

“A Study To Assess The Effectiveness Of Art Therapy On Level Of Anxiety Among Hospitalized Children (3-6 Years) In Pediatric Ward IGMC & Hospital Shimla (H.P.)”

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ABSTRACT

Introduction: Anxiety is one of the most common experiences of every hospitalized child; it adversely affects the course of hospital stay and affects the quality of nursing care as well. During the clinical placement, we had witnessed situations such as anxiety in children and the difficulties faced by the staff nurses who are responsible for their care, and while reviewing the literature, the we came across studies relating to Art therapy and its effectiveness in reducing children's anxiety. **Objectives:** To assess the level of anxiety among hospitalized children (3-6 years) in Paediatric ward IGMC & hospital Shimla (H.P.). To assess the effectiveness of art therapy on level of anxiety among hospitalized children (3-6 years) in Paediatric ward IGMC & Hospital Shimla (H.P.). To find out the association between pre-test and post- test score with selected demographic variables. **Method and Material** Pre-test Post-test approach was adopted by using pre-experimental design. The sample size was 40 hospitalized children (3-6 years) in Paediatric ward IGMC & Shimla, (H.P.). They were selected by using the purposive sampling technique. Ethical approval was taken from the concerned departments. The tool consisted of two sections. Section - A consist of Socio-demographic variables, and Section-B was standardized anxiety rating scale. Tool was validated by various experts. After conducting pre-test daily for three days, Art therapy was administered to the hospitalized children daily for three days. Post-test was conducted daily for three days. Statistical analysis of the acquired data was done by calculating mean, median, mean percentage, mean difference, standard deviation, paired-t test and chi square test. **Results:** Finding of the study in Pre-test on 1st day revealed that 27(67.5%) had high anxiety during hospitalization, 11(27.5%) had very high anxiety and 2(5%) children had some anxiety. On 2nd day finding revealed that 26(65.0%) had high anxiety during hospitalization, 11(27.5%) had some anxiety and 3(7.5%) children had very high anxiety. On 3rd day finding revealed 24(60.0%) had some anxiety during hospitalization, 16(40.0%) had high anxiety. In post- test finding of study 1st day revealed 27(67.5%) had little anxiety while 8(20%) had no anxiety and 5(12.5%) had some anxiety. On 2nd day finding revealed 21(52.5%) had little anxiety, 18(45.0%)

had no anxiety. while 1(2.5%) had some anxiety. On 3rd day finding revealed that 30(75.0%) had no anxiety while 10(25.0%) had little anxiety. **Conclusion:** The pre -test mean score of anxiety is more than the mean of post -test. The calculated 't' value was greater than the table value at 0.05 level of significance. Hence, it can be concluded that the art therapy was effective in reducing the anxiety level of hospitalized children (3-6 years).

Key words: Art therapy, Anxiety level, Hospitalized children (3-6years).

INTRODUCTION

Paediatrics, or children's health, is concerned with the well-being of children from conception to puberty. It is deeply concerned with all elements of children's growth and development, as well as with each child's unique opportunity to reach their full potential as a healthy adult.ⁱ

For children, hospitalisation entails leaving their home, caregivers, and siblings, as well as a disruption in their everyday activities and routines. Furthermore, hospital wards are frequently associated with remaining in a "cold and medical" environment, where patients fear medical examinations, pain, uncertainty, and a loss of control and safety.ⁱⁱ

Art therapy is a type of expressive treatment that involves the use of art materials such paints, chalk, and markers. Traditional psychotherapy ideas and procedures are combined with an understanding of the psychological components of the creative process, particularly the emotive characteristics of various art materials, in art therapy.ⁱⁱⁱ

A study was conducted Online art therapy in elementary schools during COVID-19: results from a randomized cluster pilot and feasibility study and impact on mental health. In COVID-19 crisis suggests that children may experience increased anxiety and depression as a result of the pandemic. To prevent such school and mental health-related problems, there is a timely need to develop preventive strategies and interventions to address potential negative impacts of COVID-19 on children's mental health, especially in school settings. Results from this pilot and feasibility study showed that both an emotion-based directed drawing intervention and a mandala drawing intervention may be beneficial to improve mental health in elementary school children, in the context of the current COVID-19 pandemic.^{iv}

OBJECTIVES OF THE STUDY

- 1) To assess the level of anxiety among hospitalized children (3-6 years) in Paediatric ward IGMC & hospital Shimla (H.P)
- 2) To assess the effectiveness of art therapy on level of anxiety among hospitalized children (3-6 years) in Paediatric ward IGMC & Hospital Shimla (H.P.)

