A Comparative Study On Stressor In Children And Adolescent Patients With Dissociative Disorder And Their Age And Gender Matched Controls In Western Rajasthan

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Abstract

Introduction:- The dissociative disorders (DDs) are a disturbance in the organization of identity, memory, perception, or consciousness involving both restricted access of information to consciousness and disruptions of consciousness.

Methodology:- This study is a hospital based cross-sectional case-control study. The subjects were selected by consecutive sampling with proper inclusion and exclusion criteria fulfilled. Socio-demographic profile of cases and controls was compared using the Chi-square test. For normally distributed quantitative continuous variables were compared using an independent T-test.

Result:- In this study, mean age of onset of dissociative disorder was late adolescent, female were more affected than male. The cases were more of lower socio-economic status with nuclear family. In cases 71% had identifiable stressor while in control only 15%, major stressor was mainly study related.

Conclusion:- Adolescent (late age), Female sex, Nuclear family (poor support system), lower socio-economic status had high prevalence while Children (young age), Male sex, Joint Family (good support system), and Upper socio-economic status had less prevalence of dissociative disorder. Major stressors were study and familial issues.

Keywords : - Dissociative disorder, Adolescents, Female sex, Stressor

INTRODUCTION:-

The dissociative disorders (DDs) are a disturbance in the organization of identity, memory, perception, or consciousness involving both restricted access of information to consciousness and disruptions of consciousness. When memories are separated from access to consciousness, the disorder is Dissociative Amnesia. Fragmentation of identity with disruption of consciousness results in Dissociative Fugue or Dissociative Identity Disorder (DID) (formerly multiple personality disorder). Disintegrated perception is seen in Depersonalization/ Derealisation Disorder.

Relationship between trauma (stressor) and dissociation

According to ICD -10 in case of dissociative disorder, in order to make a diagnosis of dissociative disorder there must be evidence for psychological causation, in the form of clear association in time with stressful events and problems or disturbed relationships (even if denied by the individual) [5]

However, convincing evidence of psychological causation may be difficult to find, even though strongly suspected. In the absence of evidence for psychological causation, the diagnosis should remain provisional, and enquiry into both physical and psychological aspects should continue.

In case of children, to find the stressor is even more difficult because traumatic memories are often repressed as they cannot handle the stress as easily as compared to the adults, their memory process differs from the adults, sometimes they omit the relevant history, and to add to that there is the difficulty in establishing rapport and communicating with the children etc.

So, in this study an attempt has been made to identify how commonly the stressors are elicited, types of stressors in case of children and adolescents in Indian context.
METHODOLOGY:

Aim:
To study socio demographic and stressor in children and adolescent patients in dissociative disorder.

Objective:
1. To study different socio demographic factors associated with dissociative disorder in children and adolescent.
2. To investigate the stressors associated with dissociative disorders in children and adolescents.

Materials And Methods
Place of Study: At the out-patient department of the psychiatry (Dr S.N Medical college Jodhpur (Raj).

a) Period of Study: 12 months (July 2021 to July 2022)
b) Study Design: Cross-sectional.
c) Sampling method: Consecutive sampling.
d) Sample Design: The study will comprise 2 groups. (80 Cases, 80 Control)

Study Group:
1. Patients with diagnosis of Dissociative disorder
2. Age and sex matched control

Inclusion And Exclusion Criteria:
For Group One [Case]-
Inclusion Criteria:
1] Patients having Dissociative disorder diagnosed according to ICD-10[5].
2] Age -6 yrs to 18 yrs

Exclusion Criteria:
1. Presence of any medical illness or mental retardation
2. Not willing to participate.

For Group Two [Control]-
Inclusion Criteria:
1. Age and sex matched
2. Not related to patients through blood relation
3. Willing to participate

Exclusion Criteria:
Significant physical and mental illness

SCALES:
1. General Socio-Demographic Profile Performa.
2. Child And Adolescent Survey Of Experiences (CASE) :
both child and parent version- The CASE provides a measure of stressful life experiences in the last one year. [6]
A) Ethical clearance from the Institute Ethical committee.
B) Informed consent/assent was be taken from the patients or parents using a standard Performa.
C) Study subjects were selected by consecutive sampling from patients coming to the OPD of the psychiatry (Dr S.N Medical college Jodhpur (Raj), diagnosed by two consultant psychiatrists as having provisional diagnosis of Dissociative disorder as per ICD-10 criteria.
D) Among these patients, those fulfilling inclusion and exclusion criteria were selected for the study. Parents and children were given information about our study and asked if they wanted to take part in the study. If they agreed to take part in the study then they were interviewed.
E) Control were taken from nearby school. Those fulfilling inclusion and exclusion criteria were selected for the study. Parents and children were given information about our study and asked if they wanted to take part in the study. If they agreed to take part in the study then they were interviewed.
F) socio-demographic data sheet was filled up
G) Child and Adolescent Survey of Experiences (CASE) was applied to assess any stressor in last 1 year the impact ratings for all life events rated as having a negative impact.

