Parental attitudes towards children with mental retardation: Across sectional study from NGOs in Northern India

Mohammad Shamim 1, Ahmed Abdella Mohammed Osman 2

1- Lecturer, Department of Health Education and Health Promotion Faculty of Public Health and Health Informatics, Umm Al-Qura University. 2- Assistant Professor, Department of Health Education and Health Promotion Faculty of Public Health and Health Informatics, Umm Al-Qura University.

Corresponding Author: Mr. Mohammad Shamim, Lecturer, Department of Health Education and Health Promotion Faculty of Public Health and Health Informatics, Umm Al-Qura University, General Alaziziah Street, Makkah, KSA. Email: shamim_ifff@yahoo.co.in

Abstract:

**Background:** People with Mental Retardation represent 2 - 3% of the general population. The parents of people with mental retardation seem to be affected considerably and they are exposed more for problems in their family lives. There is interaction between the parents and their children with mental retardation which leads to creation of negative dynamics and causing stress and reactions in the parents of children with disabilities. **Methods:** The objective of this study is to explore the attitude of the parents towards their children with mental retardation. The study research design is a 4x2x2 factorial design with a sample of 192 respondents. Parental Attitude towards problem children, a scale developed by Rangaswamy was used in the study. **Results:** Overall mean score obtained from the study indicates that there was a parental negative attitude towards children with mental retardation, and there is a positive correlation of overprotection with education and future, home management and total attitude. **Discussion:** There is a positive correlation of overprotection with education and future, home management and total attitude. The three main variables of the study (severity of mental retardation, sex and age) when interact with each other do not affect significantly on the parental attitudes towards children with mental retardation. **Conclusion:** There is a parental negative attitude towards children with mental retardation which is highly on home management and lowest on acceptance.

**Key words:** Emotional Difficulties, India, Mental Retardation, Parental Attitudes

**Introduction:** According to World Health Organization (WHO) report; people with mental retardation represent about 3% of the population of the world [1]. India is the second most populous country in the world. The overall statistical prevalence of mental retardation in India is found to be approximately 2 to 3% according to various studies reported time to time [2-4]. Most of persons with mental retardation have “mild” Intelligence Quotient (IQ) scores [5].

**Definition of mental retardation and Attitudes:**

American Association on Mental Retardation (AAMR) defines mental retardation as “a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior as expressed in conceptual, social, and practical adaptive skills” [6].

There are many definitions of "attitude". Wood defines attitude as "evaluation of an attitude object, ranging from extremely negative to extremely positive" [7].

Also, Eagly defines attitude as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” [8]. And Jung defines attitude as a "readiness of the psyche to act or react in a certain way" [9].

In this study, attitudes imply how parents react towards their children with mental retardation on various dimensions such as overprotection, acceptance, rejection, Permissiveness, Dominance, education and future, hostility and home management.

**Classification of Mental Retardation:**

According to WHO ICD-10 Guide For Mental Retardation; levels of retardation indicate by (IQ) Range obtained on measure of "General Intellectual Functioning" are classified as Mild Mental Retardation (50-69), Moderate Mental Retardation (35-49), Severe Mental Retardation (20-35) and anyone having (IQ) below 20 is regard as Profound Mental Retardation [10].
Causes of Mental Retardation:

Mental Retardation has many causes. It may be due to genetic or environmental factors. Some of the examples of genetic disorders are: Down's syndrome, Klinefelter Syndrome, Tay-Sach disease, Galactosmia, Microcephaly, and Congenital Hypothyroidism. Antenatal factors which are associated with mental retardation are such as Neural Tube Defect, Rhesus Incommutability, Infections, Drugs and Irradiation. Perinatal factors like birth injuries, Hypoxia, and Cerebral Palsy also contribute in causation of mental retardation. Postnatal factors found to be related with the mental retardation include but not limited to Head Injuries and Accidents, Encephalitis, Physical and Chemical Agents. Other factors which contribute in causation of Mental Retardation are; Maternal Malnutrition, Protein Energy Malnutrition (PEM), Iodine Deficiency, Consanguineous marriages and late pregnancy after age of 40 years [11].

