

Efficacy of Early Stimulation and Intervention in Treatment of Children with Multiple Disabilities- A Case Study

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Abstract:

Early stimulation and intervention plays a vital role in the rehabilitation of children with multiple disabilities. Children with multiple disabilities often lack in overall development which includes motor, cognitive, and social-emotional and communication. Several researches in the field of special education have demonstrated tremendous improvement in children with multiple disabilities that have undergone early stimulation activities. Studies by Michael J. Guralnick (1997) and Casto.G., & Mastoprieri.M. (1985) have demonstrated the effectiveness of early intervention on development of cognition along with various other skills and the long term positive effects of the same.

The present study talks about a child with multiple disability, who was brought to Early Intervention Program at AIISH, Mysore at the age of 9 months. At that time the child was brought to the program with complaints of lack of eye-contact, inability to sit, inability to move hand (crossing midline), no-social smile etc. After assessing the child on Assessment Checklist for Preschool Children with Communication Disorders and with 1.9 years of rigorous intervention, by rehabilitation professionals including trained special educators from department of special education, occupational therapists and speech language pathologists at AIISH and the mother, the child is now able to respond to his name call, by lifting his head. The child is also able to sit without support and uses his hands for performing various activities and has improved in other domains too.

The study hence, reiterate the fact that early infantile stimulation and intervention can lead to better rehabilitation of children with special needs.

I. INTRODUCTION

Multiple disabilities refer to a combination of two more disabling conditions that have an effect on the child's overall development, which includes communication, mobility, and cognition performance of day to day tasks. The combinations and the severity of problems differ in each child. Age of onset is referred to as the time at which the disability occurs. This may differ and range from birth to a few days after birth and so on. Some of the children are born with a specific disability and acquire the associated problems later during their childhood. The characteristics and the needs of the children depend on the nature of disability, the age of onset and the opportunities that are available to the child in his/her environment.

We can say that just as any child, every child with MD is also different. However there are some things that this group of children have in common. It affects the all-round development of the child, communication with the world around is most severely affected, opportunities to interact with the environment becomes very limited, ability to move around in the environment is restricted, need regular help in simple day-to-day activities such as wearing a shirt, opening a door, finding a chair to sit down and so on. A highly structured educational / rehabilitation programme helps in their training.

Timely identification of impairments can reduce its impact on the functioning level of the child and also stopping these conditions to become disabling later in life (Kadambari. N., & Venkatesan.S, 2013). These children initially should be identified at home/ hospitals and then they need to be assessed by a team of specialists in order to plan for necessary interventions. With a rapid increase in the field of medical technology, it has become easier to save these at-risk babies. The person's with Disability act (1995), has made provisions for early identification and intervention of such children.

II. PURPOSE OF THE STUDY

Recent researches in the field of child development have established the fact that the rate of human development is most rapid in the early years of life. Timing of intervention becomes more important particularly in the case of children with special needs, when they run into the risk of missing an opportunity to learn during the most productive years. If these crucial years are not taken advantage of, a child may have difficulty in learning a particular skill at later time. It is possible only through early identification and intervention that a child can be helped to reach his/her maximum potential (NIMH, 2008).

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In this regard at All India Institute of Speech and hearing efforts were made to provide early stimulation service to children with multiple disabilities below 2.5 age children to enhance the child’s normal development, to provide support and assistance to the family, maximize the child’s and family’s benefit to society.

III. OBJECTIVES OF THE STUDY WERE AS FOLLOWS

- To study the impact of parent infant program(PIP) (Communication, physical, cognition, social-emotional development) provided at the department of special education AIISH to CWSN.
- To find effectiveness of parent involvement in enhancing the children performance to improve the overall development of children with multiple disabilities.

IV. CASE STUDY DETAILS

With the above studies in mind, this study was undertaken with the aim of examining the outcome of early educational intervention provided at All India Institute of Speech and Hearing, on a child with multiple disability, who has been attending therapy since 1.5 yrs. Basic information about the child is obtained are

- Demographic details of the participant
- Speech-language intervention
- Preparatory training obtained
- Nature of other services received during the early years
- Support services received by the caregivers during early intervention

The obtained basic information revealed that the child had neonatal jaundice twice underwent blood transfusion. The child also had seizer attack at the age of 6 months. The child was brought to AIISH and diagnosed with Delay in Speech and Language along with multiple disabilities (CP with ID) at the age of 9 months. First evaluation is done on 30.05.2014. All assessments were carried out by varied professionals to find out the correct level of functioning using standardized tools and checklist. Professionals included Speech Language Pathologists, Occupational Therapists, Psychologists and Special Educators.

