"Randomized Control Trial on Efficacy of Homoeopathic Medicines in Separation Anxiety Disorder in Pediatric Age Group"

Dr. Amit Mohan Nimbhorkar, Research Scholar, Faculty of Homeopathy, Tantia University, Shri Ganganagar, Rajasthan, India

Dr. Devendra Kumar Bhardwaj, Research Supervisor, Faculty of Homeopathy, Tantia University, Shri Ganganagar, Rajasthan, India.

Abstract

Background: In Separation Anxiety Disorder (SAD), When Child and his parents are very anxious about why Child is suffering from different symptoms of anxiety which is hampering child behavior pattern at home as well as in school, which also can decrease his scholastic performance. Homoeopathy can play an important role in reducing his anxiety level significantly. The Aim of the study is to comparatively analyze the effect of Homoeopathic medicines in reducing Separation Anxiety Disorder successfully.

Methodology: It is prospective intervention comparison study between two group using randomly selected 100 cases (Age group between 03yrs-16yrs) attending the OPD & IPD of Sri Ganganagar Homoeopathic Medical college Hospital & research center, Rajasthan Everywhere having Separation Anxiety Disorder, the selected 100 cases were divided into two groups as Control group 1 (50 cases) and Experimental group 2 (50 cases). Group 1 selected Placebo was given whereas group 2 selected medicines on the basis of Totality was given. Diagnostic criteria mainly based on Clinical presentation and Anxiety Rating scale and improvement was assessed based on the Symptomatic relief and Scoring of Anxiety Rating scales.

Discussion: This scientific study shows that when Control Group i.e. group 1 who were kept on placebo did not show any significant improvement as compared to Experimental group i.e. Group 2 who were prescribed Homoeopathic constitutional medicines evidenced significant reductions in SAD severity, functional impairment and parent report of child anxiety symptoms with rapid recovery.

 Keywords: SAD, Control Group, Treatment Group, Comparison study, Anxiety rating scale

1. INTRODUCTION

Separation anxiety disorder (S.A.D.) is the most commonly diagnosed and impairing childhood anxiety disorders, accounting for approximately 50% of the referrals for mental health treatment of anxiety disorders.

According to DSM-5: S.A.D. is categorized under anxiety disorders, in which it is stated as Developmentally inappropriate and excessive fear or anxiety concerning separation from those to whom the individual is attached. A child with SAD experiences recurrent excessive distress when anticipating or experiencing separation from home or from major attachment figures.

Anxiety is originated from Latin word Anxious – distress, troubled. A mental health disorder characterized by feelings of worry, anxiety or fear that are strong enough to interfere with one's daily activities.

Separation Anxiety is a universal human developmental phenomenon emerging in infants less than 1 year of age and marking a child's awareness of a separation from his or her mother or primary care giver. Diagnosis of Separation Anxiety disorder in pediatric age group is difficult as compared to diagnosis of other childhood psychiatric disorders, as set of symptoms exhibited by the child are very common according to the age of their development. Homoeopathy is the only science of medicine, which have an integrated approach where mental symptoms are given equal importance with chief complaints along with physical general symptoms to arrive at a constitutional similimum which will cure the person and his diseased state.

This topic is important from research point of view because lot of research studies has been done on various anxiety disorders found in children but very few research works has been done

ROOTINDEXING
JOURNAL ABSTRACTING AND INDEXING SERVICE

INTERNATIONAL ADVANCE JOURNAL OF ENGINEERING, SCIENCE AND MANAGEMENT (IAJESM)
January-June 2023, Submitted in January 2023, iajesm2014@gmail.com, ISSN -2393-8048
Multidisciplinary Indexed/Peer Reviewed Journal. SJIF Impact Factor 2023 =6.753

till date on Separation Anxiety Disorder (S.A.D.), So my in-depth study will help us to understand the efficacy of Homoeopathy in S.A.D.

