of association for care of children's health Spring.* 9 (4): 108-13.
- 5) Cassell, S. (2003) Effect of brief puppet therapy upon the emotional responses of children undergoing cardiac catheterization. *Journal of Consulting Psychology.*29(1):1-8.
- 6) Demarest DS, Hooke JF, Erickson, MT. (1984) Preoperative intervention for the reduction of anxiety in pediatric surgery patients. *Child Health Care.*spring; 12 (4): 179-83.
- 7) Fosson, A. (1990) Martin J, Haley J. Anxiety among hospitalized latency-age children. *Developmental and Behavioral Pediatrics,* 11(6): 324-327.
- 8) Faleiros F, Sadala ML, Rocha, EM. (2002) Article in Portuguese Therapeutic relation with children in the preoperative period: Use of play and Dramatization *Res EscEnferm USP.*Mar ; 36 (1) : 58-65.
- 9) Golden L, Pagala M, Sukhavasi S, Nagpal D, Ahmad A, Mahanta A. Giving toys to children reduces their anxiety about receiving premedication for surgery

- 10) Javid Mahomedi Etal. (2008) ' Effect of pre-operative play intervention on post surgery anxiety. Iran journal of Psychiatry.3: 20-24
- 11) Johnson PA, Stockdale, DF. (1975) Effects of puppet therapy on palmar sweating of hospitalized children. The Johns Hopkins Medical Journal. Jul; 137 (1) : 1-5.
- 12) Linn S, Beardslee W, Patenaude, AF. (1986) Puppet therapy with pediatric bone marrow transplant patients. Journal of pediatric psychology. Mar: 11 (1) : 37-46.
- 13) Rae WA, Worchel FF, Upchurch J, Sanner JH, Daniel, CA.(1989) The psychosocial impact of play on hospitalized children. Journal of pediatric psychology,14 (4): 617-627.
- 14) Schulz JB,Raschke D, Dedrick C, Thompson, M. (1981)The effects of a preoperational puppet show on anxiety levels of hospitalized children. Child Health Care. Spring; 9(4): 118-21.
- 15) Schrader, ES. (1979) Preparation play helps children in hospitals. AORN Journal. Aug; 30 (2) : 336, 340-1
- 16) Vessey, JA. & Mahon, MM. (1990) Therapeutic play and the hospitalized child. Journal of pediatric nursing. 5(5):328-331.
- 17) Weber, FS. (2010)The influence of playful activities on children's anxiety during the preoperative period at the outpatient surgical center. Journal of pediatrics . May-Jun; 86 (3): 209-14.
- 18) William Li HC, Lopez V, Lee TL. Effects of preoperative therapeutic play on outcomes of school-age children undergoing day surgery.
- 19) Zahr, LK. (1998) Therapeutic play for hospitalized preschoolers in Lebanon. Pediatric Nurse. Sep-Oct; 24 (5): 449-54.

NET SOURCE

1. [http://www.nursing times.net.com](http://www.nursingtimes.net.com)
2. [http://www.pubmed. com](http://www.pubmed.com)
3. <http://www.medscape.com>
4. <http://www.medline.com>
5. <http://www.google.com>

ANNEXURE :A

DESCRIPTION OF THE TOOL

Structured interview schedule to assess the level of preoperative anxiety among school aged children admitted in surgical ward

SECTION: A

SAMPLE No:

DEMOGRAPHIC DATA

1. Age of the child in years

- a) 6 to 8years b) 9 to 10 years
c) 11 to 12 years

2. Sex of the child

- a) Male b) Female

3. Place of residence

- a) Rural b) Urban
c) Semi urban

4. Order of birth

- a) First order b) Second order
c) Third order d) Fourth order

5. Education of the child

- a) 1st to 2nd std b) 3rd to 4th std
c) 5th to 6th std d) 7th std

6. Type of family

- a) Nuclear family b) Joint family

7. Previous history of surgery

- a) Nil b) One time
c) Two time

8. Religion

- a) Hindu b) Christian
c) Muslim

9. Age of the mother

- a) 20 to 25 b) 26 to 30
c) 31 to 35 d) 36 to 40

10. Occupation of the mother

- a) House wife b) Daily wager
c) Private employee

MODIFIED YALE PREOPERATIVE ANXIETY SCALE

S.No	Items	Never	Occasional	Always
		0	1	2
I	ACTIVITIES			
1.	Active and alert			
2.	Clean and tidy			
3.	The child looks around, is curious, plays with toys			
4.	The child does not explore or play may look down			
5.	Moving from toy to parent in unfocused manner			
6.	Tries to escape, actively trying to get away			
II	VOCALIZATION			
7.	Reads, asks questions, makes comments			
8.	Answers to adult but whispers, “baby talk”, only shakes its head			
9.	Quiet, no sounds or does not answer to adults			
10.	Weeping, moaning, grunting, silent cry			
11.	Child is crying, or might yell “no”			
12.	Crying high pitched and sustained cry			
III.	EXPRESSING EMOTIONS			
13.	Happy, smiling, or concentrated on the play			
14.	Neutral, no visible expression			