Burden of mental retardation and parental relationship:

Persons with borderline or mild mental retardation are educable however they generally have poor academic achievements as a result; the parents of people with mental retardation seem to be affected considerably. Many researchers observed that these parents are more prone to be affected with several problems in their family lives as well as to experience emotional difficulties [12,14]. Regarding to the mothers of children with mental retardation, they face indifferent attitudes and non-cooperation in caring their children due to fact that they were not able to follow up their career and they also experienced marital difficulties [15].

It has also been reported that there is an interaction between the child with mental retardation and the family and this interaction may create negative dynamics and cause stress and reactions to the child with disabilities [16, 17].

Also there are other parameters such as the socio-economic deprivation of the parents [18] and the pattern of the parents to take care of their children and this may also contribute in elevation of their stress levels [19, 20]. There is a lack of awareness about individuals with mental retardation which is linked to negative attitudes [21] and to stigmatizing beliefs more prevalent in some cultures, such as mental retardation is caused due to possession by evil spirits [22, 23] or punishment for past sins [24].

Regarding to the parental attitudes; there are many influencing factors covering the interaction between the parents and their children with mental retardation; the way parents treat their children, in turn, influences their children’s attitudes toward them and the way they behave. So, the parent-child relationship is dependent on the parent's attitudes towards them. If parental attitudes are favorable, the relationship of parents and children will be far better than when parental attitudes are unfavorable [25].

People with mental retardation continue to report hostile attitudes and discrimination [26] and experience social exclusion, limited social relationships, lower rates of employment, and a reduced likelihood of participating in community based activities [27].

Available literature suggests that most of the researches on parental attitudes towards their children with mental retardation have been conducted in the West and there is a paucity of literature on the subject in Indian context considering the nature of social complexities and cultural diversity of the country. Whatever literature is available; in India, is limited in terms of its coverage and scope. The present study is contributing in bridging this gap to some extent. This study aims to study the attitudes of the parents towards children with mental retardation.

Material and Methods:

Study design:

This is a cross sectional study by using 4x2x2 factorial design with categories of degree of retardation at two levels, age groups at 4 levels, and gender at two levels. The research design of present study is given below.

Table 1: Distribution of Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Sub Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group</td>
<td>0-6 years</td>
</tr>
<tr>
<td>Degree of retardation</td>
<td>Mild</td>
</tr>
<tr>
<td>Parents having male</td>
<td>12</td>
</tr>
<tr>
<td>Parents having female</td>
<td>12</td>
</tr>
<tr>
<td>Total Sample (192)</td>
<td>48</td>
</tr>
</tbody>
</table>

Unit of sample:
The sample unit includes any parents having a child/adult person with Mild or Severe Mental Retardation in the family.
**Sampling Procedure:--**

**Sample:**
Sample of 192 respondents was drawn from voluntary agencies (5 Non-Governmental Organizations-NGOs functioning in Northern India). Purposive sampling technique was used and list of persons with mental retardation registered for day care and home based services were obtained from the included organizations. Parents having persons with mental retardation who had been diagnosed with mild or severe degree of retardation were approached personally for the interviews.

**Tools of the study:**
A questionnaire that contains demographic variables was used. And, to assess the parental attitudes we used Parental Attitudes towards problem children scale by Rangaswamy [28].

This scale measures parental attitude in terms of over protection acceptance, rejection, permissiveness, domination, education and future, hostility, and home management. The scale is a self-administered questionnaire which consists of 40 items. Scoring: All the 40 items of the scale are to be answered in terms of Yes, Can't say, and No. Negative attitudes have been assigned score (2), Can't say one (1) and zero (0) for positive attitude. To avoid response set, the items are worded in both positive and negative directions. This scale is empirically valid, having retest reliability (r= 0.916) and sensitive to discriminate parents of normal and problem children.

Data was distributed into bivariate and multivariate tables and analyzed using (SPSS) software.

