



# **A STUDY TO ASSESS THE EFFECTIVENESS OF PLAY THERAPY IN REDUCTION OF PAIN DURING VENIPUNCTURE PROCEDURE AMONG HOSPITALIZED PRESCHOOL CHILDREN IN SELECTED HOSPITALS, LUCKNOW.**

**Mr. Himanshu Kumar\*, Mrs. Sony Verma\*\*, Mr Mahak Singh Nehra\*\*\***

Tutor\* Assistant Professor\*\* Demonstrator\*\*\*

Dr. Achal Singh Yadav Institute of Nursing and Paramedical Sciences, Lucknow, UP, India\*

Faculty of Nursing, Uttar Pradesh University of Medical Sciences Saifai, Etawah, UP, India\*\*

**ABSTRACT:** Children are major consumers of health care. The need for particular focus on children in healthcare setting has undergone a major change in recent decade. Hospitalization to any child is a very unpleasant and traumatic experience for child as well as parents. Hospitalized children require more than recreational play because illness and hospitalization constitute crisis in a child's life and since this situation are brought with overwhelming stress, children need to play out their fears and stress as a means of coping with these stresses. Surgery can be a threatening experience for everyone, especially for children

Every child goes through many stages of social development. An infant or very young child will play alone happily. If another child wanders into the scene, he or she may be physically attacked or pushed out of the way. Next, the child can play with another child, gradually learning to share and take turns. Eventually, the group grows larger, to three or four children. By the time a child enters kindergarten; he or she can usually join in and enjoy group experiences.

The calculated chi square value revealed that posttest level of pain among the participant had No significant association with any one of demographic variables as the obtained value was greater than table value, hence hypotheses 3 was rejected. There was no significant association with posttest level of pain with selected demographic variables.

**KEYWORDS:** PRE-SCHOOLERS, VENIPUNCTURE PROCEDURE, EFFECTIVNESS, PAIN

## INTRODUCTION:-

Child care providers are our children first teachers, and therefore play an integral role in our systems of early childhood education. Quality care from a young age can have a huge impact on the future successes of children. Children always need special care to survive & thrive. Good health of previous members of society should be ensured as prime importance in all countries. As said by Karl Meninger “what is done to children, they will do to the society” children are wealth of tomorrows. Every child goes through many stages of social development. An infant or very young child will play alone happily. If another child wanders into the scene, he or she may be physically attacked or pushed out of the way. Next, the child can play with another child, gradually learning to share and take turns. Eventually, the group grows larger, to three or four children. By the time a child enters kindergarten; he or she can usually join in and enjoy group experiences. Children express their needs and stories differently than do adults. Children do not yet have the vocabulary to express themselves as adults do. Historically, children have been considered "miniature adults". Children were expected to take on tasks as adults, and were expected to be able to communicate as adults.

## OBJECTIVES OF THE STUDY:-

1. To assess the level of pain among children undergoing venipuncture procedure in experimental group after play therapy.
2. To assess the level of pain among children undergoing venipuncture procedure in control group.
3. To compare the level of pain scores of experimental and control group.
4. To find out the association between the level of pain among children in experimental group with their selected demographical variables