2. IMPORTANCE OF RESEARCH WORK: -

Mental, behavioural and personality development during the first few years of life can determine the final emotional, behavioural, mental and personality make-up of the individual and a recent epidemiologic survey using the Preschool Age Psychiatric Assessment (PAPA) found that 9.5% of preschoolers met DSM-IV-TR criteria for any anxiety disorders, with 0.5% exhibiting O.C.D., P.T.S.D. (1.3 to 8%), G.A.D. (6.5%), School Phobia (2.2%) and 2.4% meeting criteria for Separation Anxiety Disorder (S.A.D.)

3. OBJECTIVE: -

a. To identify Separation Anxiety Disorder Children from other anxiety disorders found in pediatric age group.
b. To evaluate the efficacy of Homoeopathic medicines in Separation Anxiety Disorder.
c. To Compare the Results between Control Group and Experimental Group of Separation Anxiety Disorder after Homoeopathic Treatment.

4. MATERIAL AND METHODOLOGY, AND TOOLS FOR PRESENT RESEARCH WORK (IF ANY):

Material:

a. OPD Case papers of Children suffering from Separation Anxiety Disorder according to DSM-5 in pediatric age group of 3 to 16 years attending the OPD and IPD of clinical centers.
b. Interview papers and CBCL filled by Parents
c. SCARED filled by Child and Parents
d. Homoeopathic Software used for Analysis and Evaluation of the cases

Methodology:

➢ Study Type
➢ Approach- Quantitative
➢ Time- Prospective

➢ Design- Randomized Control Trial
➢ Type of Samples- Purposive Sampling

Inclusion Criteria- Children suffering from Separation Anxiety Disorder
➢ Age group - 3 to 16 years
➢ Gender- Male and Female
➢ Socio-Economic Status- Middle class income group

Exclusion Criteria- Children having any other psychiatric illness in the past.

Duration of Study- 6 to 8 months

Tools-
1. Questionnaire based Scales – Child Behaviour Checklist (CBCL) and
2. Screen for Child Anxiety Related Disorders (SCARED)

To evaluate responses, 4 criteria has been used-

a. **Cured:** Patient has improved completely and symptoms of SAD has not returned or relaxed within 6 months or more than 6 months.
b. **Significant Improvement:** Patients symptoms have improved more than 50% in less than 6 months.
c. **Mild Improvement:** Patients complaint have improved less then 50% in less than 6 months.
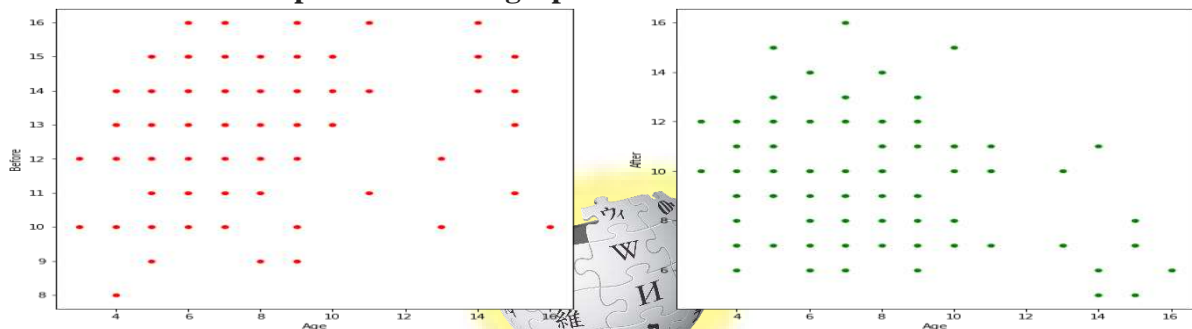
Status Quo: There has been found no change in patients' complaint.

• Evaluation and Outcome: Following the use of the proper statistical graphs and mean value, the statistical analysis was concluded.

