

ORGANIZATION OF EARLY INTERVENTION SERVICES



National Institute for the Mentally Handicapped

(Ministry of Social Justice & Empowerment, Government of India)

(An ISO 9001:2000 Institution)

Manovikasnagar, Secunderabad – 500 009. Andhra Pradesh, INDIA.

Phone : 040-27751741 Fax : 040-27750198

E-mail: hyd2_dirnimh@bsnl.in Website: www.nimhindia.org



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National Institute for the Mentally Handicapped
Manovikasnagar, Secunderabad - 500 009.

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PREFACE

The Ministry of Social Justice and Empowerment has been striving to provide services with universal coverage and equitable distribution for Persons with Disabilities. The Persons with Disabilities Act, 1995 has been passed to ensure equal opportunities, protection of rights and full participation for Persons with Disabilities. Chapter IV of The Act deals with prevention and early detection of disabilities. Even in the BIWAKO Millennium Framework for action, one of the priority areas for action is early detection, early intervention and education.

With this in view, one way of providing accessible services will be to utilize already existing infrastructure of community service provisions to cater to the needs of very young children requiring Early Intervention services. The ministry of Social Justice and Empowerment has taken up the mandate to ensure availability of services to all the sections of the country. In this endeavour, directives from the Ministry of Social Justice and Empowerment have entrusted NIMH the responsibility of initiating Early Intervention units in ideal locations to cater to the population even at the district level.

It needs to be noted that inspite of 226 Early Intervention centers in the country (as per the data available at NIMH) and the presence of an Early Intervention unit at NIMH, catering to the growing need of clients requiring Early Intervention services has become a distant possibility. Issues like transportation, lack of awareness, financial and other constraints pose a hurdle in delivering Early Intervention services. Therefore, establishing up Early Intervention centers all over the country will ensure that services are available at the doorsteps for a wider population.

It is heartening to note that nationwide efforts are being made to propagate Early Intervention. To implement the Persons with Disabilities Act which stresses on prevention and early detection of childhood disabilities in chapter IV and also the BIWAKO Millennium Framework for action which has early intervention as one of its goals and that by 2012 all infants should have access to early intervention services, the Ministry of Social Justice and Empowerment has



delegated the responsibility of propagating Early Intervention to the National Institute for the Mentally Handicapped.

At a time like this when establishing Early Intervention centers all over the country has been taken up on a war footing, it was thought befitting to bring about a book which would provide a technical know-how of Early Intervention. This would also ensure uniformity and set standards in providing Early Intervention services.

The book, “Organization of Early Intervention centers” has been designed in a manner to guide and assist interested individuals/groups and professionals in the planning and establishing of Early Intervention centers.

It is a modest attempt to produce a comprehensive book which includes information on facilities, equipment, furniture, staff, admission procedures, working hours, maintenance of records and details on Government initiatives for developing Early Intervention centers.

The book has five sections. The first section deals with Early Intervention, concept, rationale and importance of Early Intervention.

The second section explains about the nature of population requiring Early Intervention and the common terminologies to be known.

The third section deals with the requirements for organization of services at different levels.

The fourth section provides information on Early Intervention service approaches, personnel required and their activities.

The fifth section gives information about HRD, Government policies and provisions, directory, addresses of National Institutes, Reference Books and Appendix (Early Intervention Publications at NIMH).

It is my fond hope that the contents of this book would serve as a basic guide for individuals and professionals working for infants and toddlers who are at risk or with developmental delays.



ACKNOWLEDGEMENTS

The author places on record her gratitude to all those who have made this book a possibility.

Firstly my sincere gratitude to Dr. L. Govinda Rao, Former Director NIMH for his support, encouragement and facilitation of the needed infrastructure in making this endeavour a reality.

I am indebted to Dr. Amar Jyothi Persha, Former Associate Professor and Head, Department of Medical Sciences for her valuable insights, and guidance in the completion of the book.

I acknowledge the timely help and advice given by my colleagues, specially Mrs. Neeraja.

I place on record my deepest appreciation to the support rendered by the staff in the administration department.

I deeply thank my husband Mr. Rajesh Behara for his support and encouragement

This book will remain an unsung song if I fail to thank the children at the Early Intervention unit who have served as a platform and allowed me to try and test the methods that I so boldly account in this book.

– Dr. Martha David



On Children

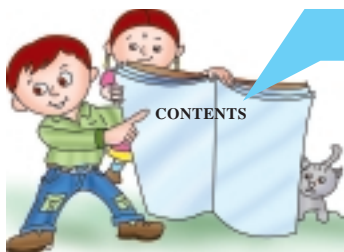
Your children are not your children.
They are the sons and daughters of Life's longing for itself.
They come through you but not from you,
And though they are with you yet they belong not to you.

You may give them your love but not your thoughts,
For they have their own thoughts.
You may house their bodies but not their souls,
For their souls dwell in the house of tomorrow,
which you cannot visit, not even in your dreams.
You may strive to be like them,
but seek not to make them like you.
For life goes not backward nor tarries with yesterday.

You are the bows from which your children
as living arrows are sent forth.
The archer sees the mark upon the path of the infinite,
and He bends you with His might
that His arrows may go swift and far.
Let our bending in the archer's hand be for gladness;
For even as He loves the arrow that flies,
so He loves also the bow that is stable.

Kahlil Gibran





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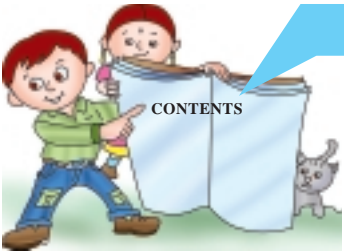
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SECTION-I

EARLY INTERVENTION AND ITS RELEVANCE

The rapid advances in medical technology have successfully increased the survival of high-risk babies, thus adding to the number of babies who might end up with developmental delays and disabilities. The Persons with Disabilities (Equal opportunities, Protection of Rights and Full Participation) Act, 1995 has made provisions for Early Identification and intervention for these infants and young children.

The present scenario is that early intervention services for children with developmental delays are far too scattered and the existing Early Intervention services units are concentrated in the urban areas and hence they hardly reach the target population. Therefore, special focus is required to address the existing deficiencies in providing early intervention services.

Further, the major hurdle in the development of these services is lack of trained professionals. To reach out to those unreached, the vital step is human resource development and the need to develop a cadre of professionals who can provide services even in the rural areas through a single window service delivery system.

A maiden effort by NIMH in training professionals in Early Intervention has yielded 6 successful batches of students who can take on the work of Early Intervention, but inspite of this, there is still a growing need to train professionals in early intervention. In the efforts made by NIMH to establish Early Intervention Centers, several Non-governmental organizations have extended support in different capacities. Collaborative efforts are made with the existing NGOs to establish Early Intervention centers, to act as a first aid in either preventing the occurrence of the problem or onset of further complications.

In order to set up Early Intervention services it is imperative to understand the concept of Early Intervention. The meaning, importance and need for Early Intervention are elaborated in the following sections.



Many things can wait the child cannot. Now is the time his bones are being formed, his mind is being developed. To him, we cannot say tomorrow his name is today.

- Gabriela Mistral

CONCEPT OF EARLY INTERVENTION

Early Intervention Services are special services for infants and toddlers at risk for developmental delays. These services are designed to identify and meet children's needs in five developmental areas. These are physical, cognitive, communication, social or emotional development, sensory and adaptive development. Early intervention includes provision of services to such children and their families for the purpose of lessening the effects of the condition. Early intervention can be remedial or preventive in nature—remediating the existing developmental problems or preventing their occurrence.

Early Intervention Services are effective ways to address the needs of infants and toddlers with developmental delays or disabilities. To ascertain the eligibility of the child for early intervention certain screening and diagnostic measures are adopted. Some children develop more slowly than the others or develop in ways that seem different from other children. Any deviation from the normal development should be dealt with at the earliest as it may lead to a developmental delay or the child may be at risk of developing developmental delays.

‘Developmental delay’ is a term that means an infant or child is developing slower than normal in one or more areas (Anderson, Chitwood, & Hayden, 1997). The child may or may not perform the motor, social, cognitive or other activities like children of his age. A child is considered to be at risk when the child's development may be delayed unless he or she receives early intervention services.

The primary reasons for intervening early with exceptional children are :

- ☞ To enhance the child's normal development,
- ☞ To provide support and assistance to the family,
- ☞ To maximize the child's and family's benefit to society.

Child development research has established that the rate of human learning and development is most rapid in the early years of life. Timing of intervention becomes particularly important when a child runs the risk of missing an opportunity to learn during a state of maximum readiness. If the most teachable moments or stages of greatest readiness are not taken advantage of, a child may have difficulty in learning a particular skill at a later time. It is possible through early identification and appropriate intervention that children can be helped to reach their maximum potential.



Early intervention services also have a significant impact on the parents and siblings of an exceptional infant or young child. The family of a young exceptional child often feels disappointed, socially isolated and suffers from added stress, frustration, chronic sorrow, anxiety and helplessness. The compounded stress with the presence of an exceptional child may affect the family's well-being which in turn may interfere with the child's development. Early intervention can result in parents having improved attitudes about themselves and their child, improved information and skills for teaching their child and more time for leisure and enjoyment.

Intervening early is also beneficial to the society at large as it ensures the child's developmental and educational gains which will decrease its dependence upon social institutions. Thus the family's increased ability to cope with the presence of an exceptional child, and perhaps the child's increased eligibility for employment provide economic as well as social benefits. Therefore, Early Intervention is also cost-effective.



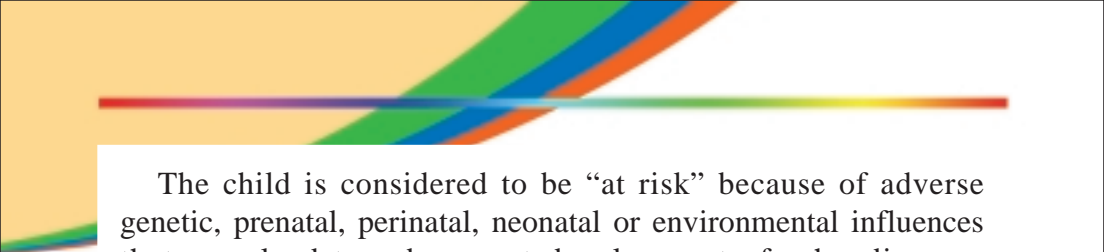
RATIONALE FOR EARLY INTERVENTION

The rationale behind Early Intervention is that much of what the child learns as an infant or a very young child is important to the development of later competencies. This implies that early learning is a foundation to later learning which is one for the principles of child development.

This gets ample support from Piaget's theory of Cognitive development in which intelligence is depicted as a developmental phenomenon and an adaptive process. The basic behaviour patterns or schemes which are acquired, repeated, integrated or in combination form complex response patterns which help in achieving higher cognitive proficiency. He also described this early age of 0-2 years as Sensory-motor period. Hence the early age period is the most appropriate period to lay the basic foundations for further development and learning.

There are a number of animal experimental studies which support this notion of critical periods. Critical periods in development are those sensitive periods when the child is most susceptible and responsive to learning experiences. Lorenz (1937) described the phenomena of imprinting as representing a unique predisposition for learning. Experiments with animals revealed that variations in early experiences affected both the organization and the biological basis of behaviour. Though there are no definite circumscribed periods, on the whole, early childhood period is considered a critical period and early intervention programmes utilize these periods to the best advantage of the child.

Developmental delay refers to a disability the child presently displays (due to biological or environmental factors) when the child's developmental abilities are compared with the abilities appropriate to that age level.



The child is considered to be “at risk” because of adverse genetic, prenatal, perinatal, neonatal or environmental influences that may lead to subsequent development of a handicap or developmental deviation.

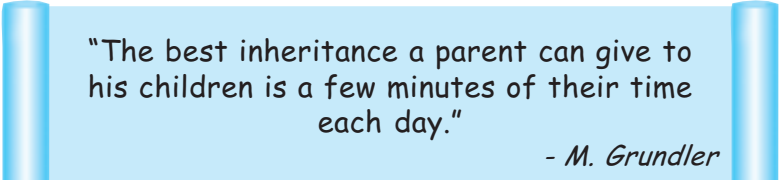
During the early years, the initial patterns of learning and behaviour set the pace and influence the nature of development, that follows in later years of the child.

