Expressed Emotion and Social Development in Mental Retardation

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The aim of this study was to reveal the relationship between expressed emotion (EE) of key relatives and social development of mentally retarded. 30 children aged between 5-18 years and all 30 children were fulfilling ICD - 10 criteria for mental retardation were taken for the study. One key relative for each mentally retarded children was identified within the age range of 34-45 years. Expressed emotion was assessed by applying Attitude Questionnaire (Sethi et.al, 1985) to the key relatives and social development was assessed by Vineland Social Maturity Scale (Nagpur adaptation) to the mentally retarded children. Age & sex matched control group of 30 normal children and key relatives were chosen from the locality and the same tools were administered. Data were analyzed by using t test and Pearson correlation coefficient. Results showed negative correlation between critical comments and emotional over involvement with social quotient. Further it was found that with increasing severity of retardation, social development also decreases.

Key Words: Mental Retardation, Expressed Emotion, Social Development, critical comment, emotional over Involvement.

Introduction

The American Association on Mental Retardation has published a new manual for the classification of mental retardation which includes diagnosis of mental retardation in four dimensions. Dimension (I):- Intellectual and adaptive skills Dimension (II) :- Psychological and emotional consideration Dimension (III) :- Physical - health - etiology consideration Dimension (IV):- Environmental considerations. This is a comprehensive description of the person’s current environment, its nature, strength and weaknesses, and its relationship to the person’s development (eg family and its attitude, poverty, availability of education and other services of all the environmental factors family and its attitude forms an important part.

To a parent, every child is special in his or her own way. But some children have special needs that challenge parents to find ways to best prepare these children for the future and to handle any problems that may surface. Every parent wants his or her child to be physically and developmentally perfect. Often some children have a temporary or permanent physical or mental disability. Both congenital as well as acquired disability, or of a children can have profound effects on the family.

Children’s problem were formerly attributed to environment, especially their relationship with parents. Today it is believed that most disorders result from a combination of biological, and socio-psychological factors. Genetics may determine the likelihood of developing certain disorders as schizophrenia, bed wetting, and certain mood and anxiety disorders. Parenting techniques can also affect a child’s behavior.

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Expressed Emotions (EE) refers to family members feelings about an identified patient and includes emotional over involvement, criticism, hostility, dissatisfaction and warmth (Shanmugiah et al 2002; Mintz et. al 1987) Greedhary (1987) found a total absence of hostility among the family of mentally handicapped. Pretch (1963) found reactions of parents of mentally handicapped swing from extremes of overprotection to complete rejection. Dossetor et.al (1994) found high expressed emotion was mainly a result of high levels of emotional over involvement in children with mental retardation.

Rachel et.al (2002) assessed maternal expressed emotion, attributions, depression and entry into therapy for children with behaviour problems. It is found that mothers who did not participate in therapy scored higher on EE dimensions critical comments, hostility or emotional over involvement, Beck Depression inventory (BDI) and parenting stress index (PSI).

Jacobson et.al (2000) examined the relation between maternal expressed emotion (EE) and mother - child attachment disorganization at age 6 years. It is found that maternal expressed emotion was significantly linked to mother - child attachment security at age 6 years. Further analyses revealed that high EE was more closely linked to the disorganized attachment pattern at age 6 years. The disorganized attachment pattern has been associated with future intrusive and hostile maternal behavior. The study provides independent validation of expressed emotion as a measure of relationship quality in early childhood.

Rastogi (1981) assessed attitudes of parents towards their mentally retarded children. It is found that attitudes of mother towards their mentally retarded children in the two study groups did not show any significant differences. When the attitude of both parents toward their child was compared, mothers exhibited significantly higher score on unfavorable dimensions. Both the parents showed negative attitudes toward their severely retarded child. Parvathi and Vijay Kumar (1995) investigated the differences in the parental reactions associated with the gender of mentally retarded adolescents. Retarded males received more warmth and better opportunities to play, while females received more stimulation by way of frequent outings and Socialization opportunities. Findings indicate that the family climate for retarded males is not as good as that of females, but that concern shown for their welfare is equivalent for both populations.

Kumar et.al (2004) studied the expressed emotion of mothers for children with mental retardation. He reported expressed emotion to be significantly more among mothers of children with mental retardation. The mothers of mentally retarded children showed comparatively very high emotional over involvement and hostility than normal.