S.No	Items	Never	Occasional	Always
		0	1	2
15.	From worried to frightened, teary eyes			
16.	Distressed, crying, uncontrolled eyes might be wide opened			
IV.	STATE OF AROUSAL			
17.	Alert, looks around occasionally			
18.	Withdrawn, calm, and silent			
19.	Attentive, looks around quickly, might be startled by noises			
20.	Whines in panic, might cry or shun others			
V.	USE OF PARENTS			
21.	Busy Play			
22.	Seeks interaction with family members			
23.	Looks silently to family members			
24.	Keeps family members at a distance			
VI	PSYCHOSOMATIC RESPONSE			
25.	Becomes over tired			
26.	Complaints of aches and pain			
27.	Dryness of mouth			
28.	Complaints of nausea, vomiting			
VII	BIOLOGICAL RESPONSE			
29.	Maintain respiratory rate within the normal range 20-23 breath/ minute			
30.	Maintain Pulse rate within the normal range 85-95 beats/minute			

PUPPET PLAY SESSION

Definition: Puppet play refers to a play in which the actors are puppets and is used to prepare children for surgery by expressing feelings and learning what is involved.

Advantages

- It enables children to learn about procedures and events that concern them.
- Puppets are universally effective for communicating with children.
- It is a technique for emotional release, allowing children to re-enact frightening or puzzling hospital experiences.

Articles

- Hand puppet: 2
- Medical instruments play kit: 1

TIME DURATION: 15-20 MINUTES

- The therapist assumes the role of puppet child patient
- The child assumes the role of puppet doctor

1. Introduction

Therapist- Hai good morning, you are looking so cute shall we start our puppet play?

Puppet patient: I am here with my abdominal pain, but don't know what will happen to me? I am frightened and want to ask lots of question?

Puppet doctor (child patient):

2. Being in hospital

Puppet patient: I must go into hospital where I will stay in a room with other children and perhaps his parents but I won't be able to go to school or see friends for a few days and I does not like doctors examination or injection, what can I do doctor?

Puppet doctor:

3. Visiting the doctor

Puppet patient: The therapist gives the child doctors play kit and suggests that he use these as a puppet doctor to examine the puppet patient throat, ears, and chest

Puppet doctor:

4. Fear of injection

Puppet patient: Will I have an injection?

Puppet doctor: He took a play syringe from a doctors play kit and began injecting the puppet child patient held by the therapist while saying to himself repeatedly

Puppet patient: I am afraid of injections, I don't want another one

Therapist: Use tricks like counting to 10 and imagining I am doing something else I really like such as swimming on a lovely beach

5. Guilt

Puppet patient: Doctor, why am i going to have an operation? What is wrong with me? Am I being punished for something?

Puppet doctor:

Therapist: Encouraged the child to role play, the puppet doctors replies, tell him why he is having operation- he seems worried

6. Separation anxiety

Puppet patient: Will they take me away from my mother?

Puppet doctor:

7. Fantasies about the operation

Puppet patient: Will it hurt? Will I see them cutting my body part? Will they take out only my body part? Will I wake up again? Are you sure they won't cut anything else off my body

Puppet doctor:

Outside role (therapist): The main aim to make him be happy and stop future pain

8. Recovery

Puppet child patient: Will I wake up afterwards?