Certain critical periods, during a child’s development are very susceptible and responsive to learning experiences.

Intelligence and other human capacities are not fixed at birth, but they are rather shaped to some extent by environmental influences and through learning.

Handicapping conditions may interfere with development and learning due to which disability becomes serious and secondary handicaps may appear.

Parents need special assistance in establishing meaningful and effective patterns of parenting a handicapping condition or a child at risk. This helps in providing adequate care, stimulation and training for their child during critical years when basic developmental skills should be established.



“The best inheritance a parent can give to his children is a few minutes of their time each day.”

- M. Grundler

DEFINITION

Early Intervention is a term, which broadly refers to a wide range of experiences and supports provided to children, parents and families during the pregnancy, infancy and early childhood period of development. [Dunst - 1996]

Early Intervention is the introduction of planned programming deliberately timed and arranged in order to alter the anticipated or projected course of development [Siegal - 1972].

The intervention is planned such that it suits the level of functioning and development. It is deliberately timed to suit the developmental age and condition of the child. The intervention is arranged in the pattern of normal development.

Early Intervention Services include a range of healthcare, developmental, therapeutic, social and cultural services for young children and their families. Children grow very rapidly in the early years and any stimulation at this stage helps to promote a child's optimum growth and development.

Therefore it is presumed that early intervention provides the brain a second chance to revisit some of the developmental stages which have once been omitted or incomplete.



Development of infants can be facilitated quantitatively and qualitatively. Early intervention can be remedial when intervention is initiated at the earliest and it helps a child to develop to his/her fullest potential.

Research shows that beginning intervention with the developmentally delayed child at an early age produces effective results in terms of developmental progress in all areas of development such as motor, language, social, cognitive, and self-help skills. In children at risk for developing developmental delays at a later stage, it would help them overcome difficulties.

For children with motor delays, in such cases where aids and appliances would help in overcoming the disability, then even in such cases early intervention would be beneficial. In conditions like cretinism, if the diagnosis is done immediately after birth and treatment is initiated, then improvement and cure is a possibility. In such conditions, early intervention is curative.



Therefore, the basis for early intervention is that by providing a stimulating environment, creating appropriate opportunities for learning and providing support to the families, young children who are at risk or already have developmental delays could be helped.



Intervention encourages and helps parents to gain skills in observing their infants and young children, and in understanding that children learn from their play. Parents are helped to become aware of materials and activities that are suitable for children at each stage of development, and the community resources and services are made available to them as they work with their children.

Early intervention services can be preventive, curative, supportive and remedial. There are three levels of Prevention, namely Primary, Secondary, and Tertiary. Primary prevention is aimed at preventing the occurrence of the disability. Secondary prevention helps in preventing the disability that has already occurred from deterioration and secondary complications. Tertiary prevention is providing supportive programmes for the complicated disability and to maximize the residual ability.

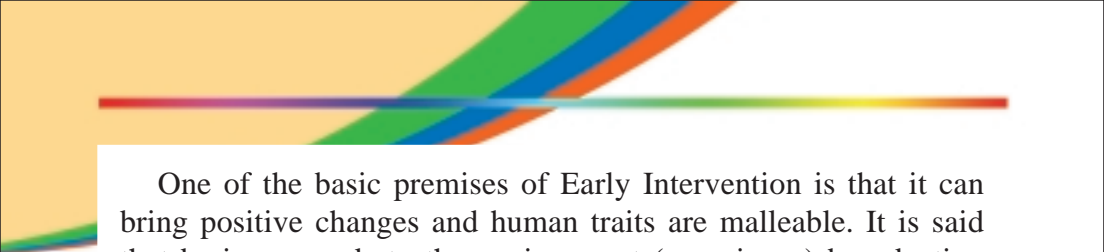
IMPORTANCE OF EARLY INTERVENTION

We are passing through an era which has seen rapid changes in the concept of the child and is burgeoning ahead taking long strides in understanding normal child development. There is mounting evidence documented regarding the deleterious effects of disability and handicapping condition on the normal development of a child. It is also a fact that these effects can be minimized or prevented if children can be identified as those who are at risk or have a disability or a handicapping condition through Early Intervention programmes. Thus, early intervention programmes can be preventive, curative and remedial. To realize the importance of early intervention we have to rationalize our thinking on the subject. The early intervention programmes derive their support from the various theories of learning and the empirical research on human development. When we look back into the history of child development, “Predeterminism” – the



concept which held hereditary and genetic endowment as the sole important factor for development. In this view there was mere unfolding of development which was predetermined and unaffected by external influences. Then came the controversy of nature versus nurture. But the current theories support the dynamic interaction between the genetic endowment and the environment and neither of them, in isolation, can account for normal development.



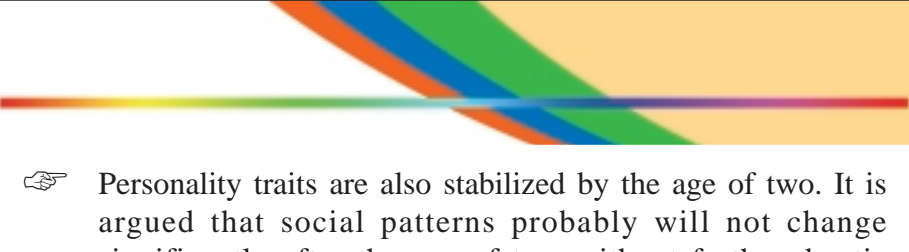


One of the basic premises of Early Intervention is that it can bring positive changes and human traits are malleable. It is said that brain responds to the environment (experience) by adapting and changing its structure which is initially determined genetically. These structured and functional changes produced by endogenous and or exogenous influences that may occur at anytime during the individual's life history is defined as plasticity. Of relevance to our subject is the plasticity of the learning brain where there are structured and functional changes due to environmental influences. It is because of this unique property of plasticity of the brain that it is able to cope with damage and ever changing environment. Thus, provision of specification of functions to systems is guided by stimuli, information and challenges from the environment. Researchers have also pointed out that the amount of cortex occupied by a body part relates not to the size of that part but to its sensory or motor sophistication. Thus in humans the finger tips occupy large areas of the cortex and the toes only small ones.

A number of experts have highlighted the rapid growth and development in the first few years of life. We all are aware of the extraordinary rapid growth and development in the first few years of life.

A few distinct observations of early years of life are :

- ☞ Myelination is almost completed by 2 years of age.
- ☞ Most of the gross motor and a great extent of fine motor milestones are reached.
- ☞ The child independently moves about, exploring, manipulating and at the same time learning and acquiring knowledge.
- ☞ During 7-36 months most young children acquire the ability to understand most of the language they ultimately use in ordinary conversation throughout their lives.



☞ Personality traits are also stabilized by the age of two. It is argued that social patterns probably will not change significantly after the age of two without further drastic changes in the environment.

☞ It is observed to be the period of unprecedented growth, second only to the prenatal period. Development occurs in all the areas to a great extent and they are guided and shaped by environmental influences.

In his book “The Preschool Child”, Gesell (1923) noted that “the preschool period is biologically the most important period in the development of an individual for the simple but sufficient reason that it comes first in a dynamic sequence; it inevitably influences all the subsequent development”. Hence this is the most ideal time to facilitate development.

It is due to the critical periods during a child’s development that makes the child very sensitive and responsive to learning experiences. Much of what the child learns as an infant or a very young child is important to the development of later competencies.

Initial patterns of learning and behaviour set the pace for later development. It is important to intervene very early. Early here means not only early in life but also early in the onset and cause of a disability condition. Hence children who are at risk for disability are recruited.

Environmental influences and learning are some of the factors that influence intelligence and human capacities.

Handicapping conditions, both physical and environmental, can lead to serious secondary complications.



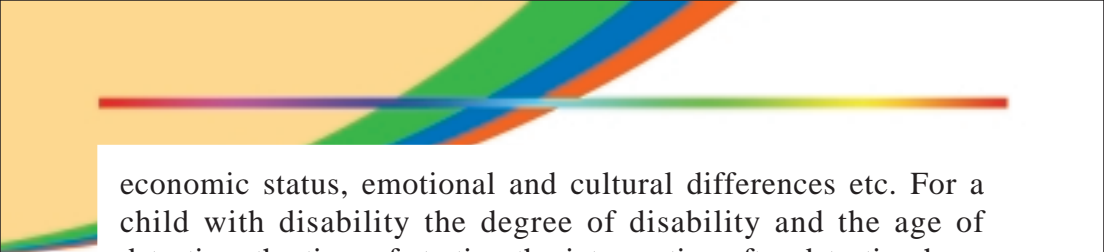
Parents and caregivers need special assistance in providing adequate care, stimulation and learning for their child.

IMPACT OF EARLY INTERVENTION

The process of evaluation to know the impact or effect of early intervention programmes is a very complicated subject. There are innumerable factors which have effect on the outcome of the programmes and which have to be considered while evaluating. One of the main factors is the basic concept underlying. To some, it is a means of stimulating intellectual growth, learning new skills and acquiring knowledge and realizing the full potential and to some others it is prevention of a decline in intellectual growth and hence only supportive to development.

The goals of the programme also differ according to the group of children who are beneficiaries. For children who are at risk for environmental causes, the programmes may be mainly supportive. Psychosocial interventions offer increased opportunities for normal development. On the contrary, for children with biological damage where there are no chances of reversing the pathology, the intervention programmes aim at maximizing the residual functions. Later it is the environment to give stimulation and encourage interaction most suited to the child's physical and mental capabilities. Some of the interventions can be corrective like surgery to correct deformities, treatment-oriented as in cretinism. In some the disability is compensated by aids and appliances (hearing aids). Some of them, in order to circumvent the limitations, find alternate methods of learning and performing. There may be combination of these different methods in a single intervention programme. The areas of development as we all know are interdependent to a very great extent and a disability in one domain affects the development of the other and a "spill over of difficulties" in learning is observed.

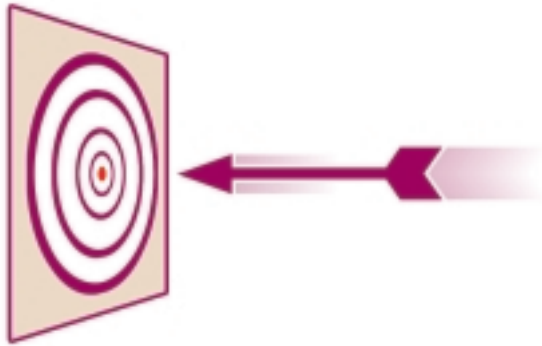
Each child's development even though follows some basic principles, may yet show some individual differences. The intervention also is highly individualized keeping in view the differences in the child, the family, environment i.e socio



economic status, emotional and cultural differences etc. For a child with disability the degree of disability and the age of detection, the time of starting the intervention after detection have a profound effect on the outcome of the intervention programmes. The earliest detection and intervention in mild and moderate cases of disability and handicapping conditions have shown better results than those with severe disabilities and later interventions. The other factors of importance for the impact of early intervention programmes are, parent involvement, motivation, education type and availability of services.

ASSUMPTIONS OF EARLY INTERVENTION:

1. A child grows very rapidly in early years. Therefore stimulating experiences may prove useful in promoting a child's optimum growth. No child is too disabled not to respond in some way, to carefully selected stimuli.
2. Early intervention produces a positive effect in a child, where due to learning of effective response pattern helps them to satisfy their curiosity, build an exploratory instinct that is important for learning and help them to gain control on the environment around them.
3. By altering the environment, development of disabled infants can be facilitated both quantitatively and qualitatively.
4. The principle of nurturance applies to infants with disability, which is a lifelong interactive process between persons. It primarily occurs within these surroundings, that growth of trust, attachment, feeling of self-worth, acquisition of skills, emergence of feeling of competence, and ability to cope with stress, occur. Therefore it is important to design early intervention programmes which encompass all kinds of services.