## METHODOLOGY:-

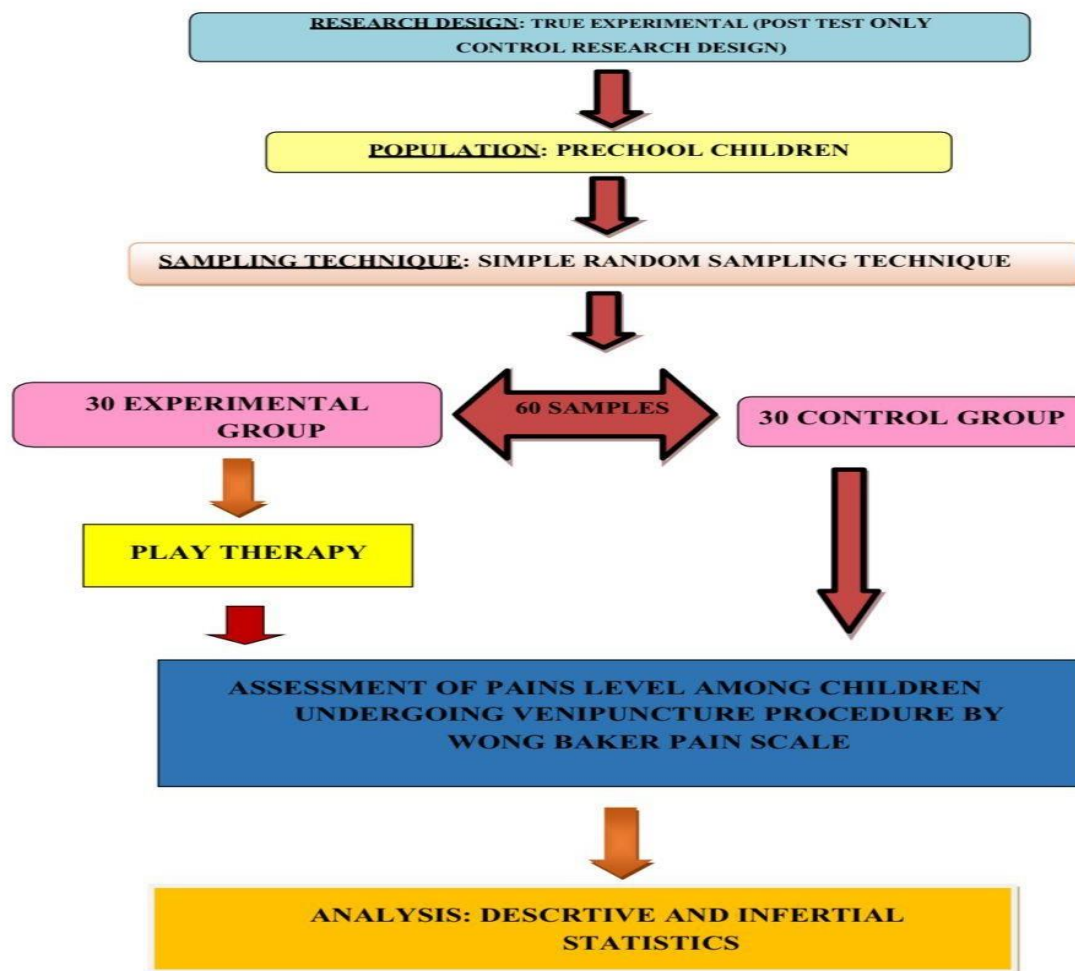
- ❖ **Research Approach:** Quantitative approach – Experimental
- ❖ **Research Design:** True-experimental post test design only
- ❖ **Population:** In this study population consists of pre-schooler children under venipuncture from selected pediatric hospital of Lucknow, U.P.
- ❖ **Site and setting of the study:** The selected paediatrics hospital PICU and general ward were the setting.
- ❖ **Sampling Technique:** simple random technique adapting simple Random technique
- ❖ **Sample and Sample Size:** PICU and general ward venipuncture preschooler children admitted in hospital

Total sample size consists of 60 (Experimental group 30 samples & control group 30 samples)

## ❖ Variables:

1) **Independent Variable:** Play therapy3) **Dependent Variable:** level of pain of hospitalized preschooler children