Tengri and Verma (1993) explored the effect of handicapped children on the attitudes of parents. Parents of physically handicapped child had more favorable attitude towards management than the parents of mentally handicapped children. Rangaswamy (1995) discussed that parental attitude is an important factor for the development of the child’s behavior. He reported significant negative attitude towards mentally retarded children with behavior problem. Ramgopal et.al (1994) studied the behavior problem in moderately mentally retarded children and their relation to parental attitude scale showed negative attitude of the parents towards the moderately retarded children.
Beck et.al (2004) assessed maternal expressed emotion towards children with and without intellectual disabilities, and showed that mothers were more negative towards their child with intellectual disabilities for all domain's of the FMSS except dissatisfaction.

Ravindranandan et.al (2007) studied the adjustment and attitude of parents of children with mental retardation. The results indicated that parental religion, income and education do not have any significant influence on adjustment variables, but there is change in parental attitude among different religious groups. Locality of parents influences only on the dimensions of social adjustment and parental attitude.

Hastings et.al (2006) studied maternal distress and expressed emotion with behaviour problems of children with intellectual disabilities. The results indicated in terms of maternal expressed emotion, criticism and not emotional over involvement was cross sectionally but not longitudinally related to children’s externalizing behavior problems and to maternal distress.

Baker et.al (2000) examined how expressed emotion relates concurrently and longitudinally to children’s problem status in a community sample of preschool aged children. At preschool, the proportion of high EE increased significantly across three child groups: comparison (8.1%), Borderline Problem (15.8%) and high problem (41.2%); however, preschool EE was not predictive of subsequent child status at 1st grade. Narayan (1993) studied the Knowledge, attitude and perception of Parent of 69 mentally handicapped children. It was found that there is a significant relationship between the Knowledge, attitude and expectation of people parents who possessed adequate knowledge also had a positive attitude towards their mentally handicapped children and cherished reasonable expectation whereas, parents who had inadequate or no knowledge regarding mental handicapped expressed inability to spell out their attitude expectations.

Social development means acquisition of the ability to behave in accordance with social expectations (Pati et.al 1996). Mentally retarded children, due to low intellectual development, function with a limited capacity in comparison to normal children. Hence the social functioning of these children is found to be affected, and this is closely related to degree of impairment. In addition to brain pathology, there are other factors related to malfunctioning of these children in a normal social set up. A particular environmental set up in which a child grows up is likely to play an important part in improving or deteriorating the child’s functioning in a social milieu. Shastri and Mishra (1974) assessed 56 school-going children (aged 6-13 years) with mental retardation with the help of Social Maturity Scale and found that the mentally retarded children function more in the lower level of social interaction. As the degree of impairment in terms of intelligence goes down, it is observed that the child approaches an average or satisfactory level of social functioning they also found that the level of social development varies with the intellectual level among persons with mental retardation, or a wide range of family and environmental variables may also influence social development.

Pati et.al (1996) designed a study to identify the effects of severity of retardation, age, type of services attended and location of services in rural / urban area on the social development of children with mental retardation using a sample of 113 subjects diagnosed as children with mental retardation. The analysis of results suggested that with increasing severity of retardation, social development also decreases. Further it was found that age, type of services and location of center do not have any effect on social development.
Matson et al. (1999) designed a study to identify the effects of seizure disorders/epilepsy on psychopathology, social functioning, adaptive functioning and maladaptive behaviours using a sample of 353 people diagnosed with a seizure disorder and either severe or profound intellectual disability. People with a diagnosis of seizure disorder were found to have significantly less social and adaptive skills when compared to developmentally disabled controls with no seizure disorder diagnosis. Kumar et al. (2009) found that there was significant relationship between the measures of social maturity scale and the IQ of the subjects. Further it was found that with increasing severity of retardation, social development also decreases and age does not have any effect on social development. Arya (2002) studied the delivery of services through itinerant services model. The results of the study showed that intervention provided by itinerant teacher made a significant impact on the overall development of preschool children. The beneficial effect of intervention was particularly observed on social maturity of rural children. Present study was conducted to find out the relation between expressed emotion and social development in mentally retarded children. Another purpose was to investigate attitude of key relatives of normal and mentally retarded towards their children.

Materials and Mehtods
Sample,
The present study was carried out on a sample of 30 mentally retarded children (Mean age 12.10 years; SD 3.63) 60 key relatives aged 34-45 years (30 mental Retardation, 30 Normal) chosen at random from the Central Institute of Psychiatry Kanke Ranchi (Jharkhand). The sample included 15 males and 15 females mentally retarded children. Children with co-morbid epilepsy, sensory deficit (like impairment of vision, hearing), other psychiatric disorders and physical problem were excluded. Characteristics of the study population are given in Table 1 and 2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Subjects</td>
<td>Age</td>
<td>12.10</td>
<td>5.5</td>
<td>5-18</td>
</tr>
<tr>
<td>Variable</td>
<td>Sex</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>Education</td>
<td>15(50)</td>
<td>15(50)</td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Marital Status</td>
<td>Single</td>
<td>Married</td>
<td></td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>Domicile</td>
<td>Urban</td>
<td>Rural</td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Religion</td>
<td>Hindu</td>
<td>Muslim</td>
<td>Christian</td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>Occupation</td>
<td>Nil</td>
<td>Present</td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Monthly family income</td>
<td>&lt;5000 Rs</td>
<td>&gt;5000 Rs</td>
<td></td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>9(30)</td>
<td>21(70)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figures in Parentheses Indicate Percentage.
A key relative is operationally defined as a family member who look after the child and had direct face to face contact with the child daily at least over the past 1 year.