AIMS OF EARLY INTERVENTION PROGRAMS

- Early identification of infants at risk
- Early identification of developmental delays
- Enhancement of normal development
- Acceleration of rate of development
- Acquisition of new behaviour/skills
- Increase in independent functioning
- Early detection and prevention of secondary handicaps
- Minimizing the effects of the handicapping condition
- Cost effectiveness
- Psychosocial support to families

"The child must know that he is a miracle, that since the beginning of the world there hasn't been, and until the end of the world there will not be, another child like him."

Pablo Casals

SECTION-II

CRITERIA FOR ELIGIBILITY FOR EARLY INTERVENTION SERVICES

Early Intervention Services are meant for children who are at risk for developmental delays, children who have developmental delays or have established conditions in the age from birth to three years. There is “zero rejection” for such children in the Early intervention unit. By zero rejection it is implied that children with all kinds of disabilities such as visual impairment, hearing impairment, cerebral palsy, speech language and communication delay are offered early intervention services irrespective of the type of disability and degree of severity of the problem.

A child is considered to have developmental delay if there is a delay in development in one or more of the following areas:

- Physical Development, including fine and gross motor function;
- Cognitive Development;
- Communication Development;
- Social-Emotional Development;
- or
- Adaptive Development.



Children with established conditions are also eligible for Early Intervention. A child is considered to have an established condition if diagnosed with medical problems, which may lead to a high probability of resulting in developmental delays. Specific conditions through which a child may be deemed eligible in the category of established conditions are as follows:



1. Congenital Anomalies/Genetic Disorders/Inborn Errors of Metabolism. These are children diagnosed with one or more congenital abnormalities or genetic disorders with developmental implications. Some examples are Down's syndrome, Fragile X Syndrome, Familial retardation syndrome, Fetal alcohol syndrome and Mucopolysaccharoidosis.



- 2. Congenital Infections.** These are children diagnosed with congenital infections with developmental implications. Some examples are toxoplasmosis, rubella, Cytomegalovirus, and HIV.
- 3. Autism.** These are children diagnosed with autism or autism spectrum disorders.
- 4. Attachment disorder.** These are children with a diagnosed attachment disorder.

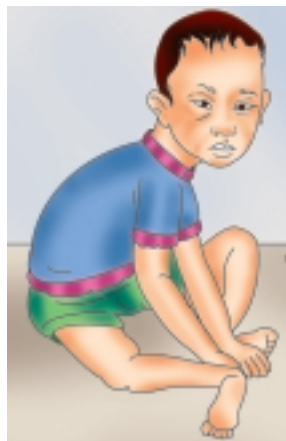
- 5. Hearing Loss.** These are children diagnosed with unilateral or bilateral partial to complete hearing loss.



- 6. Visual Impairment.** These are children diagnosed with partial to complete visual impairment.



- 7. Neurological Diseases/Central Nervous System Disorders.** These are children diagnosed with a disease or disorder known to affect the nervous system with developmental implications, such as Cerebral Palsy, Spina Bifida, Epilepsy and Microcephaly.



8. Neonatal Conditions and Associated Complications. These are children diagnosed with one or more of the following neonatal diseases or disorders known to have developmental implications:

- Gestational age less than 27 weeks or birth weight less than 1000 grams;
- Neonatal Encephalopathy with neurological abnormality persisting at discharge from the neonatal intensive care unit.
- Moderate to Severe Ventricular Enlargement at discharge from the neonatal intensive care unit or a ventriculoperitoneal shunt; Congenital Heart diseases such as ASD, VSD and PDA.
- Neonatal seizures, Neonatal Jaundice, stroke, meningitis, encephalitis, porencephaly, or holoprosencephaly;



- Bronchopulmonary Dysplasia requiring supplemental oxygen at discharge from the neonatal intensive care unit;
- Intra Uterine Growth Retardation;
- Necrotizing enterocolitis requiring surgery;
- Abnormal neurological findings at discharge;
- Intraventricular hemorrhage III or IV; or
- Periventricular leukomalacia.



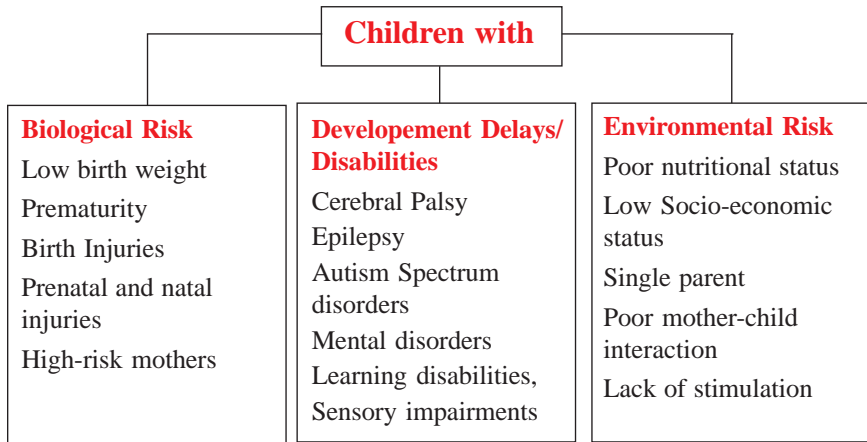
The uniqueness of early intervention in the field of mental retardation is, it draws inputs from all the areas of development. Cognitive development in its early stages is interdependent on sensory systems (vision, auditory, tactile, olfactory, vestibular, Proprioceptive etc) and also on motor area.

Hence, before providing Early Intervention Services it is necessary to ascertain the nature of population requiring such services.

Every child comes with the message that
God is not yet discouraged of humanity."

Rabindranath Tagore

NATURE OF POPULATION REQUIRING EARLY INTERVENTION



EARLY INTERVENTION ADDRESSES CHILDREN

- in the age of 0-3yrs
- who are at risk for developmental delays
- with established developmental delays
- with all disabilities
- at all degrees of severity
- at all functional levels.

Early Intervention Services are directed to the developmental needs of children, from birth until the age of three years because they:

1. are experiencing developmental delays in one or more of the following areas: cognitive, physical, language and speech, psychosocial, or self-help skills.
2. have a physical or mental condition that has a high probability of resulting in delay (e.g., Down syndrome, cerebral palsy).

3. Are at-risk medically or environmentally for substantial developmental delays if early intervention is not provided.

BERRY BRAZELTON T.(1982) DESCRIBES FORCES THAT ARE RESPONSIBLE FOR DEVELOPMENT IN CHILDREN:

- Maturation of the Central and autonomic nervous system: It regulates baby's capacity to control reactions to incoming stimuli, is one of these forces.
- Realisation of competence in baby: Energy that child mobilizes to complete a task, reinforces the realisation of mastering a task, which in turn reinforces and presses him to reach the next step in development.
- Reinforcement from the environment: This feeds infants' affective and cognitive needs. Feedback cycle which are essential for normal affective growth were pointed out by Spitz (1945) and later conceptualized by Bowlby (1969) as 'attachment'.

COMMON TERMINOLOGY USED IN EARLY INTERVENTION SERVICES

Developmental delay: Developmental delay occurs when children have not reached these milestones by the expected time period. For example, if the normal range for learning to walk is between 9 and 15 months, and a 20-month-old child has still not begun walking, this will be considered as a developmental delay.

Developmental delays can occur in all five areas of development or may just happen in one or more of those areas. Additionally, growth in each area of development is related to growth in the other areas. So if there is a difficulty in one area (e.g., speech and language), it is likely to influence development in other areas (e.g., social and emotional).

PRINCIPLES OF DEVELOPMENT

Motor skills are those skills involved in the movement of the body parts and are important for young children. Behaviours such as locomotion, reaching, grasping and maintaining one's body position and orientation in relation to objects in the environment allow children to master control and interact with the environment. Motor skills are also important in performing behaviours of other developmental areas. Motor development is not complete until the child is atleast five to six years of age. The baby learns from the sensations of movement which are gained mainly through activity rather than remaining passive in situations. In this dynamic process, the ability of the higher centres to mature are partially dependent upon sensory information brought to them. Since the sensory and the motor systems are so intimately related it is referred to as sensory-motor development. One should be aware of these interactions with the areas of social, motor and language development. One should be aware of these interactions when assessing and teaching young handicapped children.

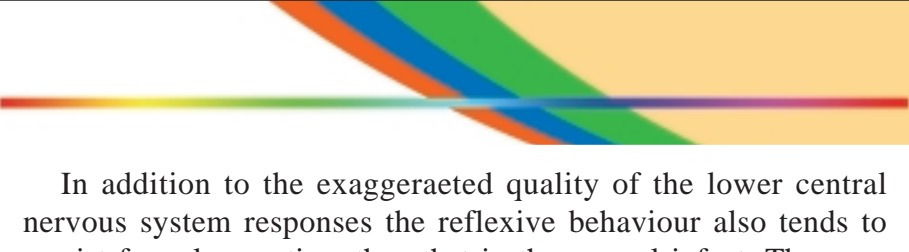
1. Development is sequential. It occurs in a definite sequence over a period of time with each new acquisition based on the previous development. For example at six to seven months most babies are capable of sitting independently in a normal manner after having been placed in the position. However, this act would not be possible if the baby had not achieved such skills as head control against gravity and extension of the spine. Although the rate of development varies, the sequence remains the same.
2. Development proceeds Cephalocaudally (from the head downward), skills are coordinated first in the upper region of the body and proceeds to the lower region later, e.g. head control is achieved before the control of the legs.

3. Development proceeds from Proximal to distal direction. The areas of the body closer to the midline are controlled before the areas towards the periphery. eg: Control of shoulder movements occurs before control of finger movements.
4. Increasing sensory-motor maturity is characterized by dissociation, i.e. the breaking up of the gross movement patterns which involve the total body into finer, more selective patterns, which permit parts of the body to move independently of the other parts. An example is dissociation of the head from the shoulders, in which the child learns to turn his head in all directions without affecting the body as a whole.

DEVELOPMENT IN ATYPICAL CHILDREN:

Damage to the brain before birth or in early childhood will prevent sensory messages from reaching or becoming fully integrated, at the higher levels of the central nervous system. Instead these messages are “short circuited” to the lower portion of the nervous system and the response that emerge are appropriate to responses from those lower levels. Since the lesion has occurred in an immature brain before development has been completed, the higher centres of the brain may never get a chance to evolve full control over the lower centres. The movement responses that are deprived of higher level control are manifested as motor patterns that are stereotyped, atypical and usually associated with an abnormal quality of muscle tone.

Young infants show evidence of reflexive motor behaviour. The child with brain damage may display these motor responses in an exaggerated form. The asymmetrical tonic neck reflex is an example. While the normal baby will occasionally assume the “fencing position”, he will be able to move out of that posture with relative ease. The child with brain damage may be “locked” into that posture every time his head turns towards one side or the other, preventing him from performing his task.



In addition to the exaggerated quality of the lower central nervous system responses the reflexive behaviour also tends to persist for a longer time than that in the normal infant. They can be elicited by the position of the baby's head in space or by the position of the head in relation to other parts of the body. When the reflex is stimulated, the baby's whole body may be involved and more selective movements may be impossible. For example, a child who is under the influence of the tonic labyrinthine reflex may assume complete extension whenever he is lying on his back or whenever his head falls backward of 90° angle to the horizontal. Since the reflex dominates his entire body, he is unable to initiate isolated head or arm movements. In general, the developing motor patterns of the normal child assist him to attain anti-gravity activities whereas when the patterns and tone are abnormal they tend to pull the baby into gravity and thus interfere with subsequent development.

In overutilizing the aberrant movements in his early explorations, he may be limited to subsequent motor achievement on a foundation of abnormality. Thus, a situation evolves where the child may develop an increasingly abnormal posture, resulting in the habituation of undesirable movements or secondary handicap.

In planning an intervention programme it is important to assess the infant in all developmental areas such as social, language, cognitive, motor and self-help, determine the manner in which his handicapping conditions may be limiting his overall learning. Activities and methods of handling should be chosen carefully so that they will minimize his disabilities and enable him to develop normal cognitive-sensory motor experiences.

AIMS OF EARLY INTERVENTION PROGRAMME:

1. To minimise the effects of handicap on the child's growth and development and maximise opportunities to engage in normal activities of early childhood.

