



## **A STUDY ON LEVEL OF AWARENESS ON ETIOLOGY OF INTELLECTUAL DISABILITY AMONG PARENTS OF CHILDREN WITH INTELLECTUAL DISABILITY**

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### **Abstract**

*In the present study the researcher has tried to explore the level of awareness regarding etiological factor of intellectual disability among parents having children with intellectual. The objective of this study was to assess the level of awareness among parents related to medical and etiological factors of intellectual disability. The sample of the study was 60 parents. The researcher used a self developed tool. The tool comprises of 30 items intellectual disabilities and its etiological factors, further it has medical cum genetic causes or environmental factor as two domains. The obtained t value was 1.20 & 2.02 respectively in both the medical cum genetic and environmental factors and the significant difference was .233 & .048 respectively. In addition to it item wise analysis was also prepared. The findings indicated that level of awareness does not vary with the gender of parents. The level of awareness has also does not have significance effect with respect to the socio economic status of the parents. Meanwhile, in the different items it can be said that parents have significance level of awareness whereas in few areas they need more awareness such as transferability of Intellectual disability, phenlketonuria.*



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### **Introduction**

Awareness means orienting and educating the people about a particular concept, condition etc. Awareness plays an important role in highlighting any event/ condition. It can take place by interaction, listening to lectures, seminars, reading printed books, magazines etc; now- a day's information communication technology plays an important role in spreading awareness through social media, internet, television. One kind of campaign is that of raising awareness of disability issues among the general public - disabled and non-disabled people - with the aim of changing negative attitudes about disabled people into positive recognition of our skills, needs and rights.

Awareness is the ability to directly know and perceive, to feel, or to be conscious of events, objects, thoughts, emotions, or sensory patterns. In this level of consciousness, sense data can be confirmed by an observer without necessarily implying understanding. More broadly, it is the state or quality of being aware of something. In biological psychology,

awareness is defined as a human's or an animal's perception and cognitive reaction to a condition or event. There is lot of lack of awareness about intellectual disability. It needs to be addressed and bring forward the facts causing intellectual disability.

Disability Awareness means educating people regarding disabilities. As the etiology depicts multiple factors leading to intellectual disability, it becomes all the more difficult for the parents to understand the complexities the child is facing leading towards intellectual disability. Finally this leads to several myths & misconceptions amongst parents. And accept that there child is suffering from this condition.

The role of awareness here becomes very important to make the parents to understand about their child's condition and further action needs to be taken for the growth and development of their child.

In the present study the researcher is intended to know the level of awareness existing among parents related to etiological factors of intellectual disability. Enormous studies have been conducted on the causes of intellectual disability but as per the review of literature procured by the researcher says that only handful studies have been conducted on the etiological factors and its awareness among parents those who have children with intellectual disability.

The researcher felt the need to understand the level of awareness about parents as Intellectual disability is a very complex and manifested at various stages of development. The etiological factors related to medical causes are one of the major indicators of Intellectual disability as the country does not have adequate medical facility for pregnant mothers, lack of medical practitioners and early identification of children with developmental disabilities/Intellectual disability. The researcher in this research also considered the environmental factors leading to Intellectual disability

### **Etiology of Intellectual disability**

Etiology signifies factors responsible for the causes of Intellectual disability Etiology is divided into four types biological causes, prenatal & post natal.

### **Objectives of the Study:-**

1. To assess level of etiological awareness among parents having children with intellectual disability.

### **Hypotheses: -**

1. There is no significant difference between the levels of awareness on two categories of etiological factors among parents having children with Intellectual Disability.
2. There is no significant difference in the level of awareness on etiological factors between parents having children with Intellectual Disability with respect to gender.
3. There is no significant difference in level of awareness on etiological factors among parents having children with Intellectual Disability with respect to their socio economic status.
4. There is no significant difference in level of awareness on etiological factors among parents having children with Intellectual Disability with respect to their level of education.

### **Research Design-**

In the present study researcher has used Descriptive Survey Design to assess level of awareness of etiology of intellectual disability among parents having children with intellectual disability.

**Sample & Sample size-** sample for the study is both mother and father having child with Intellectual Disability. Sample size consisted of 60 parents equal in proportion having children with Intellectual disability. The simple random sampling technique was used and the other factors such as education, socio economic status were taken into consideration for sample size.