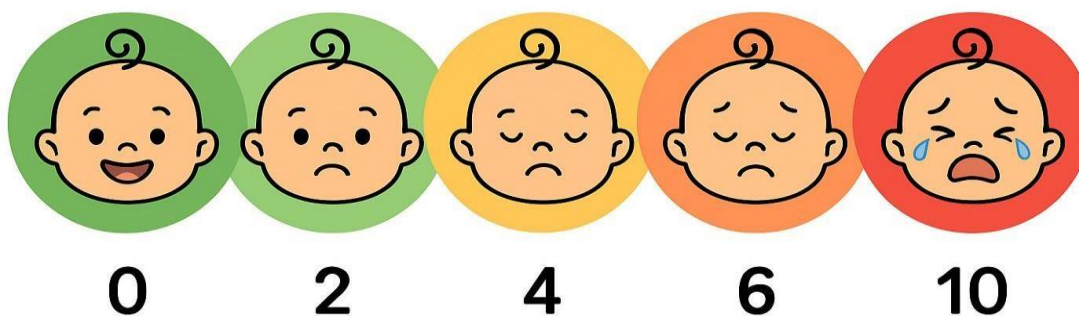
Figure: 2 - Schematic Representation Of Research Design



❖ **Tools:**

- a) **Part 1:** It consists of the socio demographic data of the participants under the study.  
Age, gender, previous OPD exposure to the hospitals, no. of hospitalization within last years
- b) **Part 2:** A standardized Wong-baker faces pain rating scale is a tool that uses a combination of faces, numbers, and words to help a person effectively communicate the severity of the pain

## WONG-BAKER FACES PAIN RATING SCALE



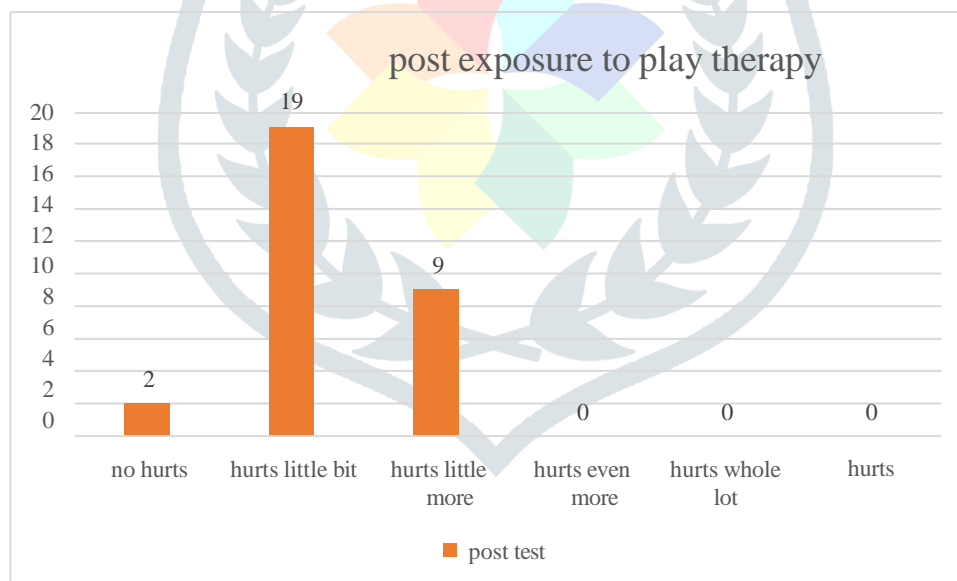
### RESULT:-

- ❖ It shows The effectiveness of play therapy among experimental group paired t test used and the obtained value was 16.85 which was higher than table value Hence hypotheses 2 was accepted. Play therapy was effective to reduce pain level among participants during invasive procedures
- ❖ It shows in post test 19 samples had pain level 2, 9 had pain level 4 and 2 had no pain level.  
To find out the effectiveness of play therapy among experimental group paired t test used and the obtained value was 16.85 which was higher than table value Hence hypotheses 2 was accepted. Play therapy was effective to reduce pain level among participants during invasive procedures.
- ❖ It shows In post test 13 samples had pain level hurts whole lot i.e. 8 score, 17 had pain level hurts even more. To find out the effect among control group paired t test used and the obtained value was .00 which was less than table value, Hence hypotheses 1 was rejected. There was no effect on pain level during invasive procedures among control group.
- ❖ This suggests Play therapy was effective to reduce pain level among participants during invasive procedures
- ❖ The calculated chi square value revealed that post test level of pain among the participant had No significant association with any one of demographic variables as the obtained value was greater than table value, hence hypotheses 3 was rejected. There was no significant association with post test level of pain with selected demographic variables.

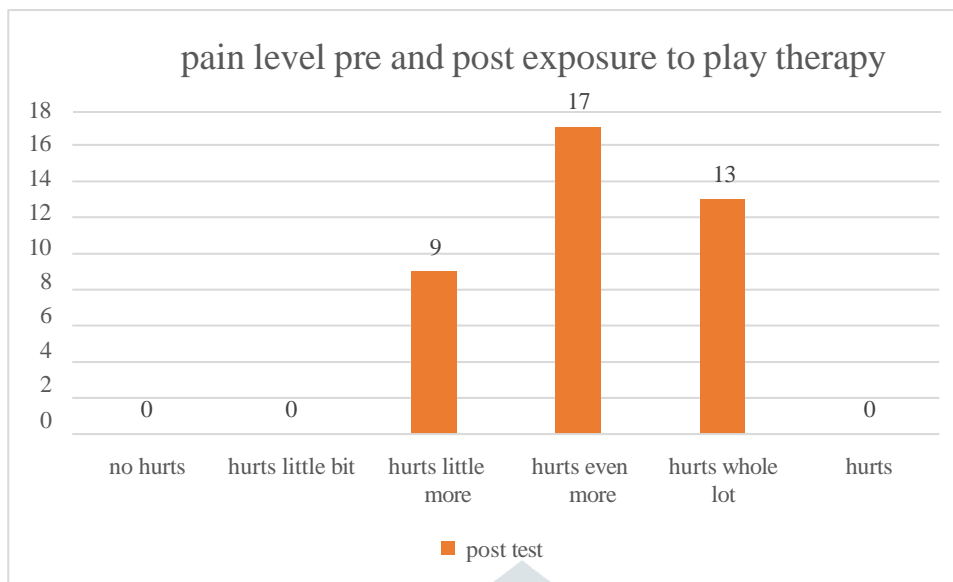
- ❖ In post test 19 samples had pain level 2, 9 had pain level 4 and 2 had no pain level.

To find out the effectiveness of play therapy among experimental group paired t test used and the obtained value was 16.85 which was higher than table value Hence hypotheses 2 was accepted. Play therapy was effective to reduce pain level among participants during invasive procedures.

- ❖ In post test 13 samples had pain level hurts whole lot ie 8 score, 17 had pain level hurts even more. To find out the effect among control group paired t test used and the obtained value was .00 which was less than table value, Hence hypotheses 1 was rejected. There was no effect on pain level during invasive procedures among control group.
- ❖ The calculated chi square value revealed that post test level of pain among the participant had No significant association with any one of demographic variables as the obtained value was greater than table value, hence hypotheses 3 was rejected. There was no significant association with post test level of pain with selected demographic variables.
- ❖ In experimental group to find out the effectiveness of play therapy among experimental group paired t test used and the obtained value was 16.85 which was higher than table value Hence hypotheses 2 was accepted. Play therapy was effective to reduce pain level among participants during invasive procedures. And in control group to find out the effect among control group paired t test used and the obtained value was .00 which was less than table value, Hence hypotheses 1 was rejected. There was no effect on pain level during invasive procedures among control group.