2. To prevent, at-risk conditions or early developmental irregularities from developing into more serious problems.
3. To prevent development of secondary handicaps as a result of interference from a primary disability, which may alter a child's ability to seek out or receive certain types of stimulation to profit from experience, to learn, or to progress, through expected developmental sequences.

MILESTONES OF DEVELOPMENT

Milestones refer to a series of skills in the four areas of development (physical, cognitive, speech and language, and social) which a child is expected to achieve at a designated time, signified by a key age, which may be calculated in terms of weeks, months or years.

Each milestone represents a skill, which is a prerequisite to the next skill in development. By comparing a child's chronological age to the milestone that he or she has obtained, it is possible to ascertain the level of maturity and the rate of progress.

Some of the milestones in the four basic areas of development are mentioned below;



1. PHYSICAL DEVELOPMENT

ITEM

AGE TO BE ACHIEVED IN MONTHS

GROSS MOTOR



Head Control

3 – 5 months



Rolling

5 – 6 months



Sitting

6 – 8 months



Crawling

9 – 11 months



Walking

13 – 15 months

FINE MOTOR



Reach

2 – 4 months



Pointing

6 – 8 months



Scribbling

12 – 14 months



Coordination

22 – 25 months

COGNITIVE DEVELOPMENT



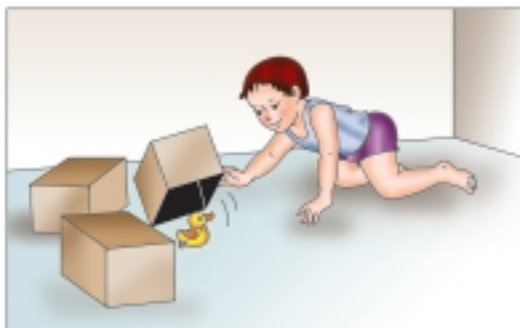
Hand to mouth

1 – 4 months



Looks for a fallen object

4 – 8 months



Finds a toy
completely covered or hidden

8 – 12 months



Manipulates an object to
produce an effect

18 – 24 months



Concept formation

28 – 32 months

SPEECH AND LANGUAGE



Cooing

0 – 3 months



Responds to name by
turning the head

4 – 6 months



Can follow
simple commands

10 – 12 months



Says three word
sentences

19 – 24 months



Says complex sentences

25 – 26 months

SOCIAL DEVELOPMENT



Kicks legs and arms
and arms

0 – 3 months



Smiles back
at a smiling face

2 – 4 months



Claps hands and
waves 'good-bye'

9 – 12 months



Imitates ball
play or action games

12 – 15 months



Independently
chooses toys and plays

24 – 30 months



Begins to play
with other children

30 – 36 months

CHILDREN AT RISK FOR DEVELOPMENTAL DELAYS:

Children will be are in danger of having substantial developmental delays if early intervention services are not provided. These children may currently demonstrate no abnormality, but have biological or environmental factors associated with their medical history and also includes children whose personal or family medical history includes biological conditions that imply a greater probability of delay.

RISK FACTORS FOR DEVELOPMENTAL DELAY

- Biological Factors
- Environmental Factors



Biological factors include:

Genetic, Prenatal and Perinatal factors.

- *Genetic factors:* Children are placed at genetic risk by being born with a genetic or chromosomal abnormality. A good example of a genetic risk is Down syndrome, a disorder that causes developmental delay because of an abnormal chromosome.



- *Prenatal Factors:* Poor maternal nutrition or exposure to toxins (e.g. lead or drugs) or infections that are passed from a mother to her baby during pregnancy (e.g., measles or HIV).
- *Perinatal Factors :* Premature delivery, Low birth weight, Respiratory distress, Lack of oxygen, Brain haemorrhage and Infections.



Environmental risk includes:

Environmental and Psychosocial factors.



- *Environmental Factors* : Exposure to harmful agents either before or after birth, trauma to the child.
- *Psychosocial Factors*: Poverty, mother's depression, poor nutrition, lack of care, child abuse, impaired attachment, disturbed families etc.



Impairment: Any loss or abnormality of psychological, physiological or anatomical structure or function at the organ level.

Disability : Any restriction or lack of ability to perform an activity in the manner considered normal for a human being.

Handicap: A disadvantage resulting from impairment or a disability that limits or prevents the fulfillment of a role that is normal depending on age, sex and sociocultural factors.

Screening: A quick checklist or survey about a child's development to see if further evaluation is needed.

Developmental Screening: The major goal of developmental screening is to reduce the time that elapses before any intervention begins. If the screening is to be effective, it must be accurate, comprehensive and cost-effective. Screening can occur through a variety of methods. They can include parent interviews, observations of the child, or the use of a specific instrument or checklist.



Assessment: It is defined as obtaining information about the skills and the potentials of individuals. Assessment includes a variety of standardized criterion-reference instruments which provide information across the traditional areas of development including cognition, fine and gross motor, receptive and expressive communication, social-emotional development and self-help.



Evaluation: Procedures used by qualified professionals to determine a child's initial and continuing eligibility which focus on determining the status of the infant or toddler in all of the developmental areas: cognitive, social/emotional, physical (including vision and hearing), communication, and adaptive behaviour.

"A mother understands what a child does
not say."

- *Anonymous*

CONSIDERATIONS FOR PLANNING AN EARLY INTERVENTION PROGRAMME:

Role of an Early Interventionist: While designing an appropriate intervention programme the Early interventionist needs to have the basic understanding about child development, developmental assessment techniques and relate them to intervention goals. In addition, some orientation is required in selecting a strategy, skills in parent counselling, understanding of family dynamics, etc.

Parent involvement: A child begins his first social interaction with parents. It serves as a basis for future social relationships as adults. In early intervention programmes parental inclusion as team members and as participants in an actual intervention process is crucial if the intervention is to be successful.

As parents have more frequent contact with the child at home, they need to develop a rapport with the staff in conveying and taking information about a child's training and development. Parents' contribution in eliciting developmental information about their child is essential. By involving the parents during assessment, one can help parents recognize their child's abilities, to sharpen their observational skills and to help them focus on the child's positive effort to communicate, so as to help children and parents respond to each other in an enjoyable and meaningful fashion.

ASSESSMENT:

The basic foundation for planning a programme for the child, is assessment which is the systematic gathering of information to determine the current level of functioning, identify instructional objectives and evaluate the current progress. The approach to choose for assessment depends upon the purpose of assessment and the kind of information desired. To get information such as characteristics of the children, including their ages and severity of the problems, particular behaviours or skills are to be targeted.

Some of the basic approaches in assessment are:

- **Formal vs informal:** Formal assessment involves instruments that have been developed, tested and refined by their authors. These are structured tests with specific instructions for administration.
- **Norm Vs Criterion referenced tests:** A child's learning can be evaluated through two different types of tests (i) in comparison to the performance of others (ii) in comparison with his/her own progress in learning a set of skills or behaviours. The former is a norm-referenced and the latter is a criterion-referenced test.
- **Direct vs indirect:** Direct observation implies watching what the child can do or documenting his or her behaviour. Indirect assessment methods, imply that an intermediate person provides the information about the child.

"We worry about what a child will become tomorrow, yet we forget that he is someone today."

Stacia Tauscher

SECTION-III

BASIC REQUIREMENTS OF A SERVICE ORGANIZATION

AVAILABILITY

Services, professionals and equipment necessary to provide the needed services.



Accessibility- The organization should be within the reach of the clients to utilize the services. There should be proper connectivity through the public transport system.



AFFORDABILITY

The service organization should make the services available at an affordable cost, taking into consideration the rural poor and persons from low socio-economic strata.



COORDINATION

Ensuring of proper networking of professionals within the organization and also with outside agencies to be able to render appropriate need-based help to the clientele.



TRAINING

It is essential that the service organization provides short-term and long-term training for professionals in the field of disability and also to sensitize those professionals outside the field of disability. They are an important source for referring persons with disability, eg. Medical professionals. Inservice training programmes will enable professionals in the field to keep abreast with the current trends and latest technologies in the field and equip them to be better service providers.



REQUIREMENT FOR ESTABLISHMENT OF EARLY INTERVENTION SERVICES AT DIFFERENT LEVELS

DIFFERENT LEVELS

Levels	Apex Institution/ Hospital	Middle District hospital/NGO	Grass root level PHC/Villages
Organi- zation Structure	Director Head of the department Incharge EIS Other staff members	Collector DMO Other staff members Early Interventionist	PHC doctor Anganwadi supervisor Anganwadi workers
Space	Well ventilated room Approx. 32X22' Sensory integration room, Auditory room, Testing room for developmental assessment, Play area (indoor and outdoor), Swing, sand pits, water play, pebble ground, grass lawns, reachable bells, small jungle gym, merry-go round etc. Swimming pool/ Hydro therapy unit.	A large room separately allocated for Early intervention services with the following specifications: Size-12 x 14 (approx.) Well ventilated, Good lighting Soft padded walls to a height of 5 feet (Optional) Clean, smooth, pucca flooring (Washable floors) Play area.	A 10 x 12 room (approx.) with good ventilation, lighting and pucca (tiled) flooring
Staff Specialists	Core Team	Early Intervention specialist, Neurologist, Paediatrician, Speech therapist, Physiotherapist	PHC doctor, CBR worker, Anganwadi worker, Community health worker, Community volunteer

Levels	Apex Institution/ Hospital	Middle District hospital/NGO	Grass root level PHC/Villages
Functions	Assessments, Intervention, Follow up and evaluation, Record maintenance, Parent training programmes, Creating models for intervention, Research, Dissemination of Information, Material development, Referral to other specialists	Assessment, Intervention, Follow up and evaluation, Record maintenance, Referral to other specialists	Identification, Intervention, Referral
Equipment/ Aids and appliances	Medical Equipment, Examination table, Stethoscope, Weighing machine, Measurement scale, Motor equipment, Ball pool, Rope bridge, Parallel bar, Steps, Bolsters Prone wedge, Bean bags, Swing, Trampoline, Balance board/ Wobble board Mattresses, Therapy ball, Hydrotherapy unit Aids and appliances <u>Speech Language and communication equipment</u> Pure tone audiometer, Impedence audiometer, Acoustic brainstem response audiometer, Hearing aids, Otoscope.	Examination table, Stethoscope, Weighing machine, Measurement scale, Torch, Knee hammer, Bell, Mattresses, Therapy ball, Wedges, Audiometer, E-rehab, Ophthalmoscope, Aids and appliances through ADIP scheme, Stimulation training material, Play equipment, <u>Outdoor Material</u> Swing Parallel bars Slide Sand play Tunnel, Water play, Pebble floor, Grass lawns, Sensory park	Basic examination material, Examination table, Stethoscope, Torch, Knee hammer, Measurement scale, Weighing machine, Bell, Stimulation materials, and other indigenous, low-cost toys,

REQUIREMENT FOR THE EARLY INTERVENTION UNIT

INFRA STRUCTURE

Early Intervention Services can be organized as a service either independently or as a part of another complex system of services.

In urban areas it can be organized as a part of CRE (Continuous Rehabilitation Education) program or in institutions (e.g. National Institutes, hospitals).

In rural areas, as a part of the primary health center, district level hospitals, schools/Anganwadis.

ACCESSIBILITY:



The Early Intervention Unit should ideally be in a place which is easily accessible. There should be public transport facility and should not be far away from the main city.



BUILDING

Depending on the availability of resources, an Early Intervention center can be organized in one large room or in several rooms.

Incase of adequate resources, both physical and financial, an Early Intervention center needs:



One large spacious room of approximately 20ft X16ft to provide comprehensive services

If there is ample space, then it could be further divided into smaller cubicles each for a specific purpose.



REGISTRATION COUNTER



COUNSELING AND FAMILY INTERVENTION



BEHAVIOR MODIFICATION



SPEECH THERAPY



PHYSIOTHERAPY



OCCUPATIONAL THERAPY



BIOCHEMISTRY LAB

It would be desirable to have expert consultation on a weekly or fortnightly basis and also to have a biochemistry lab.



EEG UNIT



BUILDING DETAILS:

Alternatively, close networking with organizations and special setups and clinics are required.