5. SAMPLE (IF ANY): Total of 100 Sample Study (Children between 3 to 16 years including both sexes) were selected who were diagnosed cases of Separation Anxiety Disorder
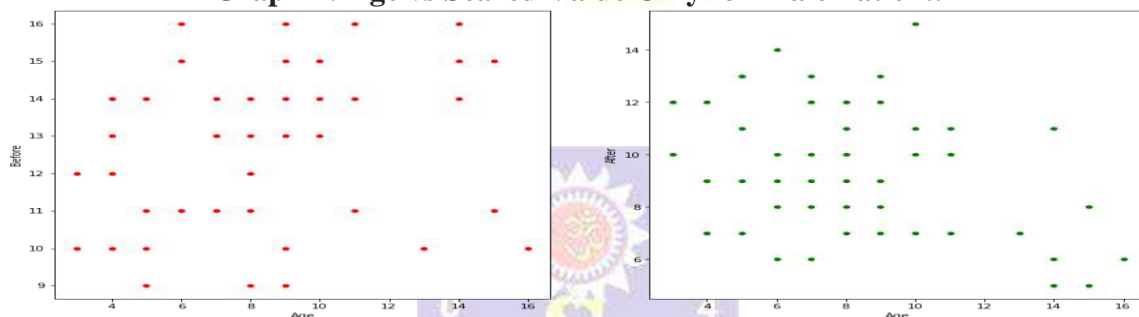
attending OPD, IPD and Peripheral OPDs of the Sri Ganganagar Homoeopathic Medical College, Hospital and Research Centre, Sri Ganagnagar , Rajasthan, India.

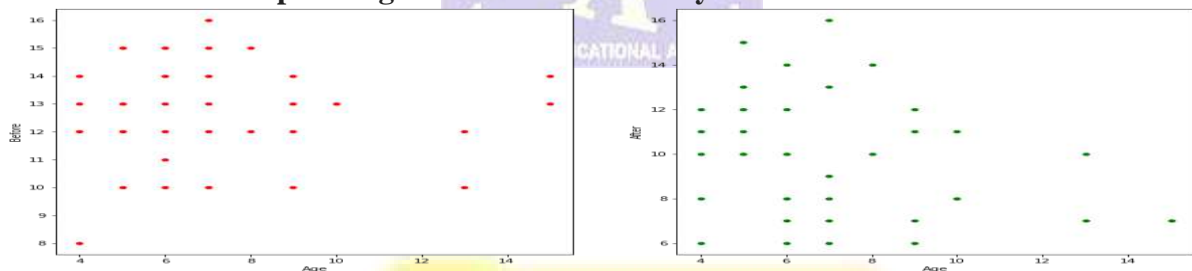### Graph 1: Combine graph of AGE vs SCARED value.

Observation: As shown in the Graph, out of 100 selected cases maximum incidence of SAD before treatment was found between 14-16 age group i.e. (23 cases) which has decreased significantly after a treatment i.e. (5 cases) as shown in the above Scatterplot Graph.

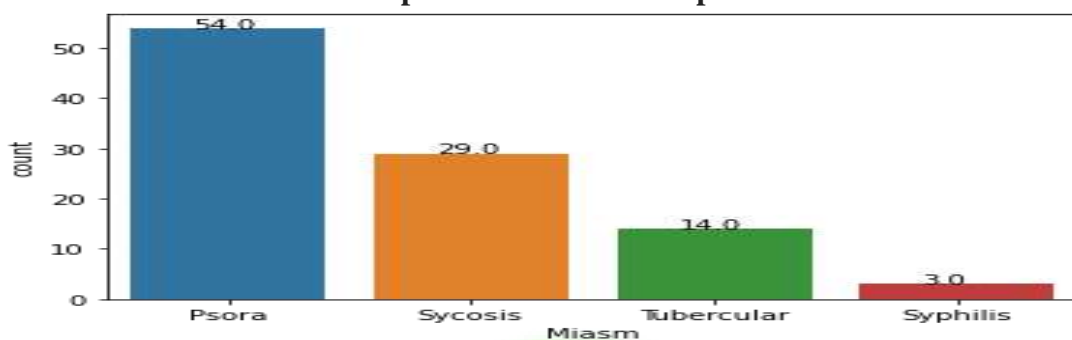### Graph 2: Age vs Scared Value Only for Male Patient.

Observation: As shown in the graph, Scared value in male patients before the treatment within the age of 14-16 is score 17 and Scared value in male patients after the treatment is score 2, which indicates the significant improvement in scared value in the male patients.

Graph 3: Age vs Scared Value Only for Female Patient.