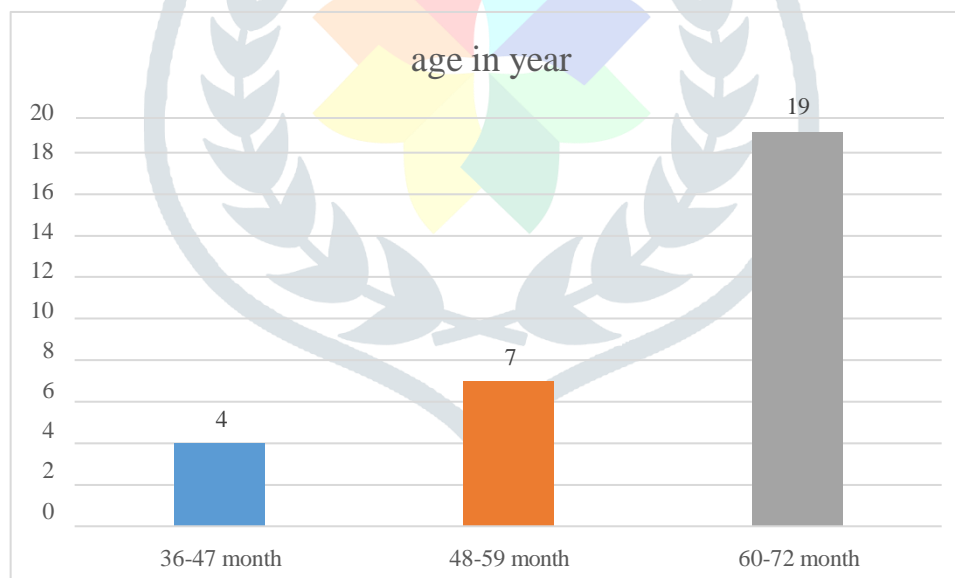
**Figure no 2:- Distribution of samples based on level of pain among control group after effect.**



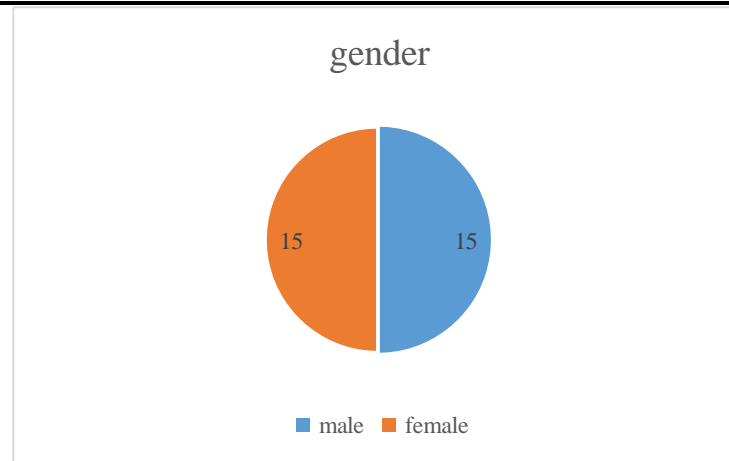
Based on table no and figure no. revealed in post test 13 samples had pain level hurts whole lot i.e 8 score, 17 had pain level hurts even more

### Distribution of samples based presentation

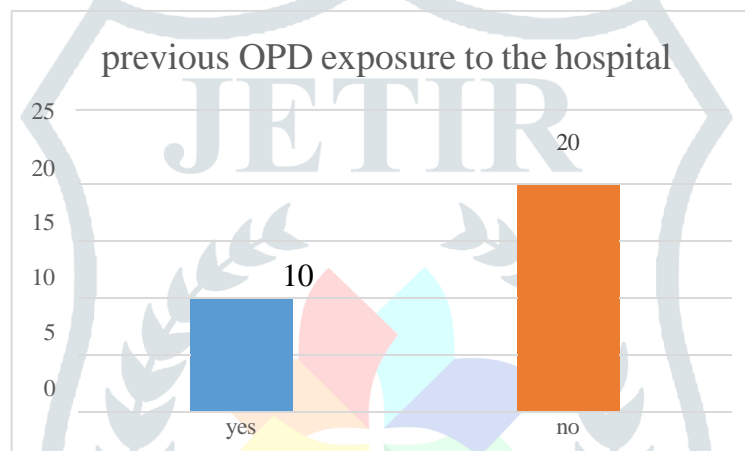
**Age in year:** - Most of the samples 19 belong to the age between 60-72 months, 7 belongs to 48-59 months and 4 belongs to 36-47 months.