The doors should not come in the way of children's activity. They should be washable and the handles should be positioned out of the reach of children.

The rooms should be bright and well-ventilated; sharp corners, steep steps or any other thing that may injure children should be avoided.

Plug points and switch boards should be provided at least 6 feet above the ground/floor so that children cannot reach them. Child-proof safety switches should be used

Rooms should be painted with washable paint.

WALL PAINTING:

The walls should be painted in pleasant and attractive colours.



Soft upholstery for walls with mirrors up to a height of 2 feet from the ground.

It is preferable that the rooms are on the ground floor.

The floor can be plain with a few rexine covered mattresses. It should be durable and easy to clean.

Carpets may crumple and fold causing a child to fall, so they must be avoided. Rexine covers are safe and easy to clean.

SPACE

It can be organized in a large open room.

Emphasis should be on cleanliness and hygiene.



There should be minimal furniture so that there is ample space for the child to move about.

Things that are breakable, injurious/toxic should be out of reach of the children.

The space should be utilized to its fullest capacity by having brightly-coloured toys for children, adequate play area and different kinds of posters.

FURNITURE:

The minimum requirement of furniture is as follows:

- Tables for consultation and examination.
- Chairs for seating
- Cupboards for storage
- Material for doll play
- Racks for material
- Display boards



TOYS RACK



RACKS FOR MATERIAL



RECORD MAINTENANCE



DISPLAY BOARD



CUPBOARDS FOR STORAGE OF MATERIAL



WELL VENTILATED ROOM

EQUIPMENT FOR SERVICES:

Medical Equipment:

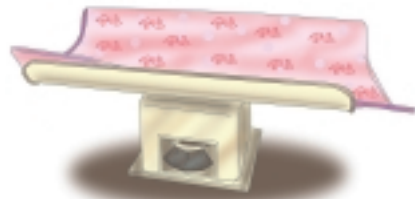
- Stethoscope
- Sphygmomanometer
- Ophthalmoscope
- Weighing Machine/ Infantometer
- Height Scale
- Measuring tape
- Torch
- Knee Hammer
- X-Ray viewer



HEIGHT SCALE



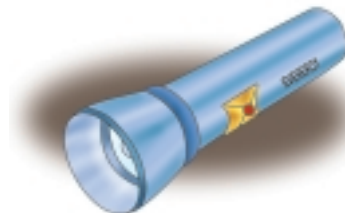
STETHESCOPE



INFANTOMETER



KNEE HAMMER



TORCH

THERAPY EQUIPMENT (PHYSIOTHERAPY AND OCCUPATIONAL THERAPY)

- Therapy ball
- Therapy mats
- Bolster
- Prone Wedge
- Tumble Roller
- Balance Board
- Trampoline
- Supine Stander
- Prone stander
- Walkers
- Strap weights, wobbling boards, sitting or corner chairs.
- Toys like balls, rings, squeaky toys etc.
- Modified chairs (Positive & Negative)
- Supporting pillows
- Splints and braces
- Knee hammer
- Crawler
- Devices for grasp and gripping frames
- Long Benches
- Swings
- Balance Beam
- Treadmill
- Bean Bag
- C- Cushion
- Hydrotherapy unit
- Rope bridge
- Parallel bars
- Aids and appliances



ROPE BRIDGE

BALANCE BOARD/WOBBLE BOARD



THERAPY BALL



BOLSTER

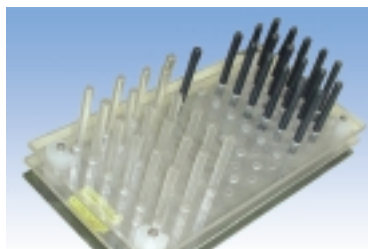
PRONE WEDGE



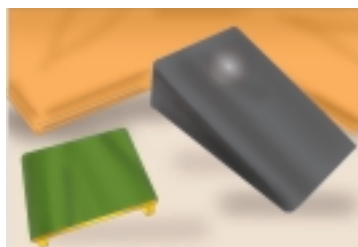
PADDED BALANCE BOARD



MODIFIED CHAIRS



PEG BOARD



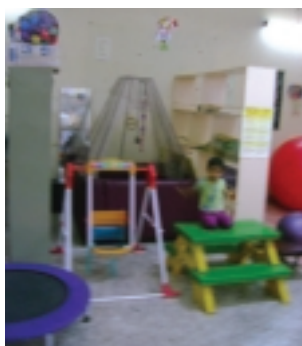
WEDGES



STACKING RINGS



TRAMPOLINE



BALL POOL



SLIDER



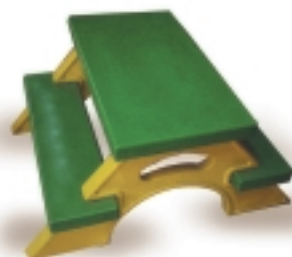
MODIFIED WHEEL CHAIR



CP WALKER



BALANCING TOY



STEP STANDER



BEAN BAG



ACTIVITY TABLE



HYDROTHERAPY

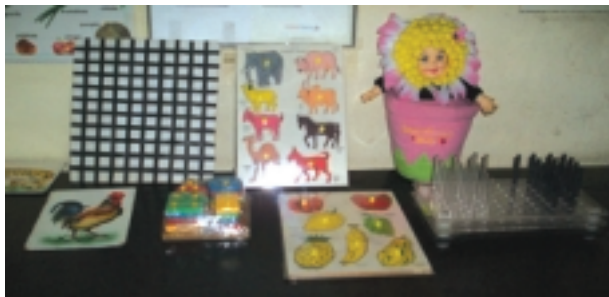
SPEECH AND AUDIOLOGY



- Diagnostic equipment (BERA, Pediatric audiometer, Diagnostic audiometry, Reactometer, Impedence audiometry)
- Musical Box
- Audio System
- Tape Recorders
- Key Board
- Animal Sound Box
- Bells
- Noise makers of various kinds
- Toys and puppets
- Masks



TOY RACK



STIMULATION MATERIAL

STIMULATION MATERIAL



INDIGENOUS MATERIAL

VISUAL STIMULATION

- Lamps
- Large Mirrors
- Bright-colored objects
- Noise making objects
- Bright-coloured lights
- Hanging, moving toys



DISCO BALL



MIRROR



BRIGHT-COLOURED TOY

TACTILE STIMULATION



SOFT TOYS



VIBRATING TOY

- Textures (Cloth)
- Textures (Paper)
- Soft Toys
- Ball Bath



SOFT TOYS



DANGLING TOYS



BALL POOL

- Sand Pool
- Hydro pool
- Different textured toys
- Mitts and Scrubbers
- Pool of balls



INDIGENOUS MATERIAL

VESTIBULAR STIMULATION

- Swing
- Net hammock
- Tube Swing
- Trampoline
- Scooter Board
- Spin Tub
- Swivel Stool
- Twister
- Bolster swing
- Scatter



TRAMPOLINE



CP WALKER

EQUIPMENT FOR SENSORY INTEGRATION

- Disco Ball
- Wind Chimes
- Tactile boards
- UV Lighting
- Rotating light
- Vertical fibre optic lamp
- Music System
- Space hopper
- Platform swing
- Bolster swing
- Textured mats (6x4ft)
- Beanbags
- Tumble roller
- Vibrator
- Optic fibres
- Soft toys
- Padded stepper
- Tractor inner tube
- Net hammock
- Scooter board
- Swiss ball
- Audio CD
- Others



THERAPY BALLS



DISCO BALL



BOLSTER

PLAY EQUIPMENT:

Indoor equipment

- Toys
- Soft Toys
- Visual Toys
- Auditory Toys
- Wooden Toys
- Boards and Blocks
- Balls
- Miniature sets (Kitchen set and doctor set etc.)
- Peg boards
- Balls
- Noise makers
- Mobiles (moving toys)
- Dolls
- Pull-push toys



MOBILE TOYS



TOYS

Outdoor equipment

- Swings
- Seesaws
- Merry-go-round
- Swimming pool
- Tricycles
- Pet corner
- Slides
- Tunnel
- Inclined surfaces
- Sand play



Children are one-third of our population and
all of our future"

- Anonymous

FUNCTIONAL USE OF THERAPY MATERIALS

ASSISTIVE TECHNOLOGY DEVICES : Any types of device that can help children with disability in their day to day functioning.

THERAPY BALL: (Multipurpose): It is useful to relax and soothe the child and facilitate movements. Righting and equilibrium reactions can be facilitated. Static vestibular stimulation can be given.

THERAPY MATS: Therapy floor mats are used for seating while treating the child. Both therapist and children will be comfortably seated on these mats.

BOLSTER: Useful for the facilitation of neck control and trunk control. Facilitation of righting and equilibrium reactions are also possible with this.

PRONE WEDGE: This ensures facilitation of neck control, trunk control, abdominal activities, activities to stretch hip flexor muscles etc.

TUMBLE ROLLER: (Multipurpose) Like the therapy ball this is useful for facilitation, righting and equilibrium reactions, vestibular stimulation, individual muscle stretchings can be given in various positions. This is used in sensory Integration.

BALANCE BOARD: To facilitate righting and equilibrium reactions in various positions (Supine, prone, sitting, kneeling, half kneeling and standing).

SUPINE STANDER: To make the child stand with normal alignment with the child facing the board.

PRONE STANDER: To make the child stand with normal alignment with hips and knees extended with occipital side facing the board.

WALKERS: They facilitate walking for children with different disabilities.



CORNER SEAT: To facilitate sitting with head and trunk in alignment and trunk in extension.



MODIFIED CHAIRS (POSITIVE AND NEGATIVE): Positive seating – To facilitate extension useful for children with Athetoid and Ataxic features.

Negative seating-To facilitate flexion useful for children with predominant extensor tone.

LONG BENCHES: Multipurpose. These are useful to facilitate head and trunk control, regulation of tone, facilitation of sitting and standing.

BALANCE BEAM: To facilitate balance while walking

TREADMILL: To facilitate walking

BEANBAG: To relax the child, to facilitate flexion. Useful to position a severe spastic child for feeding, tactile stimulation for a tactile defensive child.

C-CUSHION: Positioning the child for feeding

LAMPS: Visual stimulation for cortical visual impairment, lazy eye etc. To train the child in visual activities such as gaze fixing, tracking and visual pursuit.

BRIGHT TOYS: Facilitate sensory integration through sensory stimulation.

LARGE MIRROR: For visual feedback and to develop body image.

MUSICAL BOX: To facilitate (Auditory processing) Sensory Integration through Auditory Stimulation.

AUDIO SYSTEM: For auditory stimulation

KEY BOARD: Animal Sound Box, Auditory discrimination

SWING (BOARD): Provides vestibular stimulation.

NET HAMMOCK: Provides vestibular stimulation and relaxation. To facilitate flexion, midline orientation and head control.

TUBE SWING: Provides vestibular stimulation and relaxation. Facilitates sitting balance.



TRAMPOLINE: Static vestibular stimulation and relaxation. Facilitates body tone and standing balance.

SCOOTER BOARD: Provides vestibular stimulation, prone extension and adaptation to the environment.

SPIN TUB: Multipurpose vestibular stimulation.

SWIVEL STOOL: Provides vestibular stimulation in prone and sitting position.

TWISTER: Stimulates vestibular system.

SCATTER: Dynamic Vestibular stimulation for older children.

TEXTURES: To facilitate body awareness and facilitate sensory integration.

SOFT TOYS: To facilitate sensory integration through tactile stimulation. To facilitate hand manipulations, sensory explorations, desensitize in case of tactile defensiveness etc.



BALL BATH: To facilitate body awareness. To improve arousal level of the child, to desensitize the hypersensitiveness.

SAND POOL: Tactile awareness, to improve hand function, in hand manipulation

HYDRO POOL: To regulate tone, to facilitate body awareness and tactile stimulation.

PURE TONE AUDIOMETERS: They used for determining hearing thresholds. The client is assessed at frequencies of 250, 500, 1k, 2k, 4k, 8k and the average of hearing threshold levels at 500, 1k, 2k for each ear is obtained. This known as pure tone average. The devise is used to asses whether it is a conductive a sensorineural lose.