### **Tool Used for the study**

The researcher developed a questionnaire on the basis of etiology of intellectual disability. The researcher in the beginning has pooled in forty items based on the statement of problem from referring various sources for extraction of questions. The tool was named as **Awareness Scale for Etiological Factors of ID**. The scale consists two categories of etiological factors namely Medical cum Genetic Factors and Environmental Factors, with the total number of items 20 and 10 respectively. The test re-test reliability of the tool is .68. The researcher has established content validity for the tool.

**Hypothesis No 1:** There is no significant difference between the level of awareness on two categories of etiological factors among parents having children with Intellectual Disability.

Table depicting the level of awareness using value of t test in both the areas medical cum genetic causes and environmental factors.

| Area/ Domain                | N  | Df | t value | Sig. Diff. |
|-----------------------------|----|----|---------|------------|
| Medical and genetic factors | 60 | 58 | 1.206   | .233       |
| Environmental factors       | 60 | 58 | 2.020   | .048*      |

**Above table** exhibits the level of significance in the medical cum genetic cause by using the t value. The obtained t value is 1.206 and a significant difference of 0.233 can be observed from the above table. The calculated value is more than .05 i.e. .233,  $p > 0.05$  which means value is non-significant and no significant difference between responses of mother and father is being observed. Overall level of awareness gives a reflection that more than half of the parents possess level of awareness with respect to genetic cum medical causes.

The analysis of data also reveals that there are some genetic issues which still needed to be clear and understood by the parents. Differences of gender do not have any impact on level of awareness. It was also be observed from scores obtained that majority of parents have overcome the level of superstitions which they use to believe earlier. They are also aware of various medical conditions which my lead to intellectual disability. However they need some awareness and information about genetic issues such as transmission of intellectual disability from one generation to another generation etc. Only 25% of parents both, mother and father are aware of term pheylketonuria as one of the cause of Intellectual disability and rest of them have not heard this term. The data also made us to say that parents needed to pay more attention towards the milestone of their children which they attain in the process of development.

Parents need more information and awareness about the medical challenges faced at the time of birth and with whom a parent should be aware of. Moving on to environmental factors, the obtained t-value is .048 which is lower than .05 It shows that value is significant at 5% level of difference.

The data reveals that the majority of parents are aware of the environmental factors which can cause intellectual disability. However in some areas parents needed to be give awareness about the probable environmental factors which can lead to intellectual disability among children. Approximately parents are in favour that early stimulation leads to improvement in child with intellectual disability. Whereas half of the population have given correct responses

about the environmental facts such as social acceptance poverty and malnutrition etc. However, parents need more awareness about harmfulness of toxic materials. Majority of Parents do not agree on the fact that education has any impact on their attitude towards intellectual disability.

Therefore we accept the hypothesis that there will be no significant difference in the level of awareness between parents related to awareness about the etiological factors of intellectual disability.

**Hypothesis No 2:** There is no significant difference in the level of awareness on etiological factors between parents having children with Intellectual Disability with respect to gender.

| Gender | No. of Questions | of N | Mean scores |
|--------|------------------|------|-------------|
| Father | 30               | 30   | 48.16       |
| Mother | 30               | 30   | 48.50       |

**Above table** indicate mean scores obtained by the father and mother is 48.16 & 48.50 respectively. It shows that there is no significant difference exists between overall responses obtained by father and mother. Both parents have shown non significant level of difference when we compare the responses of father and mother. Further it possibly can be interpreted that both father and mother are equally aware of etiological factors that causes intellectual disability

**Hypothesis 03** There is no significant difference in level of awareness on etiological factors among parents having children with Intellectual Disability with respect to their socio economic status.

**Table 4.3 depicting the level of awareness using value of t test under upper socio economic Status and lower socio economic status:**

| Area/ Domain                | Socio Economic Status (SES) | Mean  | N  | Df | t value | Sig. Diff. |
|-----------------------------|-----------------------------|-------|----|----|---------|------------|
| Medical-cum-genetic factors | upper economic socio        | 31.83 | 60 | 58 | 2.73    | .008**     |
|                             | Lower economic socio        | 34.06 |    |    |         |            |
| Environmental factors       | Upper economic socio        | 15.50 | 60 | 58 | .334    | .740       |
|                             | Lower economic socio        | 15.26 |    |    |         |            |

**Table 4.3** Shows area domain-wise mean score and t value under upper and lower socio economic status. The mean score obtained where 31.83 and 34.06 for upper and lower socio economic status respectively under medical cum genetic causes. This shows that average

population is having awareness about intellectual disability and its ecological factors under upper and lower socio economic status. The difference of mean is approximately 3 which show that there is no such difference between overall responses of parents belonging to upper and lower socio economic status.