**Ethical considerations:**
Informed consent was obtained from all individual participants included in the study.
The authors declare that this manuscript does not contain clinical studies or patient data.

**Results:**
This study reports on the nature of parental attitudes towards their children. A total sample of 192 respondents was drawn.

**Table 2: Parental attitude and its dimensions towards children with mental retardation**

<table>
<thead>
<tr>
<th>Variables</th>
<th>OP</th>
<th>AC</th>
<th>RE</th>
<th>PE</th>
<th>DO</th>
<th>ED</th>
<th>HM</th>
<th>HO</th>
<th>TA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>4.17</td>
<td>3.73</td>
<td>7.66</td>
<td>5.74</td>
<td>6.16</td>
<td>6.79</td>
<td>7.83</td>
<td>4.20</td>
<td>46.29</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>2.65</td>
<td>1.71</td>
<td>1.67</td>
<td>2.39</td>
<td>2.15</td>
<td>1.79</td>
<td>2.19</td>
<td>1.69</td>
<td>6.10</td>
</tr>
</tbody>
</table>

(\(\text{OP}=\) Over protection, \(\text{AC}=\) Acceptance, \(\text{RE}=\) Rejection, \(\text{PE}=\) Permissiveness, \(\text{DO}=\) Dominance, \(\text{ED}=\) Education and future, \(\text{HM}=\) Hostility, \(\text{HO}=\) Home management and \(\text{TA}=\) Total attitudes). Overall mean score indicates parental negative attitudes towards their children with mental retardation which is highly on home management and lowest on acceptance.

**Table 3: Inter correlations matrix of entire sample on all the variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>OP</th>
<th>AC</th>
<th>RE</th>
<th>PE</th>
<th>DO</th>
<th>ED</th>
<th>HO</th>
<th>HM</th>
<th>TA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OP</strong></td>
<td>1.00</td>
<td>0.00</td>
<td>-0.20</td>
<td>-0.14</td>
<td>-0.10</td>
<td>0.28</td>
<td>-0.17</td>
<td>0.11</td>
<td>0.39</td>
</tr>
<tr>
<td><strong>AC</strong></td>
<td>1.00</td>
<td>0.00</td>
<td>0.19</td>
<td>0.19</td>
<td>-0.17</td>
<td>-0.07</td>
<td>-0.05</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td><strong>RE</strong></td>
<td>1.00</td>
<td>0.00</td>
<td>0.19</td>
<td>-0.30</td>
<td>0.01</td>
<td>0.08</td>
<td>0.39</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td><strong>PE</strong></td>
<td>1.00</td>
<td>0.00</td>
<td>0.19</td>
<td>-0.30</td>
<td>0.01</td>
<td>0.08</td>
<td>0.39</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td><strong>DO</strong></td>
<td>1.00</td>
<td>0.00</td>
<td>0.19</td>
<td>-0.30</td>
<td>0.01</td>
<td>0.08</td>
<td>0.39</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td><strong>ED</strong></td>
<td>1.00</td>
<td>0.00</td>
<td>0.19</td>
<td>-0.30</td>
<td>0.01</td>
<td>0.08</td>
<td>0.39</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td><strong>HO</strong></td>
<td>1.00</td>
<td>0.00</td>
<td>0.19</td>
<td>-0.30</td>
<td>0.01</td>
<td>0.08</td>
<td>0.39</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td><strong>HM</strong></td>
<td>1.00</td>
<td>0.00</td>
<td>0.19</td>
<td>-0.30</td>
<td>0.01</td>
<td>0.08</td>
<td>0.39</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td><strong>TA</strong></td>
<td>1.00</td>
<td>0.00</td>
<td>0.19</td>
<td>-0.30</td>
<td>0.01</td>
<td>0.08</td>
<td>0.39</td>
<td>0.33</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Overprotection was found to be highly and positively correlated with education and future, home management and total attitude.