**Table : 2**

**Characteristics of the Key Relatives**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Key relative of Mental Retardation N.%</th>
<th>Key relative of Mental Retardation N.%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>6(20)</td>
<td>2(6.6)</td>
</tr>
<tr>
<td>Female</td>
<td>24(80)</td>
<td>28(93.3)</td>
</tr>
<tr>
<td>Key relatives Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to matriculation</td>
<td>24(82.6)</td>
<td>16(55.1)</td>
</tr>
<tr>
<td>above matriculation</td>
<td>6(17.4)</td>
<td>14(54.9)</td>
</tr>
<tr>
<td>Monthly family income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below Rs. 5000</td>
<td>6(30)</td>
<td>2(6.6)</td>
</tr>
<tr>
<td>Above Rs. 5000</td>
<td>21(70)</td>
<td>24(80)</td>
</tr>
<tr>
<td>Domicile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>15(50)</td>
<td>30(100)</td>
</tr>
<tr>
<td>Rural</td>
<td>15(50)</td>
<td>0(0)</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>23(79.3)</td>
<td>21(70)</td>
</tr>
<tr>
<td>Service</td>
<td>7(24.7)</td>
<td>9(30)</td>
</tr>
</tbody>
</table>

*Figures in Parentheses indicate percentage.*

**Tools**

Specially designed Socio-demographic data sheet:
A format was developed to record the background information about the subject, like name, age, sex, religion, income, occupation etc.

**Vineland Social Maturity Scale (VSMS)**

Vineland Social Maturing scale (VSMS) (A.J. Matin, 1970; Bharath Raj, 1992) is a developmental schedule concerned with an individual’s ability to look after one’s personal needs and to undertake social responsibility. It measures differential social capacities of an individual. VSMS was used to assess social development of study children.

**Stanford Binet Intelligence Scale (Hindi adaptation)**

It was originally developed by Alfred Binet with the help of Simon in 1905 in France. In India its hindi version was developed by S.K. Kulshrestha. Its 1960 revision has a range of 2 years to 22 years and 11 months of mental age scores. The single Binet L.M. form is available with norms on data as recent as 1972. This form measures abilities in 7 categories languages, reasoning, memory, social intelligence, conceptual, numerical reasoning and visual motors. Test items are in the form of words, objects and pictures, and responses given by the testees are in the form of drawing, calculating, writing and speaking. In this revision, the intelligence is expressed in terms of standard score of intelligence, IQ.
Attitude Questionnaire
It was developed by Sethi et.al (1985). This attitude Questionnaire evaluates expressed emotion under the following five dimensions critical comments, hostility, warmth, emotional over involvement and dissatisfaction. The scoring pattern of this questionnaires is easy and less ambiguous. The psychometric properties of the questionnaire is assumed to be satisfactory.

Procedure
Mentally retarded children were identified on the basis of International Classification of Disease 10th revision (Diagnostic Criteria for Research). Informed consent was taken from the informants before eliciting relevant information and the nature and purpose of the study were explained. All subject who were selected for the present study were interviewed and then assessed for IQ with the help of Stanford Binet Intelligence Scale. Thereafter, Vineland Social Maturity Scale and Attitude questionnaire were administered to know the social development and expressed emotion of each subject.

Analysis of Data
Data have been analyzed using means standard deviation percentage t test and Pearson correlation coefficient.