**Based on gender:-**50% samples are male and 50% are females.

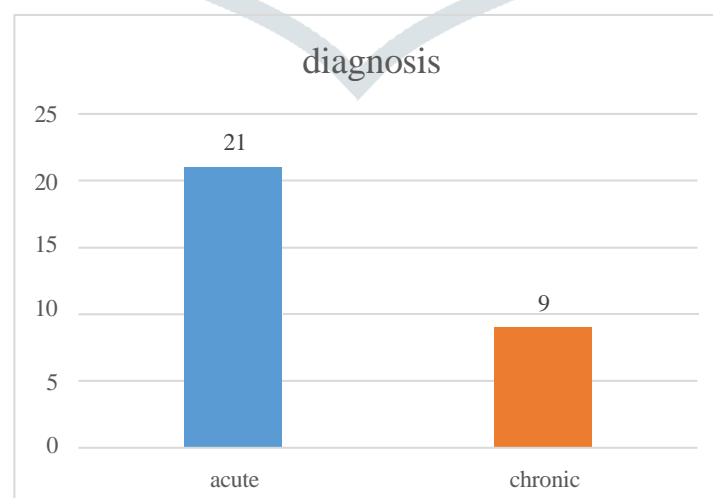


**Based on previous OPD exposure to the hospital:** - most of the samples 20 had no previous OPD exposure In 1 year, 10 had previous OPD exposure history.



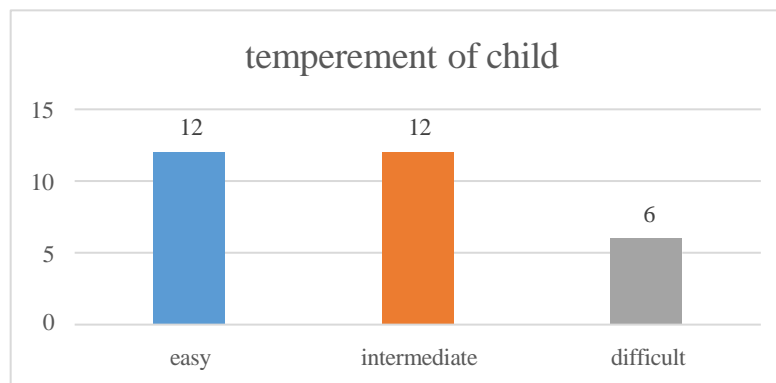
**Based on number of hospitalization within last one year** 12 samples had hospital stay one time last year, 8 had either 2 time or no hospitalization, 2 had 3 times or more hospitalization within last one year.

