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Study of social and vocational status in mentally subnormal children

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Abstract

This study was carried out on fourty mentally subnormal children of 6-15 years age group with varying severity of mental subnormality attending the Department of Physical Medicine and Rehabilitation and Pediatrics OPD, All India Institute of Medical Sciences, New Delhi. Those children below 70 on IQ scale were included in the study. A questionnaire was applied to assess their social and vocational skills. It was observed that the majority of subjects understood simple gestures and instructions of parents, welcome visitors at home, behaved appropriately with parents and sibs, expressed their requirements and were interested in watching television and going for outings. This brings forth the conclusion that mentally subnormal children are much active in creating social relations and also have potential vocational skills contrary to the common belief. These potentials need to be exploited and the children need more exposure to the normal social environment for a good social development. This needs appropriate schooling.

Introduction

Mental subnormality is a group of conditions of developing period, which manifest as low learning capability and insufficient adaptive skills. The prevalence of mental subnormality is reported to be 1-2%.[1,2]

With a lot of work being done in mental subnormality, this topic still remains a mystery. The social and vocational maladjustment that results has not found a breakthrough in applied medicine. The social stigma attached to mental subnormality prevails at large. No study was found in the review of literature assessing the status of mentally subnormal children in social and vocational aspects in India. There is lack of vocational and recreational facilities for the mentally subnormal. This is why the study was conceptualized.

WHO has defined mental retardation as a condition of arrested or incomplete development of mind.[3,4] It is especially characterized by impairment of skills manifested during the developmental period, which contribute to overall level of intelligence i.e. cognitive, language, motor and social abilities.[1] It grades the severity of mental subnormality as mild, moderate, severe and profound (Table 1).

There have been many conceptual changes in management of mental subnormality since the old days. Most recent definition of mental subnormality according to the American Association on Mental Subnormality (AAMR), 1992 is: mental retardation is characterized by significantly subaverage intellectual functioning, existing concurrently with related limitations in two or more of the ten adaptive skill areas (Table 2). Mental subnormality manifests before 18 years of age and refers to substantial limitation of present functioning.[5,6]

AAMR 1992 propounded three steps in describing a mentally subnormal person (Table 3). The definition does not label the child by severity of mental subnormality. This definition is more subjective and difficult to use than WHO definition but gives a functional novel approach to the diagnosis and management of mental subnormality. This definition considers capabilities

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of the particular individual in terms of his intelligence and adaptive skills and his social environment at home, school and in the community. With these two considerations, the functioning of the individual is assessed and appropriate supports are given in individual fields of requirement.[6] The type of supports needed may be intermittent, limited, extensive or pervasive.[7] The presence of strengths in other areas are searched for and improved further. With appropriate supports, the functioning should improve.

Table 1: Severity grades of mental subnormality

Sr. No.	*IQ*	*Severity*	*Capabilities*	*Training required*
1	50-69	Mild	Acquire languages of daily use, full independence in self care, difficulty in academic achievements, capable of semiskilled or unskilled work, noticeable social and emotional immaturity	Functional education
2.	35-49	Moderate	Limited use of language, may need supervision even in self care, trainable in basic skills or supervised practical work	Manual skills training
3	20-34	Severe	Motor impairment in addition to above	Systematic habit training
4	<20	Profound	Cannot understand or comply with instructions, most are immobile & incontinent, require constant help	Use of legs, hands and jaws

Table 2 : Adaptive skill areas for diagnosis of mental retardation (at least 2 out of 10 should be deficient)

Communication	Self-care
Home living	Social skills
Community use	Self-direction
Health and safety	Functional academics
Leisure	Work

Table 3 : Steps in AAMR 1992 definition of mental subnormality

Step 1	Diagnosis	1. Intellectual functioning approximately 70-75 or below 2. Significant limitations in two or more adaptive skill areas 3. Age of onset is 18 years or below
Step 2	Classification	1. Psychological/emotional strengths and weaknesses 2. Overall physical health and etiology 3. Current environmental placement and extent of adaption
Step 3	Profiles and intensities of needed supports (in each of the 4 dimensions)	• I-Intellectual functioning & adaptive skills • II-Psychological/emotional considerations • III-Physical health/etiology management • IV-Environmental supports and optimization

Materials and Methods

The study attempted to find out the present state of mentally subnormal children in social perspectives and vocational potential. It also attempted to find out the recreational and leisure activities in these mentally subnormal children.

This is a cross sectional descriptive study on assessment of the mentally subnormal children from social, vocational and recreational perspectives. The WHO definition is used to pick up the cases for this study as the functional utility of grading of severity needs to be questioned as far as the social and vocational aspects are concerned.