Result and Discussion
T test was carried out to find out if there was any significant difference in attitude between key relatives of mentally retarded are normal towards their children which is not significant statistically, this may indicate the stability of attitude between key relatives of mentally retarded and normal toward their children (table -3)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mental Retardation</th>
<th>Normal</th>
<th>t value</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude (Positive M ± SD)</td>
<td>2.000±0.909</td>
<td>1.600±1.868</td>
<td>1.054</td>
<td>58</td>
<td>.296</td>
</tr>
<tr>
<td>Attitude (Negative M ± SD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>8.300±8.836</td>
<td>8.966±7.672</td>
<td>-0.312</td>
<td>58</td>
<td>.756</td>
</tr>
</tbody>
</table>

Again t test was carried out to find out if there was any significant difference in social development in relation to various level of mental retardation (table - 4)

<table>
<thead>
<tr>
<th>Level of MR</th>
<th>N</th>
<th>Degree of social development Mean ± SD</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Moderate</td>
<td>1020</td>
<td>59.60±19.1042 60±13.20</td>
<td>0.008</td>
</tr>
</tbody>
</table>

* P value calculated by t test (t = -2.86 df = 28)

The value of t was significant at 0.01 level (t= -2.86; df = 28). It was found that there were statically significant difference in the social development of children in relation to various levels of mental retardation, with degrees of social development in terms of SQs for mild,
moderate retardations being 59.6, 42.6 respectively and the standard deviations being 19.1, 13.2 respectively. This suggest that there are significant differences in the social development of each category of retardation.

It is observed that with increasing severity of mental retardation, the level of social development decreases. The findings strongly suggest that among children with mental retardation too the cognitive and social skills are interrelated. The intellectual development and social development go together in the same direction Similar observations were reported by Pati et.al (1996)

Computed value of Pearson correlation coefficient between expressed emotion and social development was statistically non significant except critical comment and emotional over involvement. This may indicate relationship between critical comment and emotional over involvement with social development. The findings strongly suggest that with increasing level of critical comment and emotional over involvement, the level of social development decreases. Computed value of correlation between expressed emotion and level of mental retardation was 0.233, which is not significant statistically, this may indicate the stability of mental retardation with expressed emotion This study shows that there was no impact of expressed emotion on level of mental retardation. Our findings suggest that, critical comment, emotional over involvement, social development and mental retardation are interrelated. If critical comment and emotional over involvement of key relatives towards their children decreases, social development of their children increases. Level of mental retardation may also decreases due to social development. (Table 5)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pearson correlation Coefficient</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical comment x Social Quotient</td>
<td>-0.478**</td>
<td>0.007</td>
</tr>
<tr>
<td>Warmth x Social Quotient</td>
<td>0.258</td>
<td>0.169</td>
</tr>
<tr>
<td>Hostility x Social Quotient</td>
<td>0.182</td>
<td>0.337</td>
</tr>
<tr>
<td>Emotional over Involvement x Social Quotient</td>
<td>-0.276**</td>
<td>0.033</td>
</tr>
<tr>
<td>Dissatisfaction x Social Quotient</td>
<td>0.056</td>
<td>0.769</td>
</tr>
<tr>
<td>Overall Expressed Emotion x Social quotient</td>
<td>-0.330</td>
<td>0.075</td>
</tr>
<tr>
<td>Expressed Emotion Positive,Negative, Average x Social Quotient</td>
<td>0.270</td>
<td>0.149</td>
</tr>
<tr>
<td>Overall Expressed Emotion x Level of Mental Retardation</td>
<td>0.233</td>
<td>0.172</td>
</tr>
</tbody>
</table>

**Significant at the 0.01 level
*Significant at the 0.05 level

Socially competent behaviour requires the effective coordination of multiple social cognitive and emotion processes and contextual factors in order to adequately meet the demands of a particular social situation. The emerging evidence suggests that limitations in the child’s social cognitive processing as well as inadequate contextual supports may compromise the development of social competence among children and adolescents with Downs syndrome. Research is presented on key social cognitive processes and contextual influences.
that may hinder or facilitate the development of social competence among children and adolescents with Downs syndrome. The review is organized around key developmental tasks thought to reflect behavioural indices of social competence (i.e., parent-child interactions, peer relations, adolescent friendship, and community integration) from infancy through to adolescence (Grace et al. 2008). Most of the people think that as the child grows, social development will be enhanced, today he is a child, tomorrow he will be socially developed. This study will make the key relative of mentally retarded children aware about the functional requirement of counseling training and intervention for the mentally retarded children.

Arya (2002) found the beneficial effect of intervention on the social competencies of young children, another significant change was noticed in the attitudes of parent. It was observed that generally parents had negative attitudes towards their mentally retarded children as also reported by Rangaswami (1995). A remarkable positive change in the attitudes of parents was evinced after intervention and they felt confident to handle their mentally retarded children in a befitting manner. The merits of such parental involvement and participation of family members have been emphasized time and again (Mittler and Mittler 1983)

The most important implication of this study is the need for uplifting the key relative’s social and psychological well being. It is expected that it help the key relatives to deal effectively with their children having problem.

Conclusion.
It can be concluded that social quotient increases as critical comment and emotional over involvement decreases. Social quotient increases as level of mental retardation decreases as from moderate to mild.

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