Value of t derived under medical cum genetic causes is 2.73 which is lower than the table value. Hence it can be said that the level of awareness is highly significant i.e.  $p > 0.05$  so at 0.05 level we accept the hypothesis.

Under the 2<sup>nd</sup> area/domain i.e. environmental factors mean scores are 15.50, 15.26 for upper & lower socio economic status respectively. From the scores obtained it can be interpreted that there is no difference between the responses obtained from both upper and lower socio economic status. In other words, one can say that level of awareness does not vary with the level of economic status.

Value of t derived under medical cum genetic causes is which is lower than the table value is .334 which is higher than the table value. Hence it can be said that the level of awareness is non significant i.e.  $p > 0.05$  so at 0.05 level we accept the hypothesis.

Hypothesis 04 There is no significant difference in level of awareness on etiological factors among parents having children with Intellectual Disability with respect to their level of education.

**Table: 4.4**

| Area/ Domain                | Level of Education | Mean  | N  | Df | t value | Sig. Diff. |
|-----------------------------|--------------------|-------|----|----|---------|------------|
| Medical-cum-genetic factors | Degree Level       | 32.18 | 22 | 58 | 1.18    | .016**     |
|                             | Below Degree Level | 26.51 | 38 |    |         |            |
| Environmental factors       | Degree Level       | 16.11 | 22 | 58 | 1.21    | .084**     |
|                             | Below Degree Level | 13.08 | 38 |    |         |            |

**Table 4.4** depicts that with respect to gender and other sub variables the data has been categorized for the level of education also. It has been divided into degree and below degree level under degree level for the area of medical cum genetic cause the t-value is 1.18 which is higher than the table value significant  $p < 0.05$  which means the difference as per level of education is significant and difference can be from the mean score as well.

Similarly under environmental factors the t-value is 1.21 which is higher than the table value  $p < 0.05$  it symbolizes that in the area of environmental factors a significant difference between both cadre of education (below and degree level)

Hence the hypothesis is rejected at .05 level of difference. It means that with the variation in level of education the level of awareness also varies.

### **Discussion and Findings**

From the present study it can be concluded that level of awareness does not vary with the gender of parents. The level of awareness has also does not have significance effect with respect to the socio economic status of the parents. Meanwhile in the different questions it can be said that parents have significance level of awareness whereas in few areas they need more awareness such as transferability of Intellectual disability, phenlketonuria etc.

Hypertension and other maternal diseases also should be given more information to the parents. Genetic disorders should also be given more priority while imparting awareness among the parents. Living conditions can have a negative impact on health of the child. It also can be the reason of intellectual disability among the individuals and cause harm to the mental and physical health of children. The study also has its other side that level of awareness has increased in certain areas such as nowadays people have identified the difference between mental illness and intellectual disability. They also have awareness about medical causes of intellectual disability. About half of the population have agreed on the issue of importance of food being provided to the pregnant mothers and infants.

At last when the sample are observed on the level of their education it was quite visible that a positive correlation has been found between level of awareness and level of education of parents. Parents who are well qualified has a sound knowledge of intellectual disability and its technical aspects whereas parents who are moderately qualified have low level of awareness as compared to above one.

### **Conclusion**

The study awareness on etiology of intellectual disability among parents of children with intellectual disability have undertaken by the researcher with a view to find out the level of awareness among parents with respect to their gender and socio economic status. It was found in data analysis and interpretation that gender is not an influencing factor on level of awareness among parents. Both mother and father have significant level of awareness about

intellectual disability as the study was conducted in the one of the region located in south India so level of education was quite good and almost every parent were providing education and services to their children to the extent possible. Involvement of both parents also influenced the level of awareness related to medical, genetic and environmental factors. However it was also found that parents need more awareness about medical factors such as PKU, maternal diseases and genetic causes such as down syndrome etc. Hands on training should be provided for making parents aware about prenatal and neonatal causes.

In environmental factors parents should be made aware about the importance of living in healthy conditions. Family should be aware to take care of pregnant women and providing good nutritious diet for a healthy baby. Increase awareness of coming into contact with harmful substances and intoxications such as lead or mercury can lead to Intellectual disability.

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