Impedance/Immitance audiometer: Involves tympano-merty (which is measurement of pressure/ compliance function of the eardrum membrane and acoustic reflex testing (which helps in hearing sensitivity prediction). It is useful in differential diagnosis of middle ear pathologies.

Acoustic brain stem response audiometer: It is a device to measure changes in brain activity to sound stimuli. It scans through the pathways of hearing from ear to central areas in the brain. It is useful in diagnosing the hearing problem and establishing the hearing threshold.

Dr.Speech – This is a Software for speech analysis and therapy. It analyses the voice for various patterns of voice and speech sound production. It is also useful in therapy by giving the feedback.

Hearing aids: There are different types of hearing aids such as: Body aids, post-auricular hearing aids, in the ear, eye glass aids, cochlear implants and vibrotactile aids.

Otoscope: It is a medical device which is used to examine the ears (outer and middle) and to check for cerumen perforation.

"Each day of our lives we make deposits in
the memory banks of our children."

Charles R. Swindoll

ADMINISTRATIVE CONCERNS

Efficient and effective administrative structures must be in place. The resources needed fall broadly into three categories.

A. PROFESSIONALS

- Medical professionals
- Therapists
- Other professionals

B. ADMINISTRATIVE STAFF

- Administrative staff
- Accountant
- Support staff

C. NON-PERSONNEL

- Equipment
- Materials and supplies
- Insurance
- Utilities
- Transportation

PROFESSIONALS REQUIRED:

- Early Interventionist
- Medical professional/ Paediatrician
- Speech therapist
- Physiotherapist
- Occupational Therapist
- Child Development specialist
- Social Worker
- Psychologist

INFORMATION MATERIAL TO BE MADE AVAILABLE AT THE EARLY INTERVENTION CENTER

- Pamphlets
- Books
- Booklets
- Guidelines for parents



While planning for prevention, early identification and early intervention, it is important to take stock of the existing materials and their availability.

MATERIAL AVAILABLE AT NIMH

	Prevention	Early identification	Early intervention
Material	<div>RAPID (for grass root functionaries on prevention and →</div> <div>Posters Pamphlets Slide video film</div>	<div>RAPID Early Identification)</div> <div>Posters Pamphlets Video film (PHC doctors)</div>	<div>Available material</div> <div>➤Pamphlets ➤Posters ➤Booklets ➤Books</div> <div>In the process of completion</div> <div>➤Package on Early intervention</div>
	<div>Mental Retardation – A manual for village rehabilitation workers (working at the village level) Mental Retardation – A manual for multi rehabilitation workers (working at PHC level) Mental Retardation – A manual for guidance counselors (working at district level) Mental Retardation – A manual for Psychologists (working at district level)</div>		

EARLY INTERVENTION SERIES

Pamphlets

- Hearing screening checklists
- Let me play and enjoy
- Your newborn
- Safety measures
- Watch them explore
- Home hygiene
- Give them a chance, watch them run
- Care to become a good parent- follow these
- Common illness in childhood
- Play
- Immunization
- Family planning
- Mother- child interaction
- Positioning and stimulation activities for children with motor delays

Books

- A manual on preparation of stimulation material for infants and toddlers
- RAPID
- Early Intervention –A Service Model
- Visual Stimulation Activities for Infants and Toddlers- A guide to parents and caregivers
- Positioning and stimulation activities for children with motor delays
- Kids-Play: A pathway to learning

SECTION-IV

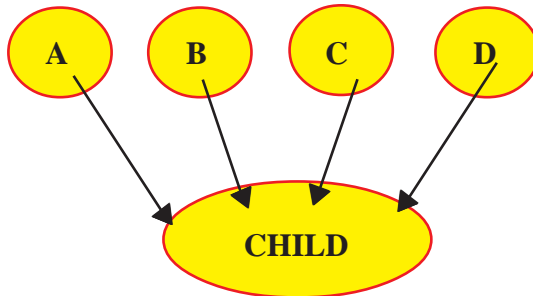
EARLY INTERVENTION SERVICE APPROACHES

The growing acceptance and implementation of the team approach also reflect early intervention professionals' view of human development that regards a child as an integrated and an interactive whole, rather than as a collection of separate parts (Golin & Ducanis, 1981). The team approach also recognizes that the multifaceted problems of very young children are too complex to be addressed by a single discipline (Holm & McCartin, 1978). The complexity of developmental problems in early life (Fewell, 1983) and the interrelated nature of an infant's developmental domains are prompting early intervention specialists to recognize the need for professionals to work together as a team.

Although different team models are in use, most are composed of professionals representing a variety of disciplines: Medicine, Child development; Physical, Occupational, Speech and Language therapy, Special education, Social work, and Psychology. The teams also involve the family in varying ways and degrees. Team members share common tasks including the assessment of a child's developmental status and implementation of a program plan to meet the assessed needs of the child within the context of the family.

What may best distinguish early intervention teams from one another is neither composition nor task, but rather the structure for interaction among team members. Three service delivery models that structure interaction among team members have been identified and differentiated in the literature: multidisciplinary, interdisciplinary, and transdisciplinary (Fewell, 1983; Linder, 1983; Peterson, 1987; United Cerebral Palsy National Collaborative Infant Project, 1976).

THE MULTIDISCIPLINARY APPROACH



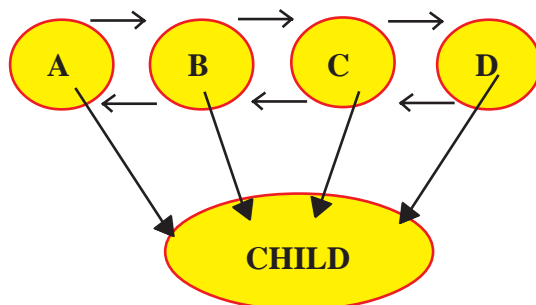
The approach to early intervention now is multidisciplinary where each professional individually provides services to the child. But what is ideal and desirable to our conditions is a transdisciplinary approach.

In multidisciplinary teams, professionals from several disciplines work independently of each other (Fewell, 1983). Peterson (1987) compared the mode of interaction among members of multidisciplinary teams to parallel play in young children: “side by side, but separate” (p. 484). Although multidisciplinary team members may work together and share the same space and tools, they usually function quite separately.

Interaction among team members in the multidisciplinary approach does not foster services that reflect the view of the child as an integrated and interactive whole (Linder, 1983). This can lead to fragmented services for children and confusing or conflicting reports to parents.

Another concern about the multidisciplinary model is the lack of communication between team members that places the burden of coordination and case management on the family. In contrast, both the interdisciplinary and transdisciplinary approaches avoid the pitfalls of multidisciplinary service fragmentation by having the team develop a case management plan that coordinates both their services and the information that is presented to the family.

THE INTERDISCIPLINARY APPROACH



A, B, C, D - Professionals

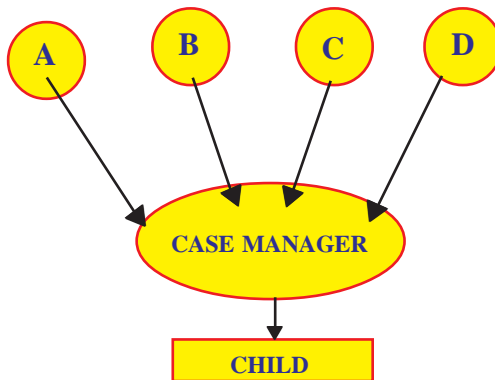
Interdisciplinary approach defines a process where professionals from different but related disciplines work together to assess and manage problems by actively participating in mutual decision making. Team members share information with one another but independently implement their section of the plan.

Interdisciplinary teams are composed of parents and professionals from several disciplines. The difference between multidisciplinary and interdisciplinary teams lies in the interaction among team members. Interdisciplinary teams are characterized by formal channels of communication that encourage team members to share their information and discuss individual results (Fewell, 1983; Peterson, 1987). Regular meetings are usually scheduled to discuss the shared cases.

Representatives of various professional disciplines separately assess children and families, but the team does come together at some point to discuss the results of their individual assessment and to develop plans for intervention. Generally, each specialist is responsible for the part of the service plan related to his or her professional discipline.

Although this approach solves some of the problems associated with the multidisciplinary teams, communication and interaction problems (e.g., influence of “professional turf”) may impinge upon the team process.

TRANSDISCIPLINARY APPROACH



A, B, C, D - Professionals

In the transdisciplinary approach, each professional provides a management plan to the case manager in consultation with the other team members. One of the members may be elected as a case manager who will deal with the child. The case manager may be a rehabilitation worker. This approach is holistic in nature and provides better case management and resource management (time & money). This approach provides services to a greater number of children with less number of professionals and facilitates easy access to the community.

FEATURES OF THE TRANSDISCIPLINARY APPROACH:

- It has a Holistic approach
- There is better case management
- There is better resource management (Time, Money)

- Greater Coverage of Services is ensured
- Less number of professionals required.
- It is a CBR approach

Early intervention being at the rudimentary stage in our country, there is an urgent need for intervention in the rural areas. The few available services in the urban areas hardly percolate to the rural population.

Transdisciplinary teams are also composed of parents and professionals from several disciplines. The transdisciplinary approach attempts to overcome the limitations of individual disciplines in order to form a team that crosses and recrosses disciplinary boundaries and thereby maximizes communication, interaction and cooperation among the team members.

FUNDAMENTAL TO THE TRANSDISCIPLINARY MODEL ARE TWO BELIEFS:

- Children's development must be viewed as integrated and interactive, and
- Children must be served within the context of the family.

Since families have the greatest influence on their child's development, they are seen as a very critical part of the transdisciplinary team and are involved in setting goals and making programmable decisions for themselves and their children. All decisions in the areas of assessment and program planning, implementation and evaluation are made with the consensus of the team. Although all team members share responsibility for the development of the service plan, it is carried out by the family and one of the team members, who is designated, acts as the primary service provider.

Another characteristic of a transdisciplinary team is that the team members accept and accentuate each other's knowledge and strengths to benefit the team, the child, and the family (Lyon & Lyon, 1980). Staff development in the form of mutual training may occur at three increasing levels of complexity: (1) sharing of general information; (2) teaching others to make specific judgments; and (3) teaching others to perform specific actions. The first two levels pertain to the sharing of information while the third level pertains to the sharing of roles.

IMPLICATIONS OF THE TRANSDISCIPLINARY MODEL

Because the transdisciplinary team members are interdependent, all must commit themselves to assist and support one another. This commitment is demonstrated by the following behaviors:

- 1) Giving the time and energy necessary to teach, learn, and work across traditional disciplinary boundaries.
- 2) Working towards making all decisions about the child and family by team consensus—that is, giving up disciplinary control.
- 3) Supporting the family and one other team member as the child's primary service provider.
- 4) Recognizing the family as the most important influence in the child's life and including the family members as equal team members who have a role to play in their child's development program.

"Children are the living messages we send
to a time we will not see."