3) To find out the association between pre-test and post- test score with selected demographic variables.

HYPOTHESIS

H₁: There will be significant difference between pre-test and post-test score of hospitalized children (3-6 years) in Pediatric ward IGMC & Hospital Shimla. (H.P.)

H₀: There will be no significant difference between the pre-test and post-test score of hospitalized children (3-6 years) in Pediatric ward IGMC & Hospital Shimla. (H.P.)

RESEARCH SETTING

The study was conducted in selected hospitals of Shimla, (H.P.). Rationale of selecting the setting of the study was feasibility of conducting the study, availability of the sample, economy of time, easy to assess and geographical proximity.

POPULATION

All the children new admitted in the ward were be considered as the population of the study.

Target population:

All children admitted in IGMC & hospital (H.P.) age group between 3-6 years.

SAMPLE SIZE:

The sample was consists of 40 hospitalized children in selected hospital of Shimla (H.P.).

SAMPLING TECHNIQUE

40 hospitalized children were selected by Purposive sampling technique. Purposive sampling technique is a non- probability sampling technique in which elements are chosen from the whole population based on purpose of the study.

SAMPLING CRITERIA

The sample were selected by the following predetermined criteria

Inclusive criteria

- Both male and female youngsters aged 3-6 years old.
- Parents' and children's willingness to participate.
- Those who have been admitted to the hospital.

Exclusive criteria

- Mentally retarded children,
- Children with hearing impairments,
- Children in solitary confinement.

DEVELOPMENT & DESCRIPTION OF TOOL

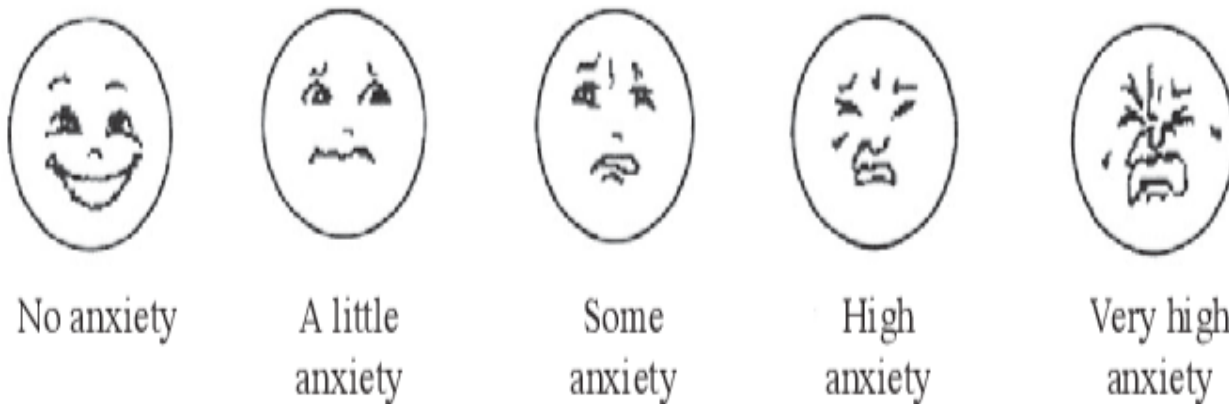
Tool was prepared on the basis of objectives of the study. 5- facial anxiety scale was selected to assess the anxiety level of hospitalized children.

The tool consisted of 2 sections:

Section A:- Socio demographic variable:- the section consist of demographic data of respondent such age, gender, education of the children, , the presence of a caregiver with the child, duration of hospitalization, play activity, education of the father, education of the mother of the child during hospitalization and mental illness in the family.

Section B:- It was comprise of 5 facial anxiety scale to assess the level of anxiety in hospitalized children.

5- Five facial anxiety scale



Scoring key: -

The score were interpret as given below:-

- 1 No anxiety :Smiling face
- 2 A little anxiety :Frowning face
- 3 Some anxiety :Frowning and wailing
- 4 High anxiety :Wailing with eye closed and tears
- 5 Very high anxiety : Frowning with eye closed with tears wailing and mouth turned down.

RESULT AND DISCUSSION:

SECTION I: FINDING RELATED TO SOCIO DEMOGRAPHIC VARIABLE OF 40 HOSPITALIZED CHILDREN OF IGMC AND HOSPITAL SHIMLA (H.P.)

Frequency and percentage distribution of selected demographic variable of sample N -40

Variables	Frequency (f)	Percentage (%)
Age in years		
3 years	5	12.5
4 years	10	25.0
5years	15	37.5
6years	10	25.0
Gender		
Male	16	40.0
Female	24	60.0
Education of the child		
Pre-nursery	5	12.5
Nursery	10	25.0
1 st standard	16	40.0
2 nd standard	9	22.5
Type of family		
Nuclear family	27	67.5
Joint family	13	32.5
Single parent family	-	-
Any others	-	-

Presence of caregiver with the child		
Father	8	20
Mother	32	80
Grandparents	-	-
Relatives	-	-
Play activities of the child during hospitalization		
Reading books	13	32.5
Playing with toys	6	15.0
Drawing	11	27.5
Watching cartoons	10	25.0
Education of father		
Illiterate	-	-
Primary education	2	5.0
Secondary education	10	25.0
Undergraduate	24	60.0
Post graduate& above	4	10.0
Education of mother		
Illiterate	-	-
Primary education	4	10.0
Secondary education	9	22.5
Undergraduate	25	62.5
Post graduate& above	2	5.0
Mental illness present in family		
Yes	-	-
No	40	100

SECTION II: FINDING RELATED TO PRE-TEST AND POST -TEST ANXIETY SCORE OF HOSPITALIZED CHILDREN (3-6 YEARS).

Table 4.2: Frequency and percentage distribution of pre-test anxiety scores among hospitalized children on 1st day.

N=40

CRITERIA MEASURE OF PRETEST ANXIETY SCORE 1 ST DAY		
SCORE LEVEL	f	(%)
NO ANXIETY	0	0
LITTLE ANXIETY	0	0
SOME ANXIETY	2	5
HIGH ANXIETY	27	67.5
VERY HIGH ANXIETY	11	27.5
Maximum score =5		Minimum score=0

Table 4.3- Mean, Median, Range, and SD Pre-test anxiety level 1st day

N=40

Descriptive Statistics	Mean score	S.D.	Median Score	Maximum	Minimum	Range
PRETEST ANXIETY (1 ST DAY)	4.22	0.530	4	5	3	2

Maximum score =5

Minimum score =0

Table 4.4: Frequency and percentage distribution of Post-test anxiety scores among hospitalized children of IGMC &Hospital, Shimla (H.P.)

N=40

CRITERIA MEASURE OF POSTTEST ANXIETY SCORE (1 ST DAY)		
SCORE LEVEL	f	(%)
NO ANXIETY	8	20
LITTLE ANXIETY	27	67.5
SOME ANXIETY	5	12.5
HIGH ANXIETY	00	
VERY HIGH ANXIETY	00	
Maximum =5		Minimum score=0

Table 4.5: Depict Mean, Standard deviation, Median of Post-test anxiety score of hospitalized children in IGMC & Hospital Shimla. (H.P.)

N=40

Descriptive Statistics	Mean	S.D.	Median Score	Maximum	Minimum	Range
POSTTEST ANXIETY (1 ST DAY)	1.92	0.572	2.00	3.00	1	2

Table 4.6: Frequency and percentage distribution of pre-test anxiety scores among hospitalized children on 2nd day

N=40

CRITERIA MEASURE OF PRETEST ANXIETY SCORE 2ND DAY

SCORE LEVEL	F	(%)
NO ANXIETY	0	0
LITTLE ANXIETY	0	0
SOME ANXIETY	11	27.5
HIGH ANXIETY	26	65.0
VERY HIGH ANXIETY	3	7.5

Maximum score =5

Minimum score =0

Table 4.7- Mean, Median, Range, and SD Pre-test anxiety level of hospitalized children (3-6years).

N=40

Descriptive Statistics	Mean score	S.D.	Median Score	Maximum	Minimum	Range
PRETEST ANXIETY (2 ND DAY)	3.80	.563	4	5	3	2

Maximum score =5

Minimum score=0

Table 4.8: Frequency and percentage distribution of Post-test anxiety scores among hospitalized children of IGMC &Hospital, Shimla (H.P.) on 2nd day.

N=40

CRITERIA MEASURE OF 2ND DAY POST TEST ANXIETY SCORE

SCORE LEVEL	f	(%)
NO ANXIETY	18	45.0
LITTLE ANXIETY	21	52.5
SOME ANXIETY	1	2.5
HIGH ANXIETY	0	0
VERY HIGH ANXIETY	0	0

Maximum score =5

Minimum score =0

Table 4.9- Mean, Median, Range, and SD Post-test anxiety level of hospitalized children (3-6years).

N=40

Descriptive Statistics	Mean	S.D.	Median Score	Maximum	Minimum	Range
POSTTEST ANXIETY (2 ND DAY)	1.57	.549	2.00	3.00	1.00	2.00

Table 4.10: Frequency and percentage distribution of pre-test anxiety scores among hospitalized children on 3rd day

N=40

CRITERIA MEASURE OF PRETEST ANXIETY SCORE 3RD DAY

SCORE LEVEL	f	(%)
NO ANXIETY	0	0
LITTLE ANXIETY	0	0
SOME ANXIETY	24	60.0
HIGH ANXIETY	16	40.0
VERY HIGH ANXIETY	0	0

Maximum score =5

Minimum score =0

Table 4.11- Mean, Median, Range, and SD Pre-test anxiety level of hospitalized children (3-6years).

N=40

Descriptive Statistics	Mean score	S.D.	Median Score	Maximum	Minimum	Range
PRETEST ANXIETY(3 RD DAY)	3.40	.496	3	4	3	1
Maximum score =5				Minimum score =0		

Table 4.12: Frequency and percentage distribution of Post-test anxiety scores among hospitalized children of IGMC &Hospital, Shimla (H.P.) on 3rd day.

N=40

CRITERIA MEASURE OF 3 RD DAY POST TEST ANXIETY SCORE		
SCORE LEVEL	f	(%)
NO ANXIETY	30	75.0
LITTLE ANXIETY	10	25.0
SOME ANXIETY	0	0
HIGH ANXIETY	0	0
VERY HIGH ANXIETY	0	0
Maximum score=5		Minimum score =0

Table No 4.13: Depict Mean, Standard deviation, Median of Post-test anxiety score of hospitalized children in IGMC & Hospital Shimla. (H.P.)

N=40

Descriptive Statistics	Mean	S.D.	Median Score	Maximum	Minimum	Range
POSTTEST ANXIETY (3 RD DAY)	1.25	.438	1.00	2.00	1.00	1.00
Maximum score =5				Minimum score=0		

SECTION III: FINDING RELATED TO EFFECTIVENESS OF ART THERAPY ON ANXIETY LEVEL OF HOSPITALIZED CHILDREN (3-6 YEARS).

Table No 4.14: Descriptive statistical finding on effectiveness of art therapy on anxiety level of hospitalized children (3-6 years).

N=40							
Paired T Test	Mean±S.D.	Mean%	Range	Mean Diff.	Paired T Test	P value	Table Value at 0.05
PRETEST ANXIETY	4.22±0.530	84.4	3 5	2.300	31.344 *Sig	<0.001	2.05
POSTTEST ANXIETY	1.92±0.572	38.4	1-3				

* Significance Level 0.05

Minimum score -5

Minimum score=0

Table no 4.15. Descriptive statistical finding on effectiveness of art therapy on anxiety level of hospitalized children (3-6 years) on 2nd day.

N=40								
Paired T Test (2 nd day)	Mean±S.D.	Mean%	Range	Mean Diff.	Paired T Test	P value	Table Value at 0.05	
PRETEST ANXIETY	3.80±0.563	76.0	3 - 5	2.225	33.275 *Sig	<0.001	2.05	
POSTTEST ANXIETY	1.57±0.549	31.4	1-3					

* Significance Level 0.05

Maximum=5

Minimum=0

Table no 4.16. Descriptive statistical finding on effectiveness of art therapy on anxiety level of hospitalized children (3-6 years) on 3rd day.

Paired T Test (3 rd day)	Mean±S.D.	Mean%	Range	Mean Diff.	Paired T Test	P value	Table Value at 0.05
PRETEST ANXIETY	3.40±0.496	68.0	2-2	2.150	37.602 *sig.	<0.001	2.05
POSTTEST ANXIETY	1.25±0.438	25.0	1-2				

* Significance Level 0.05

Maximum=5

Minimum =0

SECTION IV: FINDING RELATED TO ASSOCIATION OF PRE-TEST AND POST-TEST ANXIETY SCORE WITH SELECTED SOCIO -DEMOGRAPHIC VARIABLES.