Observation: As shown in the graph, Scared value in female patients before the treatment within the age of 14-16 is score 10 and Scared value in female patients after the treatment is score 4, which indicates the significant improvement in scared value in the female patients.
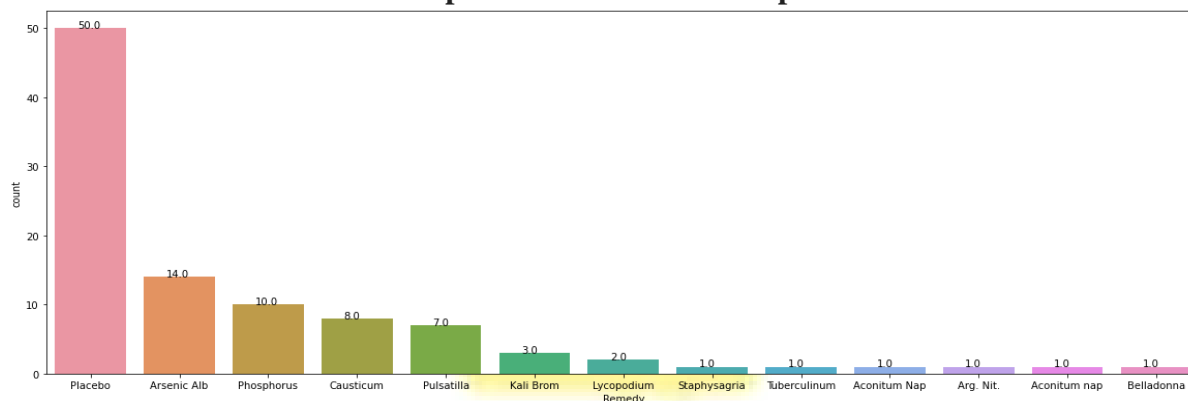
Graph 4: Miasm Bar Graph.

Observation: This bar graph shows, observation of cases by using Miasm out of 100 cases.
The ratio are as follows:

i. Psoric consist of 54 cases i.e. (54%)
ii. Sycosis consist of 29 cases i.e. (29%)
iii. Tubercular consist of 14 cases i.e. (14%)
iv. Syphilis consists of 3 cases i.e. (3%)