John W. Whitehead

SERVICE DELIVERY MODELS IN EARLY INTERVENTION

<p>TARGET</p> <p>Child-centered</p> <p>Parent-centered</p> <p>Family-centered</p>	<p>The therapist works with the child directly to bring about the desired changes on a one-to-one basis.</p> <p>The interventionist works with the parents to produce effective and long-lasting changes in the child.</p> <p>The focus is on the family.</p>
<p>FREQUENCY OF FOLLOW-UP</p> <p>MODELS OF SERVICES</p> <p>Home-based programmes</p> <p>Center-based programmes</p> <p>Home-cum-center based</p> <p>Parent Consultation Model</p>	<p>The efforts and time spent on intervention may vary greatly giving rise to different type of services, daily, weekly or monthly. It depends on the need of the child, availability of professionals, the distance of the center and the cost of intervention.</p> <p>The programs are operated at home wherein one of the parents or any other family member or the caregiver participates in intervention.</p> <p>Programs are carried out in the centre – an institute, day care centre or a community centre where services are provided by professionals/trained personnel.</p> <p>Programs are carried out both at home and in the center. The professionals do carry out home visits to extend services.</p> <p>Here parents take consultation from professionals but carry out the program at home.</p>

ACTIVITIES OF AN EARLY INTERVENTION UNIT



MEDICAL EXAMINATION



PARENT COUNSELLING



TRANSDISCIPLINARY APPROACH

- Consultancy
- Assessment
- Intervention programmes
- Counselling/ Guidance
- Interdisciplinary team members

DETAILS OF EARLY INTERVENTION SERVICES

Speech Therapy	Child Development	Physio Therapy	Occupational Therapy
Assessment <ul style="list-style-type: none"> • Communication • Comprehension • Expression • Auditory function • Oro-pharyngeal disorders or delays Intervention <ul style="list-style-type: none"> • Therapeutic programme • Parent guidance • Auditory training • Speech training Teamwork <ul style="list-style-type: none"> • Referral • Interdisciplinary planning 	Assessment <ul style="list-style-type: none"> • Cognitive development, Social and Emotional development • Child behaviour and play characteristics • Learning and maturation • Mental health Intervention <ul style="list-style-type: none"> • Play and socialization • Counselling the parent regarding all-round stimulation • Planning activities for stimulation, play and fostering all round development Community and Teamwork <ul style="list-style-type: none"> • Creating awareness • Assisting other team members • Providing information 	Assessment <ul style="list-style-type: none"> • Motor skills • Motor dysfunction • Neuromotor, Musculoskeletal Intervention <ul style="list-style-type: none"> • Design adaptive equipment and mobility devices • Motor intervention • Gait training • Specific therapies Teamwork <ul style="list-style-type: none"> • Interdisciplinary planning • Referral • Case management 	Assessment <ul style="list-style-type: none"> • Child's developmental levels • Functional performance • Sensory processing • Adaptive responses Intervention <ul style="list-style-type: none"> • Environmental modification • Design assistive/ Orthotic devices • Functional skill development Teamwork <ul style="list-style-type: none"> • Referral • Interdisciplinary planning • Case management

FACULTY:



TRAINING

Training personnel such as Faculty and Master Trainers are required to provide services and also to serve as resource persons for short and long-term courses.



A GROUP DISCUSSION

Research staff carry out research projects. A sound research backing will serve as a guide to better services and improve related amenities.



ORIENTATION

Apart from providing services, the staff in the early intervention center should be able to carry out extension and outreach programmes. Community-Based Rehabilitation will also serve as a channel to improve the clientele in the Early Intervention center. For this purpose either the teaching faculty or research staff can be involved. Each member of the Early Intervention Unit has a specific role to play.



A CASE DISCUSSION

PERSONNEL AND THEIR ROLE IN EARLY INTERVENTION

PEDIATRICIAN	
i. Assessment	Growth and development Nutrition Detailed systematic and neurological examination Investigation Diagnosis
ii. Intervention	Nutrition Care Plan Comprehensive Healthcare services Genetic Counselling Treatment of Medical illness and associated abnormalities Anticipatory Guidance Referral
iii. Teamwork	Share Information Assist Other Team Members Health Education–Prevention, Early Identification Family Support Parent training programmes

PSYCHOLOGIST	
i. Assessment	Psychological development of the child Behavioral characteristics/needs of the child and family
ii. Intervention	Psychological Counselling Family Counselling Behaviour Modification
iii. Teamwork	Referral Awareness Programmes Parent Training programme Master trainers programme Case Management Interdisciplinary Planning

PHYSIOTHERAPIST

i. Assessment	Motor Skills / development Motor Dysfunction Neuromotor Musculoskeletal
ii. Intervention	Design Adaptive Equipment and mobility devices Motor Intervention Gait Training Specific Therapies
iii. Community and Teamwork	Interdisciplinary Planning Referral Awareness programmes Parent training programmes Master training programmes Case Management

OCCUPATIONAL THERAPIST

i. Assessment	Functional performance Sensory processing Adaptive responses
ii. Intervention	Environmental modification Design assistive/orthotic devices Functional skill development
iii. Team Work	Referral Awareness programmes Parent training programmes Master trainers programme Inter Disciplinary Planning Case Management

SPEECH THERAPIST AND AUDIOLOGIST

i. Assessment	Communication/Comprehension Expression/Auditory function Oral-Pharyngeal disorders/dysfunction.
ii. Intervention	Therapeutic program Parent guidance Auditory training/Speech training Referral
iii. Teamwork	Interdisciplinary planning

CHILD DEVELOPMENT EXPERT

i. Assessment	Cognitive Development Needs and Resources of the child Child Behaviour Learning Mental Health
ii. Intervention	Play and Socialization Nutritional Plan Counselling parents to enhance overall child development Home organization Behaviour modification
iii. Community and Teamwork	Creating Awareness on child development Assisting other Team members Parent training programmes Master trainers programme Providing Information

"Free the child's potential, and you will
transform him into the world"

-Maria Montessori

SOCIAL WORKER

i. Assessment	Family needs/resources/support Family functioning style Community Resources Family conflicts
ii. Intervention	Individual counselling Group counselling Environment modification Marital Counselling Family Counselling Family support Utilization of services
iii. Community and Teamwork	Tap community resources Health education Environmental sanitation Research Referral

PSYCHIATRIST

i. Assessment	Childhood disorders Attachment problems/anxiety Parental psychiatric problems
ii. Intervention	Prevention of disorders Educating and counseling parents
iii. Teamwork	Referral Interdisciplinary planning

"Children are likely to live up to what you believe in them."

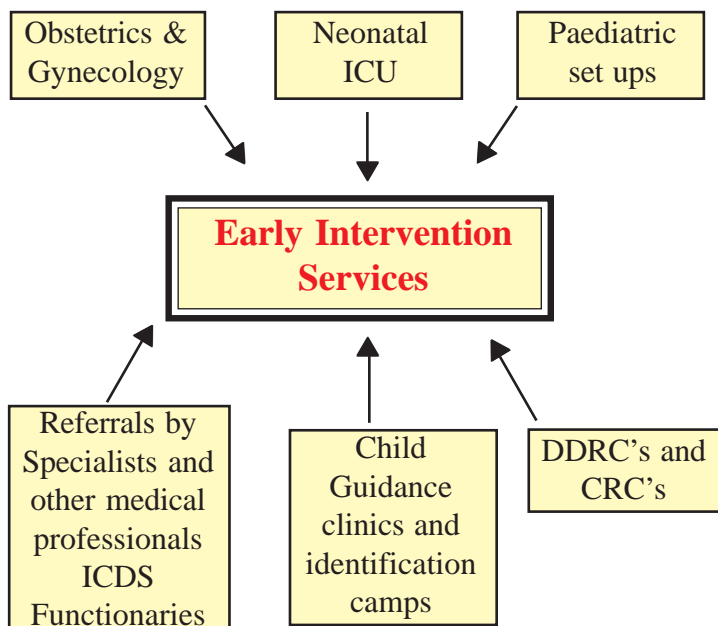
Lady Bird Johnson

- Planning
- Coordination
- Administration
- Advocacy
- Monitoring
- Evaluation
- Recording



Community Based Rehabilitation

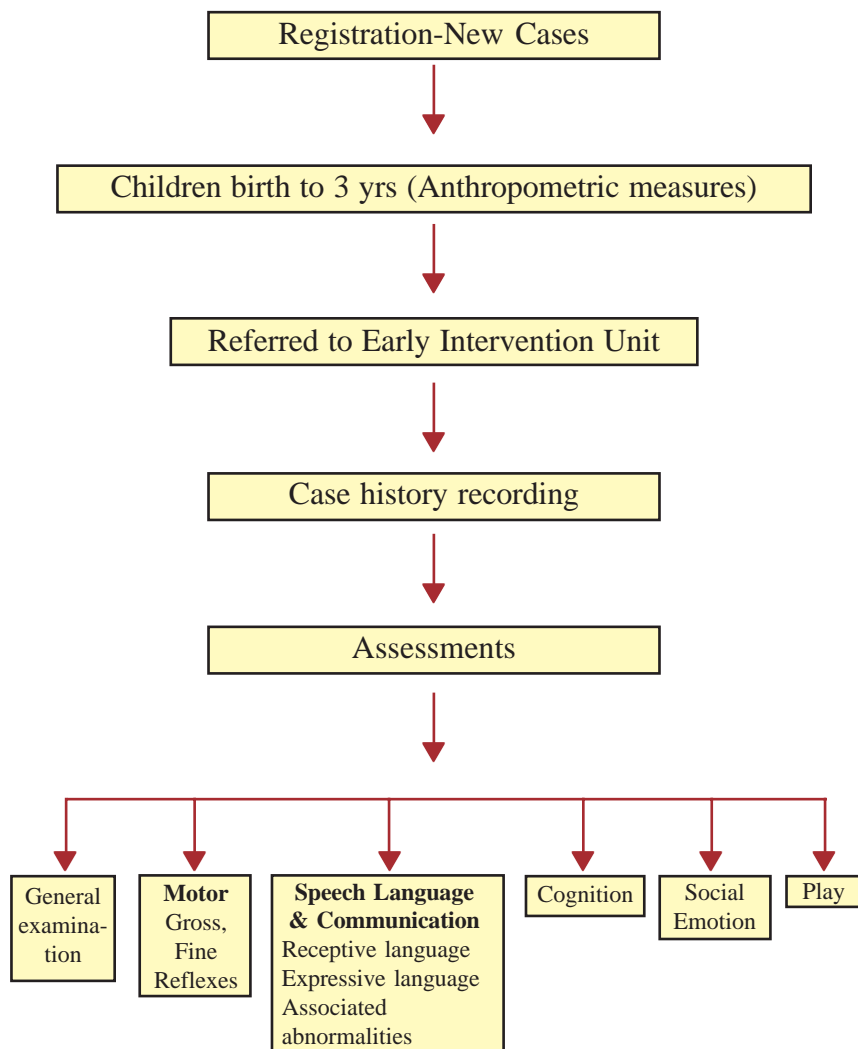
ADMISSION: CLIENT SOURCES FOR EARLY INTERVENTION



INFORMATION DESK

DETAILS OF SERVICE PROVISION:

The procedure to be followed from registration to the intervention is depicted below diagrammatically



DETAILS OF ASSESSMENT AND INTERVENTION:

CASE HISTORY



REGISTRATION

After completion of the registration formalities and recording of demographic details of the clients, they are sent for the early intervention services.

To begin with, the case history of the client is recorded by the professional concerned.

The case history format consists of details regarding the chief complaints, prenatal, natal, neonatal, postnatal history, family history, immunization history and feeding history, developmental history and behavior problems.



MEDICAL EXAMINATION

The chief complaints that are reported by the parents are recorded verbatim.

This provides information about the child's developmental status as perceived by the parents and is significant for planning the right intervention. Information on prenatal /natal/neonatal and postnatal aspects will help to identify the probable risk and etiological factors. The immunization, feeding and family history of the child is taken to rule out any of the environmental and biological risk factors.

ASSESSMENT

The assessment forms an integral part of the intervention process, as it is a resource guide for devising the intervention strategies that are sensitive to the needs of the individual child.



DEVELOPMENTAL ASSESSMENT

It is within this perspective that the developmental assessment gives the respective team members a comprehensive view about the child's all-round developmental areas where the child is delayed in development.

The general examination and the systemic examination will enable the pediatrician to understand the health as well as the neurological status of the child.



MOTOR ASSESSMENT

The information gathered can assist in knowing the cause, site of lesion, and effect of the pathology on the child, maturational status, and degree of deviation from normal, associated conditions and to a certain extent the prognosis.

Its major contribution will be for intervention planning, strategies to be opted, frequency of visits, areas to be targeted, investigations to be ordered and referrals if any required and treatment of medical conditions.

The motor and sensory development of the child is well comprehended with Physiotherapy and Occupational therapy assessments.

The assessment primarily consists of gathering information on reflex maturation, tone, voluntary control, muscle power, involuntary movement, gross motor, fine motor, oro-motor functions, sensory integration components, play and self-care skills.

Other significant aspects of assessment includes speech, language and audiology assessment. The speech and language

abilities of the child are recorded along with other oro-motor abilities that set limits to acquisition of language abilities.