Following the recommendation child attended the following therapy program.

- Speech therapy
- ASD therapy
- Sensory integration training

The child was also recommended to attend the early stimulation program at the Department of special education. After the initial assessments, the child was enrolled for the Parent Infant Program (PIP) at the Department of Special Education, along with other therapies at the institute. Once the child was enrolled a baseline assessment on various domains was carried out by a qualified special educator along with the primary caregiver using developmental check list developed by Swapna et.al.

V. GOALS

Following the assessment long term goals were framed on two different domains for six months. Assessment revealed that the child had Poor eye contact, poor self help skill

- **Social Skill**- Social Smile, eye contact
- **Self-help**-Drinking through straw, chewing, reaching to the edibles.

VI. TEACHING STRATEGY

Following are the teaching strategies used to teach the set goals

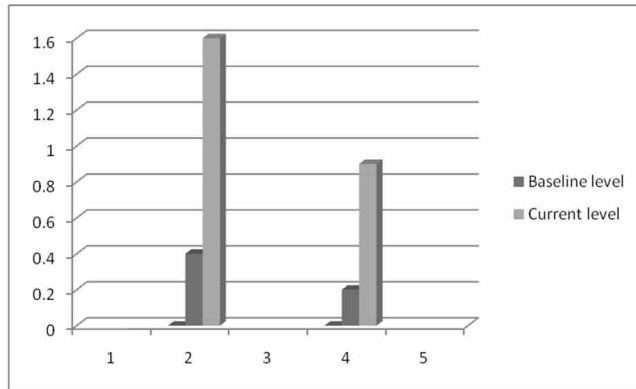
- Multisensory approach
- Play way method
- Child centered activities
- Individualized Education program(IEP)

VII. ACTIVITIES FOR THE CHILD

Sl.No.	Skill	Activity
1	Eye contact	<ul style="list-style-type: none"> ➤ Used masks and other attractive things like face like coloured spectacles, eye-mask or noise makers. ➤ Provided verbal reminders to the child to look at the face. ➤ Attractive objects were kept near the face or at the eye level while talking. Used lot of facial expressions
	Social Smile	<ul style="list-style-type: none"> ➤ Use of handkerchief in hiding the face then removing them ➤ Use of mirrors ➤ Pee ka booo game with the child.
2	Self help Chewing	<ul style="list-style-type: none"> ➤ Use soft food items initially to teach chewing. ➤ Later on chewing of semi solid items will be taught.
	Drinking through straw	<ul style="list-style-type: none"> ➤ Glitter mug will be used to teach blowing of objects ➤ Use of transparent glass and thick straw will be taken and sucking of air will be taught using colourful liquids.

VIII. POST EVALUATION RESULTS

Sl. No	Particulars	Baseline level	Current level
1	Self help	0.4	1.6
2	Social emotional	0.2	0.9



IX. RESULTS

After analyzing the post test results, it has been found that:

- There is significant improvement in the child, especially in the areas of Self-Help Skills and Social- Emotional.
- There is a subsequent improvement in the cognitive levels of the child, which can be attributed to improvement in the targeted domains.
- The mental age of the child at the time of identification was 6 months, and it has improved to:
 - Social-Emotional: 9 months
 - Self-Help: 1.6yrs
- The results hence indicate that if a child with multiple disabilities is identified and intervened at an early age, there can be significant improvement in the overall development of the child. Thus signifying the importance of Early Intervention Programs.

X. CONCLUSION

Case study convince us that if appropriate multidisciplinary intervention is provided for children with multiple disabilities in children at the earliest that is before 1 year of age. Effective early intervention should begin soon after the diagnosis is made, and be individualized, intensive, and comprehensive and should include parent education, and behavioural intervention.ensures better development of independent living skill, as well as successful inclusion in society.

IX. REFERENCES

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