Acceptance was observed to be highly and positively correlated with permissiveness, dominance, and total attitude.
Furthermore, acceptance was found to be negatively correlated with the rest of the variables of the study namely education and future, hostility and home management. Rejection was also found to be highly and positively correlated with total attitude. Rejection was found to be highly and positively correlated with dominance, alienation and total attitude. Low positive correlation of permissiveness was found with hostility, home management. High negative correlation of permissiveness was found with education and future. Low positive correlation of dominance was found with education and future and hostility whereas negative correlation was found with the home management. Education and future variable was found to be highly and positively correlated with total attitude.

Table 4: ANOVA of total attitude (Category X Gender X age)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Df</th>
<th>SS</th>
<th>MSS</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>1</td>
<td>6.38</td>
<td>6.38</td>
<td>0.21</td>
</tr>
<tr>
<td>Gender</td>
<td>1</td>
<td>24.79</td>
<td>24.79</td>
<td>0.84</td>
</tr>
<tr>
<td>Age</td>
<td>3</td>
<td>684.64</td>
<td>216.21</td>
<td>7.33</td>
</tr>
<tr>
<td>Severity X Gender</td>
<td>1</td>
<td>5.67</td>
<td>5.67</td>
<td>0.19</td>
</tr>
<tr>
<td>Severity X Age</td>
<td>3</td>
<td>979.43</td>
<td>326.47</td>
<td>11.07</td>
</tr>
<tr>
<td>Gender X Age</td>
<td>3</td>
<td>205.59</td>
<td>68.53</td>
<td>2.32</td>
</tr>
<tr>
<td>Severity X Gender X Age</td>
<td>3</td>
<td>56.47</td>
<td>18.82</td>
<td>0.63</td>
</tr>
<tr>
<td>Residuals</td>
<td>176</td>
<td>5186.25</td>
<td>29.46</td>
<td></td>
</tr>
</tbody>
</table>

This table shows three main and three interaction effect on total attitude of parental attitudes towards children with mental retardation. It implies that the subjects having male, female, mild or severe children with mental retardation do not differ from each other on total attitude (statistically insignificant). So the mean difference found in table No. 3 is not real or it may be attributed to chance factor on total attitude. Also, the different age groups with mental retardation do not differ significantly from each other on total attitude.

Table 5: Analysis of Variance of all variables

<table>
<thead>
<tr>
<th>Categories</th>
<th>OP</th>
<th>AC</th>
<th>RE</th>
<th>PE</th>
<th>DO</th>
<th>ED</th>
<th>HO</th>
<th>HM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>18.36</td>
<td>1.22</td>
<td>1.72</td>
<td>68.3</td>
<td>0.09</td>
<td>35.25</td>
<td>0.72</td>
<td>0.87</td>
</tr>
<tr>
<td>Gender</td>
<td>1.47</td>
<td>0.26</td>
<td>0.06</td>
<td>0.09</td>
<td>0.03</td>
<td>0.16</td>
<td>2.19</td>
<td>0.87</td>
</tr>
<tr>
<td>Age</td>
<td>1.94</td>
<td>0.49</td>
<td>0.67</td>
<td>3.94</td>
<td>3.76</td>
<td>11.1</td>
<td>7.07</td>
<td>3.09</td>
</tr>
<tr>
<td>Severity X Gender</td>
<td>6.22</td>
<td>0.18</td>
<td>1.72</td>
<td>2.03</td>
<td>0.35</td>
<td>2.27</td>
<td>19.72</td>
<td>1.04</td>
</tr>
<tr>
<td>Severity X Age</td>
<td>15.75</td>
<td>0.43</td>
<td>4.56</td>
<td>6.27</td>
<td>1.8</td>
<td>14.89</td>
<td>35.25</td>
<td>2.68</td>
</tr>
<tr>
<td>Gender X Age</td>
<td>2.52</td>
<td>2.56</td>
<td>0.2</td>
<td>0.55</td>
<td>3.67</td>
<td>0.49</td>
<td>5.55</td>
<td>1.63</td>
</tr>
<tr>
<td>Severity X Gender X Age</td>
<td>0.39</td>
<td>1.81</td>
<td>0.54</td>
<td>5.25</td>
<td>1.2</td>
<td>2.04</td>
<td>4.28</td>
<td>2.01</td>
</tr>
</tbody>
</table>

This table shows the analysis of variance (2x2x4) for two levels of Severity (mild and severe) and two sexes (males and females) matched with four levels of age group (having children of 0-6 years, 6-12 years, 12-18 years and 18 years and above).