**Based on diagnosis:-**most of the participant had acute illness 21, and remaining 09 had chronic illness.

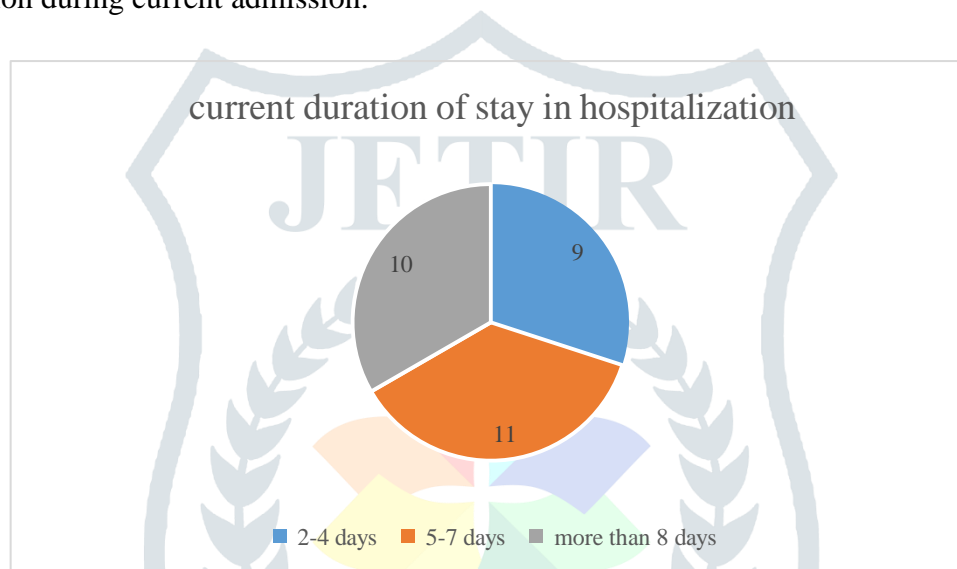


**Based on temperament of child** of the samples 12 had either easy temperament or intermediate temperament, 6 had difficult temperament.





**Based on current duration of stay in hospitalization** most of the participants 15 had more than 8 days duration of hospital stay during current hospitalization, 10 had 2 days -4 days stay and 5 had 5 days to 7 days hospitalization during current admission.



**Assess the level of pain among experimental group after play therapy.**

**Table no 1:- Distribution of sample based on level of pain among experimental group after play therapy.**

Pain Level of participant	No hurts	Hurts little bit	Hurts little more	Hurts even more	Hurts whole lot	Hurts worst
Post test	2	19	9	0	0	0

## CONCLUSION:

### Section I: - Categorization of experimental group based on demographic variables.

Most of the samples 21 belongs to the age between 36-47 months, most of the samples are female 16, most of the samples 17 had no previous OPD exposure In 1 year, 16 samples did not had hospitalization stay within last 1 year, most of the participant had acute illness 20, 16 had difficult temperament, most of the participants 15 had more than 8 days duration of hospital stay during current hospitalization.



**Section II:- Categorization of control group based on demographic variables.**

Most of the samples 19 belongs to the age between 60-72 months, 50% samples are male and 50% are females. most of the samples 20 had no previous OPD exposure, 12 samples had hospital stay one time last year, most of the participant had acute illness 21, 12 had either easy temperament or intermediate temperament. most of the participants 15 had more than 8 days duration of hospital stay during current hospitalization.

**Section III: - Assess the level of pain among experimental group after play therapy.**

In post test 19 samples had pain level 2, 9 had pain level 4 and 2 had no pain level.

**Section IV:- Assess the level of pain among control group after effect.**

In post test 13 samples had pain level hurts whole lot ie 8 score, 17 had pain level hurts even more.

**Section V: - To determine the effectiveness of play therapy on reduction of pain among experimental group.**

To find out the effectiveness of play therapy among experimental group paired t test used and the obtained value was 16.85 which was higher than table value Hence hypotheses 2 was accepted. Play therapy was effective to reduce pain level among participants during invasive procedures

**Section VI: - To compare the significant difference in pain level among experimental and control group after intervention with play therapy.**

In experimental group to find out the effectiveness of play therapy among experimental group paired t test used and the obtained value was 16.85 which was higher than table value Hence hypotheses 2 was accepted. Play therapy was effective to reduce pain level among participants during invasive procedures. And in control group to find out the effect among control group paired t test used and the obtained value was .00 which was less than table value, Hence hypotheses 1 was rejected. There was no effect on pain level during invasive procedures among control group.

**Section VII: - To find out an association between post test level of pain among experimental group with demographic variables.**

The calculated chi square value revealed that post test level of pain among the participant had No significant association with any one of demographic variables as the obtained value was greater than table value, hence hypotheses 3 was rejected. There was no significant association with post test level of pain with selected demographic variables.

## REFERENCES

1. Barbera F. Nurses' dictionary. 24<sup>th</sup> ed. Philadelphia: Elsevier Publications. P. 127
2. Basavanthappa BT. Nursing research 1<sup>st</sup> edition. Bangalore: Jaypee Brothers medical publishers; 2003.
3. Bastin T, Children and illness psychological aspect of children, archives of pediatrics, 2000;7 (4): 405-9
4. Bolig R, Yoltson K A, Nissen H L, medical play activities and preparation, 1991; 20 (4); 225 -9
5. Chirstense P.J, Kenny. J.N. Nursing process. Application of conceptual framework. 1<sup>st</sup> edition. Philadelphia: Mosby. 1989.
6. Denise F. Polit, Bernadette P Hungler, Nursing research – principles and methods, 2<sup>nd</sup> edition, Philadelphia:Lipincott publishers: 1999.
7. Furtado M C, Lima R A, Playing in hospital, Rev Esc Enferm usp, 1999; 334 (4): 364-9.
8. Ingalls, Salerno, Maternal and child health nursing, 9<sup>th</sup> edition, Newyork: mosby; 1999.
9. Laura A Talbot. Principles and practice of nursing research. 1<sup>st</sup> edition Missouri: Mosby – publishers: 1995.
10. Marilyn J, Hocken B, David W. Wong's essentials of paediatric nursing. 8<sup>th</sup> ed. Philadelphia: Elsevier Publications; 2010. p. 658-83.
11. Mariner. A nursing theorists and their work. 1<sup>st</sup> edition. Toronto C.V. Company 1986.
12. Nancy Burns, Susan K Grove. Understanding nursing research 1<sup>st</sup> edition.
13. Neeraja KP. Textbook of growth and development. New Delhi: Elsevier 2006.

## JOURNALS

1. Anna Thomas. Effectiveness of play activities in reducing the level of anxiety among hospitalized children in selected hospitals at Mangalore. Unpublished thesis; 2010
2. Bonnie N. The effectiveness of play therapy on development achievement of abused children. IPT journal. 2000; 14 (2) ; 6-8.
3. Bossert E. Factors influencing the coping of hospitalized school aged children. Journal of paediatrics nursing. 1994; 9(5): 299-306.
4. Chambers MA Play as therapy for the hospitalized child, Journal of clinical Nursing, 1993;2(6):349 – 353.
5. Clatworthy S, Simson K, Tiedman M.E, Child Drawing Hospital, An Instrument Designed to Measure the Emotional Status of Hospitalization School Aged Children, Journal of pediatric Nursing, 1999; 14 (1):2-18
6. Couch Promoting Play activities. IPT journal 1999; 347 – 349.
7. Dee C, International journal of play therapy, jul 2009, vol 18 (3), 162 – 75
8. Doverly N, Therapeutic use of play in hospital, British Journal Of Nursing, 1992: 14- 27;(2) ;77 ; 79-81

9. Favara the effect of the use of therapeutic play, IPT Journal 2001;86 (2): 16-20
10. Gills Angela J. The effect of play on immobilized children in hospital. Indian journal of Nurses studies, 2001 ; 89 : 261 – 269.
11. Gilis, research and practices/association for play activities, Canadian Journal of Play activities. 1999;9(2): 39-43
12. Gordon, role of anxiety sensitivity, journals of behavioural medicine, 1996, 19(6), 577-86
13. Haiat H, Bar Mor G, Shocbat M, the word of child: A world of play even in the hospital, Journal of Paediatric Nurses, 2003;18(3): 209-214
14. Javad M, Fatemeh M, Zahra S, Bahar A, Narges A, Jaleh P. Effect of preoperative play interventions on post surgery anxiety. Iran J Psychiatry 2008;3:20-4.
15. Jones S M, Fiser H.D, Living Stone R. L. Behaviour changes in paediatrics intensive care units. American journal of disease children. 1992; 146 : 375 –379.
16. Katz K. Fogelman R, Attias J, Baron E, Soudry M. Anxiety reaction in children during removal of their plaster cast. Journal of bone joint surgery. 2001; 83; 388-390.
17. Marcus D, Play activities with young children, Indian Journal of paediatrics, 1992;59 (1): 53 – 60