Table 4.17: Association of pre-test anxiety score with selected socio-demographic variables. N=40

Variables	No anxiety	Little anxiety	Some anxiety	High anxiety	Very high anxiety	df	Chi square	Table value	p value
Age									
3 years	0	0	0	1	4	6	12.855	12.592	0.045*
4 years	0	0	0	10	0				
5 years	0	0	1	10	4				
6 years	0	0	1	7	2				
Gender									
Male	0	0	2	8	6	2	5.18	5.991	0.075
Female	0	0	0	19	5				
Education of the child									
Pre-nursery	0	0	0	4	1	6	14.371	12.592	0.026*
Nursery	0	0	0	10	0				
1 st standard	0	0	1	9	6				
2 nd standard	0	0	1	7	1				
Type of family									
Nuclear family	0	0	1	17	9	2	1.561	5.991	0.458
Joint family	0	0	1	10	2				
Single parent family	0	0	0	0	0				
Any others	0	0	0	0	0				
Presence of caregiver with child									

Father	0	0	1	6	1	2	2.027	5.991	0.363
Mother	0	0	1	21	10				
Grandparents	0	0	0	0	0				
Relatives	0	0	0	0	0				
Play activity of child during hospitalization									
Reading books									
	0	0	0	9	4	6	4.508	12.592	0.608
Playing with toys	0	0	1	4	1				
Drawing	0	0	1	8	2				
Watching cartoon	0	0	0	6	4				
Education of father									
Illiterate	0	0	0	0	0	6	13.629	12.592	0.034*
Primary education	0	0	0	1	1				
Secondary education	0	0	0	6	4				
Undergraduate	0	0	1	19	4				
Post graduate & above	0	0	0	2	2				
Education of mother									
Illiterate	0	0	0	0	0	6	6.957	12.592	0.325
Primary education	0	0	1	1	2				
Secondary education	0	0	0	6	3				
Undergraduate	0	0	1	19	5				
Post graduate & above	0	0	0	1	1				
Mental illness presents in family									
Present	0	0	0	0	0			N.A.	
Absent	0	27	2	11	0				

*Level of significance ≤ 0.05

Table 4.18: Association of Post-test anxiety score with selected socio-demographic variables.

N=40

							Chi Square	Table value	p-value
Variables	No anxiety	Little anxiety	Some anxiety	High anxiety	Very high anxiety	df			
Age									
3 years	2	0	3	0	0	6	14.462	12.592	0.025*
4 years	1	9	0	0	0				
5 years	4	10	1	0	0				
6 years	4	6	0	0	0				
Gender									
Male	4	8	4	0	0	2	4.877	5.991	0.087
Female	4	19	1	0	0				
Education of child									
Pre-nursery	2	3	0	0	0	6	15.27	12.592	0.018*
Nursery	2	8	0	0	0				
1st standard	4	10	2	0	0				
2nd standard	3	6	0	0	0				
Type of family									
Nuclear family	5	17	4	0	0	2	0.456	5.991	0.796
Joint family	3	9	2	0	0				
Single parent family	0	0	0	0	0				
Any others	0	0	0	0	0				
Presence of caregiver with the child									

Father	4	4	0	0	0				
Mother	5	23	4	0	0				
Grandparents	0	0	0	0	0	2	1.985	5.991	0.371
Other relatives	0	0	0	0	0				
Play activity of the child during hospitalization									
Reading books	2	10	1	0	0				
Playing with toys	5	0	1	0	0				
Drawning	0	10	1	0	0	6	24.098	12.592	0.001*
Watching cartoons	0	7	3	0	0				
Education of the father									
Illiterate	0	0	0	0	0				
Primary education	3	0	0	0	0				
Secondary education	0	8	2	0	0				
Undergraduate	6	15	2	0	0	6	4.894	12.592	0.557
Post graduate & above	1	3	0	0	0				
Education of mother									
Illiterate	0	0	0	0	0				
Primary education	1	2	1	0	0				
Secondary education	0	8	1	0	0				
Undergraduate	6	16	3	0	0	6	4.646	12.592	0.59
Post graduate & above	1	1	0	0	0				
Mental illness in the family									
Present	0	0	0	0	0			N.A.	
Absent	8	27	5	0	0				

* Level of significance ≤ 0.05

Discussion of present study

The first objective was to assess the level of anxiety among hospitalized children (3-6 years) in Paediatric ward I GMC & hospital Shimla (H.P). The present study revealed that majority of the subject i.e. 24(60.0%) had high anxiety during hospitalization, 11(19.6%) had very high anxiety and 2(3.6%) child had some anxiety.

The Second objective was to evaluate the effectiveness of Art therapy on anxiety level among hospitalized children (3-6 years) in I GMC & Hospital Shimla (H. P.). The present study there was a significant difference between pre-test anxiety score and post- test anxiety score after administration of art therapy. The pre -test mean score of anxiety (4.22) is more than the mean of post -test (1.92). The calculated 't' value (31.344) was greater than the table value ($t=2.00$) at 0.05 level of significance.

The third objective of the study was to find out the association of pre -test and post-test with selected demographic variables. The study revealed that pre-test anxiety level among hospitalized children(3-6years) was significantly associated with age of child (0.025 df=6), education of child (0.018 df=6), play activity of child during hospitalization (0.001 df=6) at p level (≤ 0.05). in post -test there was significance association between the anxiety level and age (in years) (0.025 df=6), educational status of child (0.018 df=6), and play activity of the child during hospitalization (0.001 df -6) at p level (≤ 0.05).

CONCLUSION

Anxiety is one of the most common experiences of every school going children; it adversely affects the child's physical and mental aspect of life. This study highlighted the effectiveness of art therapy in reducing anxiety among hospitalized children. Study findings showed that after the administration of color, drawing art therapy hospitalized children (3-6years), there was a significant reduction in the level of anxiety. The present study concluded that art therapy is simple, inexpensive and culturally acceptable approach that helps children in reducing anxiety and thus result in growth of child in all dimensions.

5.3 IMPLICATIONS OF THE STUDY

Nursing is a practice discipline; research is conducted to address issues that directly affect nursing practice, whether in patient care, administration or education. According to the finding of the study, majority of the children experienced considerably reduced level of anxiety after intervention with Art Therapy. The findings of the study can be incorporated in nursing education, practice and administration for quality pain management care.

NURSING EDUCATION

- A Continuing nursing education program can be arranged on Art therapy.
- Art therapy is a non-pharmacological intervention that can be integrated with nursing curriculum.

- In service education can be given to staff Nurses and faculty members regarding Art therapy in order to upgrade the cognitive and psychomotor skills.
- Nursing students from various levels must be educated about the Art therapy in order to practice in the clinical settings.
- A nurse educator should encourage the students for effective utilization of research based practice.
- A nurse educator should make use of available literatures and studies related to the measures of reducing anxiety among children.

NURSING PRACTICE

- Nurses should develop skill in implementing Art therapy.
- Nurses should create awareness and motivate others in the team to use this approach in reducing the anxiety among children.
- Teach the staff nurses about the effectiveness of Art therapy to reduce anxiety among children.
- Art therapy can be used as a Nursing intervention in reducing anxiety among children during their hospital stay.
- Nurses can apply this technique as a diversion therapy to relax the child like play therapy.
- Art therapy facilitates communication between staff and children and encourages the child's co-operation in Hospital procedure.

NURSING ADMINISTRATION

- The Nurse administrator should aware of importance and benefit of Art therapy in reducing anxiety in children.
- Art therapy is one of the best, non-pharmacological and cost effective intervention for hospitalised children.
- It can be easily administered by the health care worker in their practice to alleviate anxiety.
- Arrange and conduct workshop, conference and seminars on hospital anxiety reduction and its management in children.

NURSING RESEARCH

- As a nurse researcher, promote more research on reducing anxiety among children.

- Art therapy studies are rare in nursing field, so the Nurse researcher can conduct similar studies related to Art therapy and this will help the Nurses for Evidence Based Practice in aspect to art therapy.
- Promote effective utilization of research findings on management of anxiety among children.

PERSONAL EXPERIENCE

- The researcher had gained lots of new information and experience throughout the study.
- All the participants participated in the study and understood the purpose of the study.
- Some of participants were not so co-operative while participating in the study.
- Apart from all that the researcher found that in spite of all the struggles and difficulties, doing this research was quite interesting and helpful for developing the research knowledge.

5.4 RECOMMENDATIONS

Based on findings of the study the investigator proposed the following recommendations,

- The same study can be done with large sample size so that the results can be generalized.
- Comparison of Art therapy with other types of relaxation techniques like music therapy and play therapy can be done.
- A study to assess the Knowledge and Practice of Medical and Paramedical personnel's regarding Art therapy can be assessed.

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