There is statistical significant relationship that the sex of the child with mental retardation affects the dominance attitudes of the parents towards their children with mental retardation. Furthermore, the result shows that the two categories of the severity of retardation (mild and severe) do not differ from each other on overprotection, acceptance, rejection, permissiveness, dominance, education, hostility or home management.

It implies that the degree of retardation of the child with mental retardation does not affect the overprotection, acceptance, rejection, permissiveness, dominance, education, hostility or home management of the subjects towards children with mental retardation. It can be interpreted that the subjects having children with mental retardation of any age group do not differ from each other statistically on overprotection, acceptance, rejection, permissiveness, dominance, education, hostility or home management.
It can be concluded that all the three main effects of the study (severity, sex and age) when interact with one another do not affect significantly on the over protection, acceptance or rejection or permissiveness, dominance, education, hostility and home management of the subjects having children with mental retardation.

Discussion:
In this study there is a parental negative attitude towards children with mental retardation which is highly on home management and lowest on acceptance.

In a similar study conducted in rural Zulu community of South Africa, researcher found that parents seem to have feelings of embarrassment towards their children with mental retardation; which stem from the perceived negative attitude of the general population towards such children [29]. This embarrassment results in social withdrawal and isolation with far reaching negative consequences for the child with mental retardation and his/her family [30]. In a Kolkata based study, it was observed that the parents of children with mental retardation were worried about their future and the researcher further states that the parents withdraw from the society due to insult and derogatory comments made by the so called their well-wishers regarding their children with mental retardation and these comments were not similar to those made against their normal children [25].

There is a positive correlation of overprotection with education and future, home management and total attitude. Acceptance correlates positively with permissiveness, dominance, and total attitude. Also, rejection and education positively correlate with total attitude. The Scale used in this study measures parental attitude in five different aspects, which are overprotection, acceptance, rejection, permissiveness, and domination as an effect on parental attitude on four sub areas like, home, health, social and emotional adjustment pattern of their children with mental retardation. The findings suggest that the attitudes of parents towards their children with mental retardation differed in respect of different dimension of attitude such as acceptance, permissiveness, and domination of their children [1].

The three main variables of the study (severity of mental retardation, sex and age) when interact with each other do not affect significantly on the parental attitudes of the subjects having children with mental retardation. In consistence with the findings, with respect to the gender of the child with mental retardation, it is reported that there is no gender impact on attitudes of parents towards their children with mental retardation [31].

Conclusion:
Mental retardation continues to be growing challenge for the parents of children with mental retardation in specific and to the societies in general worldwide. Parents of children with mental retardation face difficulties and experience stress in management of their children.

There is a parental negative attitude towards children with mental retardation which is highly on home management and lowest on acceptance.

There is no significant difference between three main variables of the study (severity of mental retardation, sex and age) when interact with each other on the parental attitudes of the subjects having children with mental retardation.

Recommendations:
Attention should be paid to the parental stress and negative parental attitudes towards their children with mental retardation. Introduction of health education programs in form of behavioral change for the affected families may be worth full. Also, NGOs should increase their efforts to minimize the effects of negative attitudes of the parents on their children with mental retardation by imparting education including short term parents training programs, professional guidance and counseling services, and pre vocational and vocational guidance. Rehabilitation services including therapeutic services must be made accessible to the affected population on affordable cost particularly in rural areas. All concerned stakeholders must join hands together and play their required roles including the responsible Government agencies in reducing these effects and providing an enabling environment for people with disabilities.

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Conflicts of interest:
The authors declare that there is no conflict of interests.

References: