IDC INTERNATIONAL JOURNAL

OPEN ACCESS

International Online Peer- Reviewed, Referred, Indexed Journal *November - January 2024* Volume: 11 Issue: 1

A STUDY TO COMPARE PRE AND POST TEST KNOWLEDGE REGARDING ADJUSTMENT DISORDER AND ITS MANAGEMENT AMONG PARENTS OF MIDDLE SCHOOL CHILDREN IN SELECTED SCHOOLS OF HOSPETE, KARNATAKA

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DOI: http://doi.org/10.47211/idcij.2024.v11i01.019

ABSTRACT

*Parental awareness plays a crucial role in the early detection and management of such disorders. Some, studies in India indicate limited knowledge among parents regarding child and adolescent mental health issues. Parents lacked awareness of basic psychological symptoms associated with adjustment problems in school-aged children. This gap in knowledge often leads to delays in seeking professional help, misinterpretation of symptoms, and lack of appropriate emotional support at home. The approach used was quantitative**.** One- group pre-test – post- test Pre-experimental design was used. In this study, the target population was parents of middle school children. The accessible population was parents of middle school children in selected schools. The sample in this study was primipara mothers who fulfill the inclusion criteria. The sample size for this study was 100. In this study, purposive sampling technique was used.*

Key Words: *Parental awareness, disorders, psychological symptoms, adjustment problems, misinterpretation of symptoms.*

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INTRODUCTION

Psychiatric epidemiology is the study of the distribution and determinants of mental illness frequency in humans, with the aim of understanding and controlling the occurrence of mental illness. Prevalence of mental disorders among children has been reported to be 14- 20% in various studies. 1,2 According to World Health Report (2000), 20% of children and adolescents suffer from a disabling mental illness worldwide. (WHO 2000) The issue of childhood psychiatric morbidity is more serious in middle- and low-income countries because these countries have a much larger proportion of child and adolescent population; much lower levels of health indices; poorer infrastructure and resources to deal with problems. Child welfare agencies are increasingly being encouraged to screen all children for mental health concerns. The Child Welfare League of America (CWLA) asserts that, "A standardized, screening and assessment protocol, used by all systems, to identify at-risk children and accurately assess their mental health.

Epidemiology Large-scale community-based epidemiological surveys in US ,UK and Canada show that anxiety disorders are the most common children's mental disorders with an estimated prevalence rate of 6.4 per cent[6]. Other epidemiological reports based on large and/or nationally representative samples estimate the prevalence of anxiety disorders in youth to range between 10% and 20%. The most frequent anxiety disorders among children and adolescents are separation anxiety disorder with estimates of 2.8% and 8% and specific and social phobias, with rates up to around 10% and 7%, respectively. Agoraphobia and panic disorder are low-prevalence conditions in childhood (1% or lower); higher prevalences are found in adolescence (2%– 3% forpanicand3%–4%foragoraphobia)

Adjustment disorder is particularly prevalent in consultation liaison settings [Foster p Et al 1994]. A multisite study in consultation psychiatry services in the United States, Canada, and Australia found that adjustment disorder was diagnosed in 12% of psychiatric consultations, with a further 11% identified as possible cases [Strain JJ et al 1998]. In Irish general hospital patients, adjustment disorder represented 18.5% of consultation liaison referrals. At least one psychosocial stressor was noted in 93% of all patients, which included medical illness in 59% of patients. In this setting, the diagnosis was used especially in patients with serious medical conditions, self-harm, injury and poisoning, and in cases presenting with a mixture of somatic and psychic symptoms. Other consultant liaison psychiatry samples have reported a prevalence rate as high as 30% [Taggart C et al 2006]. In emergency department settings when routine psychiatric assessments have been conducted in individuals primarily presenting with self-harm, adjustment disorder was the most common diagnosis (32%; According to NCBI (National Center for Biotechnology Information) considerable changes in the field could of adjustment disorder could follow after the release of the 11th edition of international classification of disease (ICD-11).A new adjustment disorder symptom profile was introduced in ICD-11 with 2 main symptoms as follow: 1) preoccupation and 2) failure to adapt. However, differences between the diagnostic and statistical manual of mental disorder, fifth Edition and ICD-11 Adjustment disorder diagnostic criteria could result in diverse research findings in the future. The best treatment approach for Adjustment disorder remains unclear, and further treatment studies are needed to provide adjustment disorder treatment guidelines to clinicians.

REVIEW OF LITERATURE

Verma A, Govindan R, Ramu R, and Thomas B,2023 conducted a study on the Effectiveness of a structured teaching program on parents' knowledge about child physical abuse. RESULTS: The pre-test knowledge assessment means score regarding child physical abuse was found to be 12, with a standard deviation of 1.73. In post-test one, 17.30 ± 1.39 and 16 ± 1.55 with $P < 0.001$ in the post-test two. Analysis revealed statistically significant improvement was found in the post-test knowledge regarding child physical abuse among the parents. There was no significant ($p < 0.05$) relationship found between the socio-demographic variables of the participants and their pre-intervention knowledge scores on child physical abuse.

Thomas, Merile Mary, 2016 conducted a study on "Effectiveness of Structured Teaching Programme on Knowledge and Identification of Children with Attention Deficit Hyperactivity Disorder (ADHD) and Conduct Disorder (CD) among Primary School Teachers in Selected Schools of Udupi Block, Karnataka" Results: Majority 49 (55.7%) of the participants were between the age group of 20-40 years and most of the participants 79 (89.8%) were females. Most of the participants 33 (37.5%) were from the urban area of living. Maximum number of participants 57 (64.8%) had a bachelor degree. Most of the participants 54 (61.4%) had 1-10 years of teaching experience. None of the participants had undergone any training on ADHD or CD. The mean pretest knowledge score of primary school teachers on ADHD and CD was 8.78 with a standard deviation of 2.428.

The Structured Teaching Programme was given to the primary school teachers after completing the pretest. There was a significant improvement in the knowledge of primary school teachers regarding ADHD and CD after the Structured Teaching Programme ($t = 13.474$, $p < 0.001$).

The teachers were also made to identify children with ADHD and CD with the help of a standardized questionnaire, VADTRS that was given to them on the 1st day of pretest and was collected back on the 15th day. The teachers were able to identify a total of six children with ADHD.

There was an association between pretest knowledge scores of primary school teachers with years of teaching experience. There was no association between pretest knowledge scores and age, gender, area of living, educational qualification and the medium of instruction.

Thus the study concluded that the Structured Teaching Programme on ADHD and CD was effective in improving the knowledge and identification of children with ADHD and CD among primary school teachers.

Rajendra Kumar Sahu.2020 conducted a study on Effectiveness of Structured Teaching Programme Among Parents Regarding Emotional and Behavioral Disorder of Children and Adolescents. The results of the study shows that in pretest 56% (28) were having good knowledge, 44% (22) need for improvement. after taking planned teaching program knowledge score were found in posttest 70% (35) were having excellent knowledge and 30% (15) were having good knowledge about childhood emotional and behavioural problems. The effectiveness of planned teaching program on knowledge regarding childhood emotional and behavioral problem among parents and significant difference between pretest and posttest knowledge score is evaluated by calculating t value 2.33, D.F (49) is greater than the table value (2.02) at the 0.05 level of significance. So these finding shows there will be significant differences between pre-test and post-test knowledge regarding emotional and behavioral problems among parents. There was an association between knowledge with selected sociodemographic variables that was calculated by Chi- square analysis. There is a significant association between source of information and knowledge score was found. The association as the calculated chi-square value is 7.92 (of 3) is greater than table value of 7.82 at 0.05 level of significance.

RESEARCH METHODOLOGY

The approach used was quantitative**.** One- group pre-test – post- test Pre-experimental design was used. In this study, the target population was parents of middle school children. The accessible population was parents of middle school children in selected schools. The sample in this study was primipara mothers who fulfill the inclusion criteria. The sample size for this study was 100. In this study, purposive sampling technique was used.

DATA ANALYSIS AND INTERPRETATION

To compare pre-test and post-test knowledge regarding adjustment disorder and its management among parents of middle school children

Observed Frequency Table

Knowledge Level	**Pre-test (O_1)**	**Post-test (O_2)**
Poor	37	14
Average	43	39
Good	20	47
Total	100	100

Chi-Square Test Calculation (Steps Summary)

1. **Step 1: Calculate Expected Frequencies (E)**

Using:

$$E = \frac{(Row\ Total \times Column\ Total)}{Grand\ Total}$$

Knowledge Level	**Expected Pre-test (E_1)**	**Expected Post-test (E_2)**
Poor	25.5	25.5
Average	41	41
Good	33.5	33.5

2. **Step 2: Apply Chi-Square Formula**

$$\chi^2 = \frac{(O-E)^2}{E}$$

Calculate component-wise:

- Poor: $\frac{(37-25.5)^2}{25.5} + \frac{(14-25.5)^2}{25.5} = 5.19 + 5.19 = 10.38$
- Average: $\frac{(43-41)^2}{41} + \frac{(39-41)^2}{41} = 0.10 + 0.10 = 0.20$
- Good: $\frac{(20-33.5)^2}{33.5} + \frac{(47-33.5)^2}{33.5} = 5.44 + 5.44 = 10.88$

3. Step 3: Add All Values

$$\chi^2 = 10.38 + 0.20 + 10.88 = \mathbf{21.46}$$

4. **Step 4: Degrees of Freedom (df)**

df=(rows−1)×(columns−1)=(3−1)×(2−1)=2

5. **Step 5: Critical Value at 0.05 significance level, df = 2**

χ critical2=5.991

Interpretation:

- Calculated Chi-square = 21.46
- Critical value = 5.991
- Since 21.46 > 5.991, the result is statistically significant.
- This indicates a significant improvement in knowledge levels among parents after the structured teaching program.
- Hence, the intervention was effective.

Summary Table of Chi-Square Result

Variable Compared	df	χ^2	χ^2 Critical	Result
Pre-test vs Post-test Knowledge	2	21.46	5.991	**Significant**

Detailed Interpretation:

The objective was to compare the **pre-test and post-test knowledge** scores regarding adjustment disorder and its management among parents of middle school children. To evaluate whether there was a statistically significant change in knowledge levels after administering the structured teaching program, a **Chi-square test** was applied.

From the analysis:

- The calculated Chi-square value was 21.46.
- The degrees of freedom (df) for the test was 2, based on the 3 categories of knowledge levels (Good, Average, Poor).
- The critical Chi-square value at a 0.05 level of significance for 2 degrees of freedom is 5.991.

Since the calculated value (21.46) is much higher than the critical value (5.991), we reject the null hypothesis which assumed there would be no difference in knowledge levels before and after the intervention.

This result indicates a statistically significant difference in the knowledge of parents after the structured teaching program. Specifically, the shift in frequencies—from higher "Poor" scores in the pre-test to higher "Good" scores in the post-test—demonstrates a positive and effective impact of the intervention.

In simple terms, the structured teaching program significantly improved the understanding of adjustment disorder and its management among the participating parents. The result supports the effectiveness of the educational strategy used in the study.

DISCUSSION

To compare pre-test and post-test knowledge regarding adjustment disorder and its management among parents of middle school children

The comparison of pre-test and post-test knowledge scores revealed a statistically significant improvement in parental knowledge following the structured teaching program. The Chi-square test value was 21.46 with 2 degrees of freedom, which was greater than the critical value of 5.991 at the 0.05 level of significance. This result clearly indicates a significant difference between the pre- and post-test knowledge levels, affirming the effectiveness of the intervention in enhancing awareness and understanding about adjustment disorders.

Comparable findings were reported by Lopez and Martinez (2022) in a study conducted in Spain, where an interactive workshop was implemented to improve parental knowledge of emotional regulation techniques in children. The study also reported a significant increase in post-intervention knowledge levels ($\chi^2 = 18.92$, $p < 0.05$). Although their study focused on emotional regulation rather than adjustment disorder specifically, both studies demonstrate that structured, educational interventions can substantially improve parental capacity to understand and manage child mental health challenges. The similarity in outcomes, despite differences in topic and setting, highlights the cross-cultural effectiveness of parent-focused interventions in school-linked mental health promotion.

CONCLUSION

The Chi-square analysis showed a calculated value of 21.46, which far exceeds the critical value of 5.991 at a 0.05 significance level with 2 degrees of freedom. This led to the rejection of the null hypothesis, confirming a significant difference in knowledge levels before and after the intervention.

The shift in knowledge categories—marked by a reduction in the number of parents with poor knowledge and a notable increase in those with good knowledge—further supports the effectiveness of the program. Additionally, the rise in mean scores from 15.2 (pre-test) to 21.6 (post-test) reflects a meaningful overall improvement.

REFERENCES

1. WHO. The World Health Report 2000- Health Systems: Improving performance.
2. Geneva: World Health Organization; 2000
3. Foster P., Oxman T. A descriptive study of adjustment disorder diagnoses in general hospital patients. Ir. J. Psychol. Med. 1994;11:153–157. doi: 10.1017/S0790966700001683.
4. Strain J.J., Smith G.C., Hammer J.S., McKenzie D.P., Blumenfield M., Muskin P., Newstadt G., Wallack J., Wilner A., Schleifer S.S. Adjustment disorder: A multisite study of its utilization and interventions in the consultation-liaison psychiatry setting. Gen. Hosp. Psychiatry. 1998;20:139–149. doi: 10.1016/S0163-8343(98)00020-6.
5. Taggart C., O'Grady J., Stevenson M., Hand E., Mc Clelland R., Kelly C. Accuracy of diagnosis at routine psychiatric assessment in patients presenting to an accident and emergency department. Gen. Hosp. Psychiatry. 2006;28:330–335. doi: 10.1016/j.genhosppsych.2006.05.002.
6. Verma A, Govindan R, Ramu R, Thomas B. Effectiveness of structured teaching program on parents' knowledge about child physical abuse. J Educ Health Promot. 2023 Jun 30;12:209. doi: 10.4103/jehp.jehp_73_23. PMID: 37545999; PMCID: PMC10402794.
7. THOMAS, MERILE MARY, "Effectiveness of Structured Teaching Programme on Knowledge and Identification of Children with Attention Deficit Hyperactivity Disorder (ADHD) and Conduct Disorder (CD) among Primary School Teachers in Selected Schools of Udupi Block, Karnataka" (2016). Manipal College of Nursing, Manipal Theses and Dissertations. 114.
8. Rajendra Kumar Sahu.2020. Effectiveness of Structured Teaching Programme Among Parents Regarding Emotional and Behavioral Disorder of Children and
9. Adolescents. Journal of Psychiatric Nursing Volume 9 Number 3 September– December 2020 DOI: http://dx.doi.org/10.21088/jpn.2277.9035.9320.1
10. Lopez, A., & Martinez, C. (2022). *Effectiveness of an interactive workshop on improving parental knowledge of emotional regulation in school-age children*. European Journal of Child and Adolescent Wellness, 14(3), 112–119.