RESULTS:

| TABLE-I: Comparison of mean age between case and control |
|-------------|----------------|---|---|
|            | Case[n=80] | Control[n=80] | t  | p     |
| Age        | 14.21±2.846| 14.33± 3.026   | .256| .799  |
|            | SE-0.318   | SE-0.338       |    |       |
As seen from Table-1, mean age of onset of Dissociative disorder cases is 14.21±2.846 yrs (SE=0.318), whereas that of controls is 14.33±3.026 yrs (SE=0.338). After applying independent sample t-test, both groups are confirmed to be age matched [t=.256, p=.799].

### TABLE -2: Comparison of sex distribution between case and control

<table>
<thead>
<tr>
<th>Sex</th>
<th>Case [n=80]</th>
<th>Control [n=80]</th>
<th>χ²</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>14[17.5%]</td>
<td>17[21.2%]</td>
<td>.360</td>
<td>1</td>
<td>.548</td>
</tr>
<tr>
<td>Female</td>
<td>66[82.5%]</td>
<td>63[78.8%]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 regarding sex distribution, among the cases 14[17.5%] of cases are male, 66[82.5%] are female, among controls 17[21.2%] are male and 63[78.8%] are female. Chi-square test confirms both group to be sex matched [df=1, p=.548, χ²=.360].

### TABLE-3: Comparison of case and control in respect of socio economic status

<table>
<thead>
<tr>
<th>Socio economic status</th>
<th>Case [n=80]</th>
<th>Control [n=80]</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper</td>
<td>4[5%]</td>
<td>20[25%]</td>
<td>&lt;.001 **</td>
</tr>
<tr>
<td>Middle</td>
<td>28[35%]</td>
<td>49[61%]</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>48[60%]</td>
<td>11[14%]</td>
<td></td>
</tr>
</tbody>
</table>

** Significant at the 0.01 level (2-tailed).

* Significant at the 0.05 level (2-tailed).

Table -3 shows comparison between case and control in respect of socio economic status. Chi-square test shows significant difference among the groups [df=2, p<.001].

### TABLE-4: Distribution of cases as children and adolescent

<table>
<thead>
<tr>
<th>Group</th>
<th>Children [&lt;12 yrs]</th>
<th>Adolescent [≥12 yrs]</th>
</tr>
</thead>
<tbody>
<tr>
<td>frequency</td>
<td>13[16%]</td>
<td>67[84%]</td>
</tr>
</tbody>
</table>

Table 4 shows among the cases 13[16%] were children and 67[84%] were adolescent.

### TABLE-5: Stressors in patients with dissociative (conversion) disorder

<table>
<thead>
<tr>
<th>Stressors</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>not found</td>
<td>23</td>
<td>28.8%</td>
</tr>
<tr>
<td>study related</td>
<td>15</td>
<td>18.8%</td>
</tr>
<tr>
<td>familial issues</td>
<td>14</td>
<td>17.5%</td>
</tr>
<tr>
<td>physical illness related</td>
<td>8</td>
<td>10.0%</td>
</tr>
<tr>
<td>problem with friends</td>
<td>3</td>
<td>3.8%</td>
</tr>
<tr>
<td>change of place</td>
<td>9</td>
<td>11.3%</td>
</tr>
<tr>
<td>abuse</td>
<td>6</td>
<td>7.5%</td>
</tr>
<tr>
<td>others</td>
<td>2</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Table 5 shows that in 23[28.8%] cases no stressor was found, 15[18.8%] had study related stressor, 14[17.5%] had stressors related to family, 8[10%] had physical illness related stressors, 3[3.8%] had problem with friends, 9[11.3%] associated with change of place, 6[7.5%] had abuse and 2[2.5%] had other kind of stressors.

### TABLE-6: Comparison of case and control in respect of stressor

<table>
<thead>
<tr>
<th>Group</th>
<th>no stressor</th>
<th>stressor present</th>
<th>χ²</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>case</td>
<td>23[28.8%]</td>
<td>57[71.2%]</td>
<td>51.601</td>
<td>1</td>
<td>&lt;0.001 **</td>
</tr>
<tr>
<td>control</td>
<td>68[85%]</td>
<td>12[15%]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
** Significant at the 0.01 level (2-tailed).
* Significant at the 0.05 level (2-tailed).

Among the cases 23[28.8%] had no identifiable stressors, 57[71.2%] had identifiable stressor. Among the control 68[85%] had no identifiable stressors, 12[15%] had identifiable stressor. Chi-square test shows significant difference among the groups[χ²=51.601, df=1, p<0.001]

DISCUSSION :-
This study is a hospital based cross-sectional case-control study. The subjects were selected by consecutive sampling with proper inclusion and exclusion criteria fulfilled.
.
The mean age of onset was 14.33 yrs.
So, in this study it appears that dissociative [conversion] disorder occurs more commonly in adolescent age group compared to children.

One study showed that the age at onset is typically from late childhood to early adulthood. Onset is rare before the age of 10 years (Maloney, 1980)\(^\text{7}\). One study in Australia showed that the disorder is rare before 8 yrs of age\(^\text{8}\) (Gratton-Smith P, 1988) This study also supports the Regarding sex distribution, among the cases, 14[17.5% of cases] are male, 66[82.5%] are female.

In virtually all studies, an excess (to the extent of 2:1 to 10:1) of women reported dissociation symptoms relative to men (Ljunberg, 1957; Raskin et al., 1966; Stefansson et al., 1976)\(^\text{9-11}\).

Among the cases, 4 cases [5%] were from upper socio economic class, 28 cases[35%] were from middle socio economic class, 48 cases[60%] were from lower socio economic class. Among the controls 20 [25%] were from upper socio economic class, 49[61%] were from middle socio economic class, 11[14%] were from lower socio economic class. Chi-square test shows significant difference among the case and control groups[χ²=51.601, p<0.001].

Different studies reported that there is a predilection for lower socioeconomic status; less educated, less psychologically sophisticated (Veith, 1965; Weinstein et al., 1969; Lazare, 1981; Folks et al., 1984)\(^\text{12-15}\). Consistent with this, higher rates (nearly 10%) of outpatient psychiatric referrals are for dissociative symptoms in “developing” countries (Stafanis et al., 1976)\(^\text{16}\).

Among the cases 51[63.8%] were from nuclear family, 27[33.8%] were for joint family, 2[2.4%] were from extended nuclear family. Among the control 31[38.8%] were from nuclear family, 41[51.2%] were from joint family, 8[10%] were from extended nuclear family.

These findings show that there is increased incidence of dissociative disorder in nuclear family.

The traditional joint family that exists in India is seen as a source of social and economic support and is known for its tolerance of deviant behavior and capacity to absorb additional roles in times of crisis\(^\text{17-18}\).

Among the cases 23[28.8%] had no identifiable stressors, 57[71.2%] had identifiable stressor. Among the control 68[85%] had no identifiable stressors, 12[15%] had identifiable stressor. Chi-square test shows significant difference among the case and control groups in respect of presence and absence of stressors.[χ²=51.601, df=1, p<0.001].

In 23 cases no stressor was found, 15[18.8%] had study related stressor, 14[17.5%] had stressors related to family, 8[10%] had physical illness related stressors, 3[3.8%] had problem with friends, 9[11.3%] associated with change of place, 6[7.5%] had abuse and 2[2.5%] had other kind of stressors.

Many studies also reported that extraordinary life stressors are not required to trigger the disorder in children always\(^\text{19}\).

One study reported that altogether 75% of the children with conversion disorder presented during spring and summer; at the time of end of year exams and the beginning of the new school year\(^\text{20}\).

SUMMARY & CONCLUSION:-
In summary we can say that there was no significant difference among the case and control groups in respect of age, sex and religion.

In this study it appears that dissociative disorder occurred more commonly in adolescent age group compared to children and among the children male were more commonly affected, among adolescents female were more commonly affected and as a whole increased incidence in female compared to male [a ratio of F:M=4.7:1].

In this study findings shows that there was increased incidence of dissociative disorder in nuclear family, in middle and lower socio economic status.

There was significant difference among the case and control groups in respect of presence and absence of stressors. In 1/3 cases no stressor was found. Most common stressor being study related stressor, followed by stressors related to family, change of place, physical illness related stressors, abuse, problem with friends and other kind of stressors respectively.

REFERENCES:-