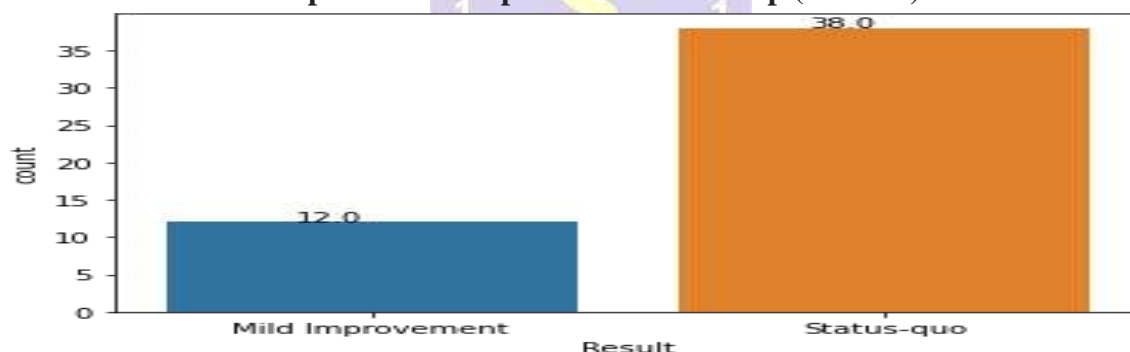**Graph 5: Remedies Bar Graph.**

Observation: In the above graph control group (50 patients) were prescribed Placebo and 50 Patients were prescribed constitutional medicines and the ratio of each constitutional medicine are as follows:
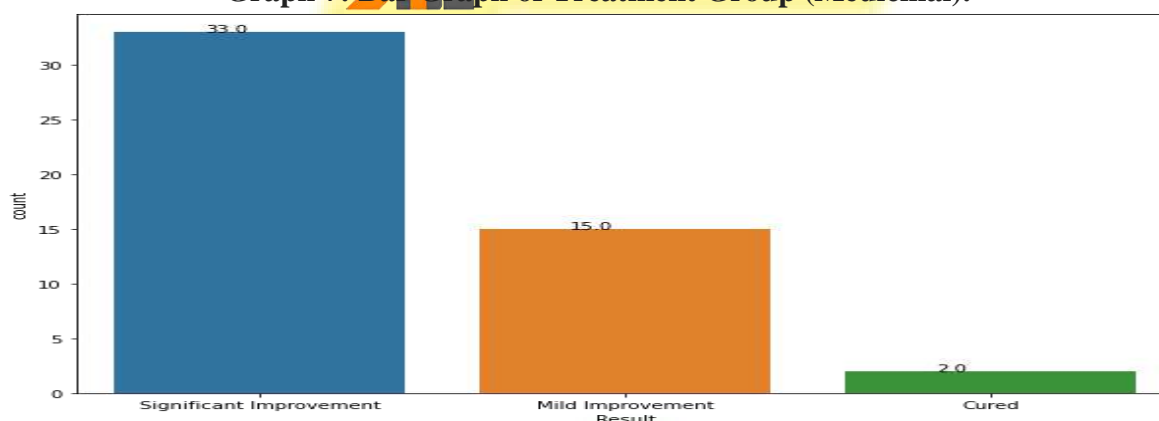
➤ In treatment group total 50 cases are of constitutional medicine out of which 14 cases are of Arsenic Alb, 10 cases were prescribing Phosphorus, 8 cases were prescribed Causticum. Pulsatilla was prescribed to 7 patients, 3 patients have taken Kali Brom, 2 were prescribed Lycopodium, 1 patient was prescribed Staphysagria, 1 with Tuberculinum, 1 with Aconitum Nap, 1 with Arg. Nit., 1 with Aconitum nap and 1 was prescribed Belladonna.

Graph 6: Bar Graph of Control Group (Placebo).

Observation: 50 cases of control group were prescribing placebo and the result found was there was mild improvement in 12 cases and 38 cases were found to be in status quo.
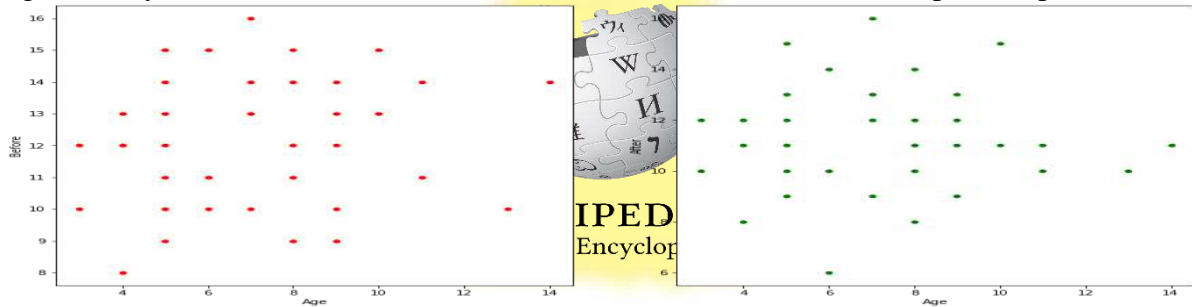
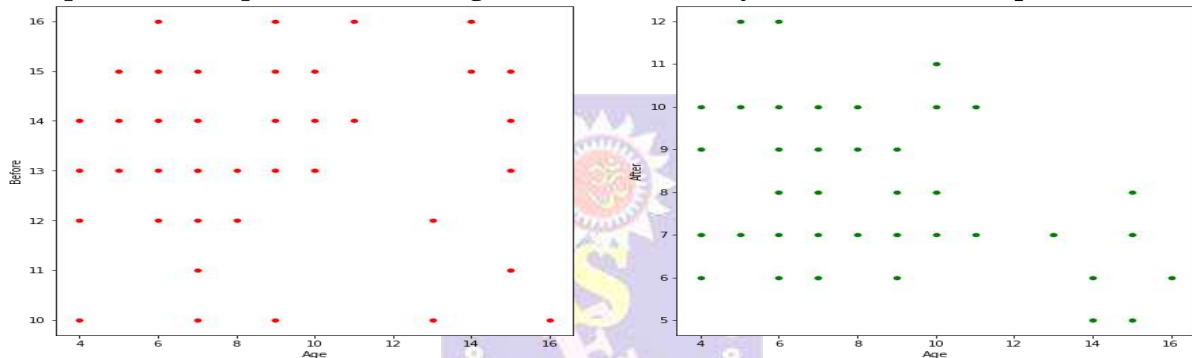**Graph 7: Bar Graph of Treatment Group (Medicinal).**

Observation: 50 cases of Treatment group were prescribed constitutional medicines according to Similimum and the result found was there was significant improvement in 33 cases, mild improvement in 15 cases and 2 cases were cured.

Graph 8: Bar Graph of Related to Age vs sacred value only for Control Group (placebo).

Observation: As shown in the Graph, out of 50 selected cases maximum incidence of SAD before treatment was found between 14-16 age group i.e. (11 cases) which has decreased significantly after a treatment i.e. (5 cases) as shown in the above Scatterplot Graph.
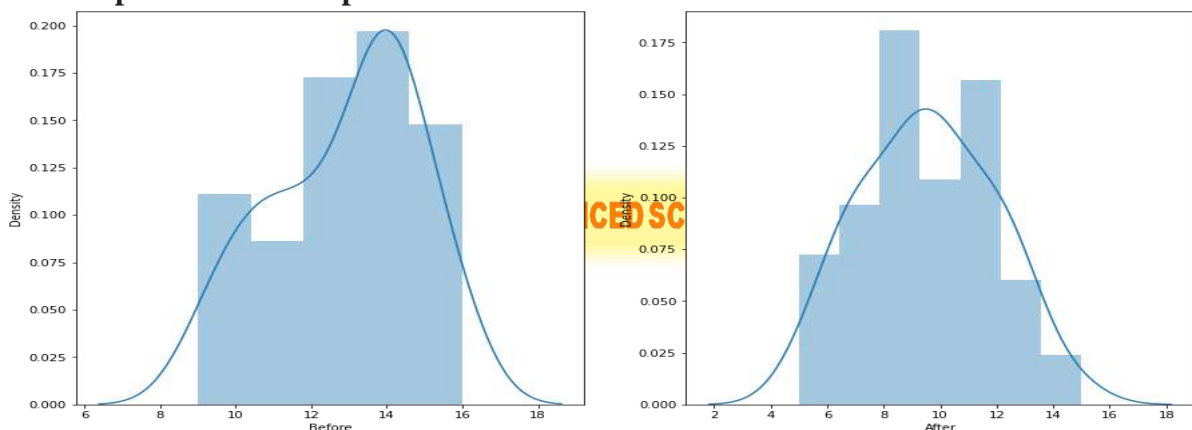

Graph 9: Bar Graph of Related to Age vs sacred value only for Treatment Group (Medicinal).
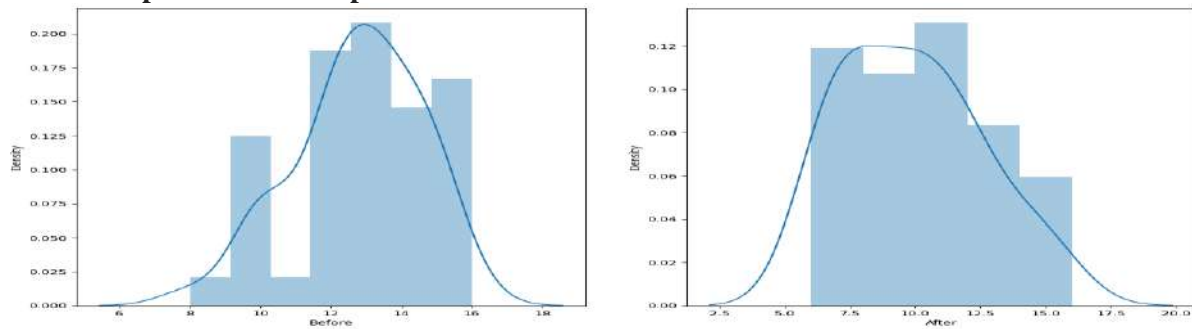

Observation: As shown in the Graph, out of 50 selected cases maximum incidence of SAD before treatment was found between 14-16 age group i.e. (19 cases) which has decreased significantly after a treatment 0 cases were found as shown in the above Scatterplot Graph.

Graph 10: Visual Representation of Male Patients Before and After Treatment.

Observation: As shown in the above graph the density of male patient before treatment was 0.200 and after treatment density was 0.135 with the mean improvement of 3.3448 where,

Male Mean Before - 12.89655172413793

Male Mean After - 9.551724137931034

Male Mean Improvement - 3.344827586206897

Graph 11: Visual Representation of Female Patients Before and After Treatment.

Observation: As shown in the above graph the density of female patient before treatment was 0.210 and after treatment density was 0.12 with the mean improvement of 2.880 where,

Female Mean Before - 12.761904761904763

Female Mean After - 9.880952380952381

Female Mean Improvement - 2.8809523809523814

6. CONCLUSION:

In our investigations of studies, the randomized study conducted on 100 patients suggest that there was significant improvement in SAD in Pediatric patients, after they were prescribed constitutional Similimum which was confirmed by the score values of SACRED tests. There were 4 medicines which was found to be more effective in SAD were Arsenic Alb, Phosphorus, Causticum, Pulsatilla followed by other medicines.

With the help CBCL (Childhood behavior check list) it was easy to diagnose anxiety disorder from other behavioral disorders.

7. REFERENCES

1. Benjamin James Sadock, Virginia Alcott Sadock, (2007), *Kaplan & Sadock's Manual of Psychiatry*, Wolters Kluwer (India) Pvt, Ltd, New Delhi, 10th edition, Page no. 1277-1286
2. Allan Tasman, Jerald Kay, Jeffrey A. Lieberman, (2004), *Psychiatry*, Volume 2, John Wiley & Sons Ltd, Second edition, Page no. 853-856
3. Alan De Sousa, D. A. De Sousa, (1987), *Child Psychiatry*, 1st edition, Page no. 1,2
4. American Psychiatric Association, (2013), *Diagnostic and Statistical Manual of Mental Disorders, DSM-5,* CBS Publishers & Distributors Pvt. Ltd., 5th edition, Page no. 190-195
5. Dr. Hahnemann Samuel, (2008), *Organon of Medicine*, B. Jain Publishers Pvt. Ltd, 6th edition – aphorism no. 210 – 230
6. William Boericke, M.D., (2007), *Pocket Manual of Homoeopathic Materia Medica & Repertory*, B. Jain Pulblishers Pvt. Ltd., 9th Edition, Page no. 8
7. Dr. Philip M. Bailey M.D. (2002), *Homeopathic Psychology*, published by: B. Jain Publishers, New Delhi, Reprint edition Page no. 19, 20.
8. John Rush Jr., Michael B. First, Deborah Blacker, (2011), *Handbook of Psychiatric Measures*, Part 2, Viva Books Pvt. Ltd., Page no. 296-301, 329-332
9. Lewinsohn PM, Holm-Denoma JM, Small JW, Seeley JR, Joiner TE Jr. *Separation anxiety disorder in childhood as a risk factor for future mental illness*. J Am Acad Child Adolesc Psychiatry. (2008) May;47(5):548-555. doi: 10.1097/CHI.0b013e31816765e7. PMID: 18356763; PMCID: PMC2732357.
10. Bhalerao, Rupali. (2012). *School Refusal in children and Homoeopathy*. Homoeopathy for All. Page no.13
11. NIPCCD . National Institute of Public Cooperation and Child Development; India: (1989). A report of child guidance clinic in India. New Delhi Documentation and information Centre. [Google Scholar]
12. Homoeopathy Software: Synergy Homeopathic, (1986), *Mac Repertory and Reference Works*, 8.5.3.6, Professional, Complete Repertory 2016
13. Thomas M. Achenbach, Child Behavior Check List (**CBCL**), 1996.
14. Boris Birmaher MD, Suneeta Khetarpal MD, Marlene Cully MEd, David Brent MD and Sandra McKenzle PhD, **SCARED Test**- "Screen For Child Anxiety Related Disorders".