Inclusion Ccriteria

1. Intelligence quotient < 70
2. Children aged 6-15 years where the IQ tests are more valid and social and vocational potentials are exposed.
3. Informed consent from the parents of the children

Exclusion criteria

1. No deficiency in adaptive skill areas
2. Any condition hampering IQ testing. E.g. deafness.

An expert clinical psychologist did the IQ testing throughout the study and the children were accordingly classified as mild, moderate, severe and profound mental subnormality. One of following three IQ tests was applied along with Vineland Social Maturity Scale for assessment of social quotient.[8]

1. Mallin's Intelligence scale for Indian children [8]
2. Seguin form board [8]
3. Gessel developmental scale

A proforma was made containing questions regarding the subject's:

- Behavior with parents, siblings and visitors
- Hobbies and leisure activities
- Household work
- Group activities
- Schooling
- Independent outdoor ambulation
- Safety consciousness
- Outings

Questions were asked to the parents of the subjects on this proforma by a single interviewer. The data was collected on consecutive cases during the period of September 1997 to September 1998. Since there was no such study in the Medline search, prevalence of the variables in this study is not available. Hence a study of fourty subjects was planned.

The data was analyzed and the results were as follows. Seventeen (42.5%) out of the fourty subjects were mild, 14 (35%) moderate, 7 (17.5%) severe and 2 (5%) were having profound mental subnomality. Age distribution was almost uniform. Males were twice the numbers of female subjects. Majority of the parents was educated. Three fourths of the mothers were housewives. The statistically significant outcomes were:

1. All children enjoyed outings
2. All of them followed gestures of parents
3. Mild cases had more interest in viewing television ($p<0.01$)
4. Children who were sent to school welcomed visitors at home ($p<0.01$)
5. Children who welcomed visitors at home also offered help at home ($p=0.001$)
6. Having good sleep was found to be associated with following parents' instructions and welcoming visitors at home ($p<0.01$)
7. Those children who were taken for outings had eye contact with visitors ($p<0.01$)
8. Children who enjoyed outings behaved well with parents ($p<0.05$)

Schooling was correlated well but not statistically significantly with moving

independently and being informed about current happenings. Milder grades of severity correlated with sense of handling money, household work and hobbies.

The observations also showed that severity of mental subnormality did not correlate with eye contact, welcoming visitors, enjoying outings, household help, music, schooling, indicating requirements, behavior with parents and following their instructions.

Discussion

In the review of literature, no such study was found in Indian context. This study strives to find out the present state of the mentally subnormal children in social, vocational and recreational activities. It is based on the observation of the parents' view about their children.

In sixty percent of the subjects, the mother came forward with the information on the child.

Only one of the mothers was illiterate. All other parents were literate. This might be showing the fact that literate parents are more aware about the rehabilitation needs of their children.

One fourth of the mothers were doing some job. Majority was housewives. This is an advantage for the child that the mother who can care best for the child can pay him attention too. However, this might also indicate that the mother couldn't go for a job because of the special care her child needed.

The study came up with 2:1 male to female ratio. This is of no significance as an indictor of prevalence because the males are cared for more than the female children in India. Another fact is the hopelessness of cure and social stigma attached to mental subnormality might restrict the turn-up of these children at the hospital. Another hospital-based study in India has found the ratio to be 3:2 among sample size of 50.[9]

Welcoming visitors at home is a social activity and shows no correlation with severity of mental subnormality. This indicates that socialization is present in the severe grades of mental subnormality also.

Sending the children to school was associated with further incidence of socialization. This could be because the child is exposed to social atmosphere amongst his peers and teachers. He is also taught about the manners and social activities at the school. Also it was found that schooling was not correlated with IQ. So the children should be sent to school irrespective of their severity of mental subnormality. The IQ score should not interfere with sorting out the management strategies.

Children who had good sleep behaved socially better. This shows the importance of good sleep and conducive environment to achieve socialization. Sleeping well gives adequate rest to mind and might make it more receptive to learning social skills.

Taking the children for outings improves their exposure to environment and thus is associated with having eye contact with people. These children should not be restricted to home and neglected. On the contrary, they need more exposure to the society so that they can mix well socially. This also improves their behavior with parents.

Conclusion

It is concluded that the mentally subnormal children have social skills and enjoy leisure activities. They also have vocational potential. Social interaction is not dependent on severity of mental subnormality. These potentials may remain suppressed due to restricted exposure of the special children to their social environment. Hence exposure of the mentally subnormal children to social environment outside home is needed in the form of sending to school and mainstreaming.

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