Puppet doctor:

Outside role: Yes of course, after the operation is over he will wake up as he wakes from sleep every morning

9. Some days after, the puppet child goes home after recovery with happy

ANNEXURE-B

பகுதி - அ

மக்கள் தொகை கணிப்பியல் சார்ந்த புள்ளி விவரத் தகவல்கள்

மாதிரி படிவ எண்: _____

- 1) குழந்தையின் வயது ஆண்டுகளில்
- அ) 6-8 வயது
- ஆ) 9-10 வயது
- இ) 11-12 வயது
- 2) குழந்தையின் பாலினம்
- அ) ஆண்
- ஆ) பெண்
- 3) குழந்தை வசிக்கும் இடம்
- அ) கிராமம்
- ஆ) மாநகரம்
- இ) நகரம்
- 4) பிறப்பின் வரிசை
- அ) முதலாவது குழந்தை
- ஆ) இரண்டாவது குழந்தை
- இ) மூன்றாவது குழந்தை
- ஈ) நான்காவது குழந்தை
- 5) குழந்தையின் கல்விநிலை
- அ) 1 முதல் 2ம் வகுப்பு
- ஆ) 3 முதல் 4ம் வகுப்பு
- இ) 5 முதல் 6ம் வகுப்பு
- ஈ) 7 வகுப்பு
- 6) குடும்ப வகை
- அ) தனிக் குடும்பம்
- ஆ) கூட்டுக் குடும்பம்

- 7) அறுவைசிகிச்சைக்கு உட்படுத்தப்பட்ட அனுபவம்
- அ) இல்லை
- ஆ) ஒரு முறை
- இ) இரண்டு முறை
- 8) மதம்
- அ) இந்து
- ஆ) இஸ்லாமியர்
- இ) கிறிஸ்துவர்
- 9) தாயின் வயது
- அ) 20 முதல் 25 வரை
- ஆ) 26 முதல் 30 வரை
- இ) 31 முதல் 35 வரை
- ஈ) 36 முதல் 40 வரை
- 10) தாயின் தொழில்நிலை
- அ) இல்லதரசி
- ஆ) தினக்கூலி வேலை
- இ) தனியார் ஊழியர்

பகுதி - ஆ

அறுவைசிகிச்சைக்கு செல்லும்முன் இருக்கும் கவலையை அளவீடு செய்யும் மாற்றப்பட்ட ஏல் அளவீடு

எண்	உருப்படிகள்	எப்போதும் இல்லை	எப்போதாவது	எப்பொழுதும்
		0	1	2
I	நடவடிக்கைகள்			
1.	சுறுசுறுப்பாகவும் மற்றும் விழிப்புடன் இருத்தல்			
2.	சுத்தமாக இருத்தல்			
3.	விளையாட்டு பொருட்களுடன் சரளமாக விளையாடுதல்			
4.	விளையாட்டில் கவனம் செலுத்தாமல் கீழே பார்த்து கொண்டு இருத்தல்			
5.	விளையாட்டு பொருட்களிடம் இருந்து பெற்றோரிடம் கவனம் சிதறல்			
6.	அந்த இடத்திலிருந்து வெளியேற முயற்சித்தல்			
II	குரல் வெளிப்பாடு			
7.	படித்தல், வினாக்கள் தொடுத்தல்			
8.	கேட்கிற வினாக்களுக்கு தலையை மட்டும் ஆட்டுதல் & முனுமுனுத்தல்			

எண்	உருப்புகள்	எப்போதும் இல்லை	எப்போதாவது	எப்பொழுதும்
		0	1	2
9.	அமைதியாக கேட்கப்படும் வினாக்களுக்கு பதிலளிக்காமல் இருத்தல்			
10.	அமைதியாக அழுதல்/குமுறல்			
11.	அழுதல்			
12.	மிகவும் சத்தத்துடன் அழுதல்			
III	மனஉணர்வின் வெளிப்பாடு			
13.	சந்தோஷமாக, விளையாட்டில் கவனம் செலுத்துதல்			
14.	முகத்தில் எந்தவிதவெளிப்பாடும் இல்லாமல் நடுநிலையாக இருத்தல்			
15.	கவலையுடன் கலந்த பயம், கண்களில் நீர் வடிதல்			
16.	அழகையை நிறுத்தமுடியாமல் இருத்தல்			
IV	தூண்டுதல்/எழுப்புதலின் நிலை			
17.	எப்போதாவது விழிப்புடன் இருத்தல்			
18.	பிரிந்து அமைதியாக இருத்தல்			
19.	விழிப்புடன் தன்னை சுற்றி பார்த்தல்			
20.	பதற்றத்தோடு அழுதல்			

எண்	உருப்புகள்	எப்போதும் இல்லை	எப்போதாவது	எப்பொழுதும்
		0	1	2
V	பெற்றோர்களை பயன்படுத்துதல்			
21.	மும்முரமாக விளையாடுதல்			
22.	குடும்ப நபர்களின் கவனத்தை ஈர்த்தல்			
23.	அமைதியாக குடும்ப நபர்களை பார்த்தல்			
24.	குடும்ப நபர்களிடம் இருந்து விலகி இருத்தல்			
VI	மன உடல் ரீதியாக வெளிப்பாடு			
25.	மிகவும் சோர்வடைந்துபோதல்			
26.	வலியை அறிவித்தல்			
27.	நாக்கு வறண்டு போதல்			
28.	வாந்தி வருகின்றது என்று அறிவித்தல்			
VII	உடல் ரீதியான வெளிப்பாடு			
29.	ஒரு நிமிடத்தில் ஏற்படும் சுவாசங்களின் எண்ணிக்கை (20-23) ஆக இருத்தல்			
30.	ஒரு நிமிடத்தில் ஏற்படும் நாடித் துடிப்பின் எண்ணிக்கை (85-95) ஆக இருத்தல்			

பொம்மலாட்ட விளையாட்டு நிகழ்வு

பயன்படுத்தப்படும் பொருட்கள்

1. கைபொம்மைகள்:2
2. மருத்துவ உபகரணங்கள் அடங்கிய விளையாட்டு பொருட்கள்

எடுத்துக் கொள்ளும் கால் அளவு: 15-20 நிமிடங்கள்

2 கைபொம்மைகளில், 1 கை பொம்மையை குழந்தையிடமும், 1 கை பொம்மை ஆராய்ச்சியாளரும் வைத்துக்கொள்ளவேண்டும். ஆராய்ச்சியாளர் பொம்மலாட்ட நோயாளியாகவும் ஒரு சில இடங்களில் ஆராய்ச்சியாளராகவும் செல்படுகிறார். அதேபோல் ஆராய்ச்சியாளர் குழந்தையிடம் பொம்மலாட்ட மருத்துவராக செயல்பட சொல்கிறார்.

1. அறிமுகம்

பொம்மலாட்ட ஆராய்ச்சியாளர்: ஹாய், வணக்கம், நீ ரொம்ப அழகா இருக்க, நாம பொம்மலாட்ட விளையாட்டை தொடங்கலாமா?

பொம்மலாட்ட நோயாளி: எனக்கு நிறைய வயிற்று வலி, அதனால் எனக்கு என்ன நடக்குமுன்னு தெரியலை? எனக்கு ரொம்ப பயமாக இருக்கு நான் உங்ககிட்ட நிறைய கேள்வி கேட்கணும்?

பொம்மலாட்ட மருத்துவர்:

2. மருத்துவமனை

பொம்மலாட்ட நோயாளி: எனக்கு உடம்பு சரியில்லை, அதனால் எங்க அப்பாவும், அம்மாவும் என்ன மருத்துவமனைக்கு கூட்டிட்டு போவாங்க, நான் மற்ற குழந்தைகளோடு இருக்கணும், என்னால் பள்ளிக்கூடம்

போகமுடியாது. என்னோடு நண்பர்களை பார்க்க முடியாது. அதுமட்டுமில்லாமல் எனக்கு மருத்துவ பரிசோதனை அல்லது ஊசி எல்லாம் பிடிக்காது. நான் என்ன செய்யனும்? மருதுவர் ஐயா?

பொம்மலாட்ட மருத்துவர்:

3. மருத்துவ விளையாட்டு உபகரணங்களை பயன்படுத்தி பரிசோதனை செய்தல்

பொம்மலாட்ட நோயாளி: ஆராய்ச்சியாளர், மருத்துவ விளையாட்டு உபகரணங்கள் அடங்கிய தொகுப்பை குழந்தையிடம் கொடுக்கிறார். அதை பயன்படுத்தி பொம்மலாட்ட மருத்துவர், பொம்மலாட்ட நோயாளியின் தொண்டை, காது, மார்பு, பகுதியை பரிசோதிக்கிறார்.

பொம்மலாட்ட மருத்துவர்:

4. ஊசிக்கு பயன்படுத்தல்

பொம்மலாட்ட நோயாளி: எனக்கு ஊசி போடுவீங்களா?

பொம்மலாட்ட மருத்துவர்: தற்போது மருத்துவ விளையாட்டு உபகரணங்களில் இருந்து ஊசியை எடுத்து பொம்மலாட்ட நோயாளிக்கு செலுத்துகிறார் என எதிர்பார்க்கப்படுகிறது.

பொம்மலாட்ட நோயாளி: எனக்கு ஊசி பயமாக உள்ளது. எனக்கு இன்னொரு ஊசி வேண்டாம்.

ஆராய்ச்சியாளர்: ஊசிபோடும்போது 1 முதல் 10 வரை எண்ணவும் அல்லது உங்களுக்கு பிடிச்ச விஷயங்கள் ஏதாவது நினைத்து கொள்ளவும் (நீச்சல் அடிப்பது போல்)

5. குற்ற உணர்வு

பொம்மலாட்ட நோயாளி: எனக்கு ஏன் அறுவைசிகிச்சை செய்கிறார்களா? நான் என்ன தவறு செய்தேன்? நான் எதற்காகவது தண்டிக்கப்படுகிறேனா?

பொம்மலாட்ட மருத்துவர்:

ஆராய்ச்சியாளர்: அறுவைசிகிச்சை என்ன காரணத்திற்காக செய்யப்படுகிறது என்பதை தெரிவித்தல்.

6. பெற்றோரை தற்காலிகமாக பிரிதலால் ஏற்படும் கவலை

பொம்மலாட்ட நோயாளி: என்னை என் அம்மாவிடமிருந்து பிரித்து விடுவார்களா?

பொம்மலாட்ட மருத்துவர்:

7. அறுவைசிகிச்சை பற்றிய கற்பனை

பொம்மலாட்ட நோயாளி: என்னோட உடம்பிலிருந்து எதையாவது எடுத்துவிடுவார்களா? நான் திரும்ப எழுந்திடுவேனா? கண்டிப்பாக என் உடம்பிலிருந்து ஏதாவது எடுத்து விடுவார்களா?

பொம்மலாட்ட மருத்துவர்: ?

8. இயல்புநிலை

பொம்மலாட்ட நோயாளி: நான் திரும்ப எழுந்திடுவேனா?

பொம்மலாட்ட மருத்துவர்:

ஆராய்ச்சியாளர்: அறுவைசிகிச்சை முடிந்த பின் நீ எப்பொழுதும் போல் தூக்கத்திலிருந்து எழுந்திடுவாய்?

9. சில நாட்களுக்கு பிறகு, பொம்மலாட்ட நோயாளி சந்தோஷமாக வீடு திரும்புகிறான்.

ANNEXURE-C

Ref: NO : 307 NMMC, CON, Ch-3/ DE on 25/7/13

From

Mrs.S. Sarala,
M.Sc(Nursing) II year,
College of Nursing,
Madras Medical College,
Chennai-3.

To

The Professor & HOD,
Department of Paediatric Surgery,
Institute of Child Health and Hospital for Children,
Egmore,
Chennai-8.

Through Proper Channel,

Respected Sir,

Sub: Requesting Permission to conduct a research study-regarding

I, Mrs.S.Sarala, studying M.Sc.Nursing II year ,College of nursing, Madras Medical college, kindly request you to grant me permission to conduct study for the proposed topic "A study to assess the effectiveness of puppet play on reducing pre-operative anxiety among children 6-12 years of age, undergoing abdominal surgery at Institute of Child Health, Egmore, Chennai-8." to fulfill the requirement of data collection. I assure you that it will not interfere with routine activities of the study settings.

Thanking you,

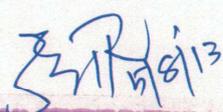
Date:

Yours obediently,

Place: Chennai

S. Sarala.

(Mrs.S.Sarala)


Dr. S.V. SENTHILNATHAN, M.S., M.Ch.,
Professor & HOD - Paediatric Surgery
ICH & HC - (MMC), Egmore, Chennai - 8.
Reg. No. : 36255

INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI -3

EC RegNo.ECR/270/Inst./TN/2013

Telephone No : 044 25305301

Fax : 044 25363970

CERTIFICATE OF APPROVAL

To
S.Sarala,
M.Sc.,(N) II year,
College of Nursing,
Madras Medical College, Chennai-3.

Dear Sarala

The Institutional Ethics committee of Madras Medical College, reviewed and discussed your application for approval of the proposal entitled "A study to assess the effectiveness of puppet play on reducing pre-operative anxiety children 6-12 years of age, undergoing abdominal surgery at institute of Child Health, Egmore, Chennai-8." No.14072013.

The following members of Ethics Committee were present in the meeting held on 06.07.2013 conducted at Madras Medical College, Chennai -3.

1. Dr.G.SivaKumar, MS FICS FAIS --- Chairperson
2. Prof. R. Nandhini MD -- Member Secretary
Director, Instt. of Pharmacology ,MMC, Ch-3
3. Prof. Shyamraj MD -- Member
Director i/c , Instt. of Biochemistry , MMC, Ch-3
4. Prof. P. Karkuzhali. MD -- Member
Prof., Instt. of Pathology, MMC, Ch-3
5. Prof. Kalai Selvi -- Member
Prof of Pharmacology, MMC, Ch-3
6. Prof. Siva Subramanian, -- Member
Director, Instt. of Internal Medicine, MMC, Ch-3
7. Thiru. S. Govindsamy. BABL -- Lawyer
8. Tmt. Arnold Saulina MA MSW -- Social Scientist

We approve the proposal to be conducted in its presented form.

Sd/ Chairman & Other Members

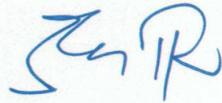
The Institutional Ethics Committee expects to be informed about the progress of the study, and SAE occurring in the course of the study, any changes in the protocol and patients information / informed consent and asks to be provided a copy of the final report.

R Nandini 17/7/13
Member Secretary, Ethics Committee

CERTIFICATE OF CONTENT VALIDITY

This is to certify that a tool prepared by Mrs. S.Sarala, M.Sc. Nursing, II year of College of Nursing, Madras Medical College, undertaking a research study on "A study to assess the effectiveness of puppet play on reducing preoperative anxiety among children 6-12 years of age, undergoing abdominal surgery at Institute of child Health & Hospital for Children, Egmore, Chennai-8", has been validated by me and is found to be valid and up to date and she can proceed with this tool to conduct the main study.

Signature :



Name :

Designation :

Date :

3/9/2013

Place :

Seal :

Dr. S.V. SENTHILNATHAN, M.S.,M.Ch.,
Professor & HOD - Paediatric Surgery
ICH & HC - (MMC), Egmore, Chennai - 8.
Reg. No. : 36255

CERTIFICATE OF CONTENT VALIDITY

This is to certify that a tool prepared by Mrs. S.Sarala, M.Sc. Nursing, II year of College of Nursing, Madras Medical College, undertaking a research study on **“A study to assess the effectiveness of puppet play on reducing preoperative anxiety among children 6-12 years of age, undergoing abdominal surgery at Institute of child Health & Hospital for Children, Egmore, Chennai-8 ”**, has been validated by me and is found to be valid and up to date and she can proceed with this tool to conduct the main study.

Signature : 

Name : ZEALOUS MARY.C

Designation : READER

Date : 16.08.13

Place :

Seal :



Dr No: 287 / CON. N.N.R. Ch / DT. 16/7/13

From

Mrs.S. Sarala,
M.Sc(Nursing) II year,
College of Nursing,
Madras Medical College,
Chennai-3.

To

The Director,
Institute of Child Health and Hospital for Children,
Egmore,
Chennai-8.

Through Proper Channel,

Respected Madam,

Sub: Requesting Permission to conduct a research study-regarding

I, Mrs.S.Sarala, studying M.Sc.Nursing II year ,College of nursing, Madras Medical college, kindly request you to grant me permission to conduct study for the proposed topic "A study to assess the effectiveness of puppet play on reducing pre-operative anxiety among children 6-12 years of age, undergoing abdominal surgery at Institute of Child Health, Egmore, Chennai-8." to fulfill the requirement of data collection. I assure you that it will not interfere with routine activities of the study settings.

Forwarded
16/7/13

Thanking you,

Date: 16.7.13

Place: Chennai

Yours obediently,
S. Sarala
(Mrs.S.Sarala)

To see HOD - Paed. Surgery
ML
19/7

Director and Superintendent
Institute of Child Health and
Hospital for Children

CERTIFICATE OF ENGLISH EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the dissertation work "A study to assess the effectiveness of Puppet play in reducing preoperative anxiety among children 6-12 years of age, undergoing abdominal surgery at Institute of Child Health and Hospital for Children, Egmore, Chennai -08." done by Mrs.S.Sarala II year M.Sc(N) student of college of Nursing, Madras Medical College, Chennai-03, is edited for English language appropriateness by Dr.John Sunil Manoah, M.A., M.Phil., Ph.D.,

Signature : *J. John Sunil Manoah*

Designation: *Asst. professor in English*

Seal : **Dr. J. John Sunil Manoah, M.A.
Assistant Professor in English**