The family assessment comprises assessing the family support, family resources and family functioning. These aspects are essential for providing intervention that is context-specific. Assessment of behavior helps to understand the evolution of behavior problems if any that may be manifested due to any deficits in child's development.

INTERVENTIONS



SPEECH INTERVENTION

The intervention strategies are devised in accordance with the assessment conducted by the multidisciplinary team. The Individualized Early Intervention Plan (IEIP) devised by the team focuses on using the assessment data for helping the child to overcome the deficits and mitigating the effects of risk factors through environmental stimulation through the transdisciplinary approach.



HYDRO THERAPY



AUDIOLOGICAL TESTING

Intervention related to medical aspects primarily aims at the use of medication for problems like epilepsy, hyperactivity, spasticity, general health problems and related concerns. It also focuses on nutrition, health, hygiene and immunization.



CASE HISTORY

Genetic counseling is given wherever it is deemed necessary, and anticipatory guidance on various health issues is also provided. Prior to intervention, the parents/caregivers are given information regarding the status of the child with reference to development, maturation, problems present, their effect and the requirement of the child.



OCCUPATIONAL THERPAY

Provisional diagnosis is made and management strategies are explained. The role of parents and family in intervention is explained. The steps that are essential for successful program outcome are described. The limitations of predictive prognosis are briefed. Parent's general queries are answered. Information and guidance are given on request.

Interventions pertaining to child's development focus on fostering social, emotional and cognitive processing. The stimulation that helps to enhance these processes form an integral aspect of child development. The behavior of the child is also studied for understanding the evolution of behavioral problems that may arise due to deficits in neurological and environmental dysfunction. This kind of ecobehavioural analysis is essential for planning an appropriate behavioral management program.

The importance of interactions for facilitating speech and language development is an essential component of speech therapy. It also includes identifying and facilitating the specific speech and language deficits in children.

Auditory training for children with hearing impairment is also provided. Auditory training includes, awareness, detection and discrimination (Gross and Fine discrimination). Auditory training is given in order to make the child aware of all the environmental and speech sounds which help in the development of speech and language.



SPEECH
THERAPY

Home training programs are also provided. Here, the guidelines are given to the parents to incorporate these home-based activities every day.

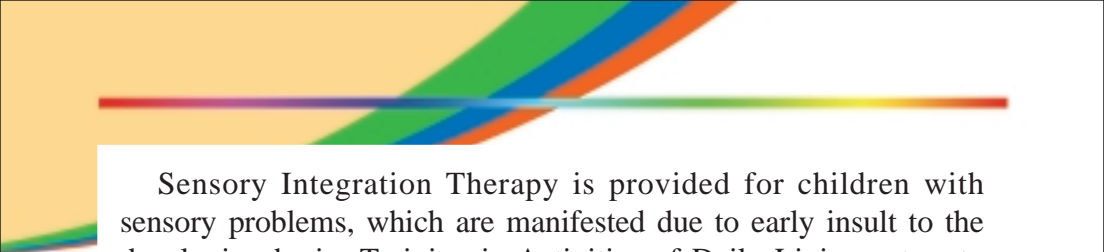
Physiotherapy interventions foster motor development in the child using Neurodevelopmental techniques. The emphasis of this technique is on facilitating movement under a normal postural tone.



PHYSIOTHERAPY



OCCUPATIONAL THERAPY



Sensory Integration Therapy is provided for children with sensory problems, which are manifested due to early insult to the developing brain. Training in Activities of Daily Living caters to those aspects like feeding, bathing and dressing. These self-care skills are important to maximize the functioning and minimize the dependency.

Occupational therapy enables a child to develop gross motor, fine motor and self-help skills using activity as a medium for fostering movement.

Sensory Integration is useful in treating specific Learning disabilities, Emotional and Behavioral disorders, Attention deficit disorder, Speech and language disorder, Infants at risk, Autism and Hyperactivity.

Specific interventions like behaviour management and anticipatory guidance are also being provided.

Family intervention is targeted for improving the care giving environment. Potential stressors like lack of motivation in mother, time management strategies and referrals for further assistance are the likely interventions.

All the above interventions are in accordance with the parent consultation model where the parent is advised, guided and given practical demonstration about the intervention which can be carried out at home.

They are given guidelines on observations and recording methods and therefore require the cooperation of family members. Information and guidance of all the above interventions is an added attribute.

Follow-up services include evaluation on the progress of the child, information as recorded by the parents. Once the earlier set goals are achieved, necessary plans for further course of intervention are made. These activities are practically demonstrated to parents to follow-up at home.



BEHAVIOUR MODIFICATION

Regular follow up services are provided depending upon the need. The follow ups may be daily, weekly or fortnightly. However, for outstation cases efforts are made to identify local agencies giving early intervention and the cases are referred to them. The parents are advised on follow-up as per the requirement and convenience



EMG SERVICES

REFERRALS

Suitable specialists are of vital importance for providing interventions. Referrals to specialists for opinion and advice and investigations help in understanding and confirming the diagnosis, thereby assisting in planning appropriate individualized intervention. For some children with locomotor impairments, aids and appliances are recommended to correct and prevent the setting of deformities.

Other referrals for family-related aspects are made when there are family problems like marital discord, alcoholism, financial crisis or mental illness in the family.

The Parent Training Program substantiates the interventions by addressing those issues that are of common concern for the parents. Another vital aspect of parent training programme is the parental motivation program where some potential parents are identified and trained to train other parents to sustain and encourage family members for carrying out home-based programmes.

"Children are the anchors that hold a
mother to life"

- *Sophocles*

OTHER ACTIVITIES OF EARLY INTERVENTION SERVICES INCLUDE:



PARENT TRAINING PROGRAMMES



PLAY THERAPY



SENSITIZATION PROGRAMMES

THE MAJOR OBJECTIVES OF PARENT TRAINING PROGRAMS ARE:

- To impart training on vital aspects of childcare and development
- To enable parents to understand the importance of comprehensive services
- To encourage and sustain the motivation of parents

Upgradation of information on research trends and recent perspectives is an imminent aspect of professional development which is covered in the fortnightly seminars.

The case discussions provide scope for understanding the individual cases who are attending the early intervention services. It also helps the team members to understand those specific cases within the sphere of intervention gains and also those who are not showing the expected progress. This helps to modify the intervention plan to suit the needs of the individual child.

Preparation and distribution of training material is also taken up regularly for dissemination of information and providing guidance.

WORKING HOURS:

The timings can be scheduled according to the local requirements. Generally 9:00 a.m. - 5:00 p.m. is ideal.

MAINTENANCE OF RECORDS:

Case Details and Administrative Details:

Case details: The 'Early intervention record' includes information regarding the screening, evaluation, assessment, eligibility determination, development and implementation of the IEIP, and any other area of the early intervention services being provided to the child and the child's family.

Early intervention records may also include records created and maintained by therapists, teachers, and other providers made in the course of providing services.

- IEIP
- Register for follow-up cases
- Register for new cases
- Register for complaints
- Stock register
- Referral register
- Log Book
- Minutes Register
- Visitors Register
- Directory



Other Materials

- Case Records
- Physiotherapy assessment proforma
- Occupational therapy assessment proforma
- Child development assessment proforma
- Family Assessment Scales
- Follow-up proforma
- IEIP Proformas

While we try to teach our children all about
life, our children teach us what life
is all about."

- Anonymous quote

CATEGORIZATION OF HUMAN RESOURCES

Level	Place	Personnel	Courses
Apex	Urban Cities	Professionals	<p>Long-term → PGDEI - 1 yr DECSE - 1 yr</p>
Middle	District	<ul style="list-style-type: none"> ➤ District Medical Officers ➤ PHC Doctors ➤ Therapists, ICDS functionaries 	<p>Short term Certificate course in EI-1 month Sensitization and refresher courses: 5-day Inservice courses Short-Term Program</p>
Grass root	Village	<p>Anganwadi workers Balasevikas Community Health Workers Community Volunteers</p>	Short-term program

SECTION-V

GOVERNMENT POLICIES AND PROVISIONS

To create new services, knowledge and skills are required to perform different activities at different levels. There is a basic need to link education and training with development in the field. The policies of our government have been encouraging and responsive to these changing needs. There is a government directive to states to ensure that service providers in the field of disability must have adequate training. Government of India has passed an Act of Parliament by which RCI (Rehabilitation Council of India) has been formed in the year 1992. It is a body for regulating the training of Rehabilitation professionals. One of its functions is the recognition of qualification granted by universities in India.

There is an urgent need to address the rural population as the few services that are available are concentrated in the urban pockets and these services do not percolate to the rural poor.

Some of the many factors affecting the reach of services in the rural areas some of them are as follows:

- Lack of awareness – regarding disability, identification and Early Intervention services
- Poor resources – lack of trained personnel, professional help
- Long distance to travel and poor transport facilities
- Monetary constraints,
- Poor socio economic status and high cost of services
- Cultural factors
- Misconceptions and negative health practices
- Psychosocial problems
- Adverse environmental and climatic factors

Hence it is essential that planning should be focused on overcoming these adverse factors and services should be planned considering the factors mentioned above.

BIWAKO MILLENNIUM FRAMEWORK FOR ACTION

In the BIWAKO Millennium Framework for Action, one of the priority areas for action is early detection, early intervention and education.

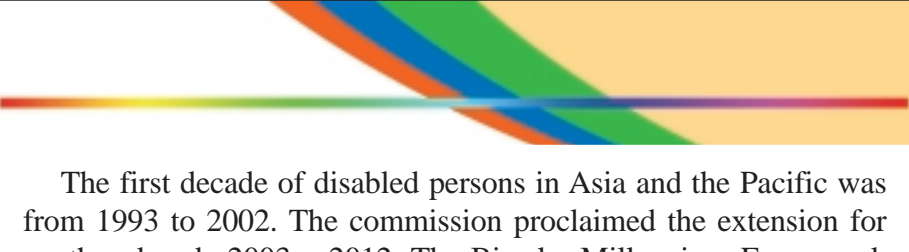
The main objective of this plan would be to reach out to the unreached. The incidence of mental retardation is 2 to 3 per cent of the population. The number requiring services is staggering and the challenge ahead is colossal. In a developing country like ours, 70% of population lives in villages and therefore providing highly specialized services for persons with mental retardation is a difficult task.

Feasible models which are adapted to our cultural and environmental conditions should be made available. The services should be cost-effective and close in proximity. To cut down on the initiation and establishment cost, the services should be able to utilize the locally available resources and should be easily integrated into the existing delivery systems. Above all, an important element is the involvement of the community – the factor that determines the success of a large-scale service programme. To cater to the changing needs of the persons with mental retardation and children with developmental delays, the answer seems to lie in child-centered, family-oriented and community-based services.

THE KEY FACTORS IN THE BIWAKO MILLENNIUM FRAMEWORK FOR ACTION ARE:

- Pro-poor development strategy
- Rural focus
- Involvement of the community.
- Integration into the existing delivery system.
- Cater to the changing needs of children with developmental delays

The focus of rehabilitation efforts are shifting to adoption of preventive measures, early identification and early intervention.



The first decade of disabled persons in Asia and the Pacific was from 1993 to 2002. The commission proclaimed the extension for another decade 2003 – 2012. The Biwako Millennium Framework for Action in its principles and policy directions clearly states.

- Adopt a policy of early intervention in all multisectoral areas including education, health and rehabilitation and social services for children with disabilities from birth to four years.
- Strengthen community-based approaches in the prevention of causes of disability, rehabilitation and equalization of opportunities for persons with disabilities.

PERSONS WITH DISABILITIES ACT, 1994

The Persons with Disabilities Act, 1994 was enacted by the parliament, to provide for recognition by the state of the right of persons with disabilities, to enjoy equality of opportunity and full participation in national life and for matters connected therewith/incidental.

This act specifies that early childhood and pre-school education are very essential for the development of infants and children with disabilities.

BENEFITS

Every state government has provided certain benefits for people with disability. Hence, information regarding concessions for the disabled can be obtained from

- Publications of Central and State governments, Ministry of Social Welfare.
- The Rehabilitation Council of India.
- Institutions and organizations working in the field of disability.

COMMON BENEFITS AND CONCESSIONS FOR ALL CATEGORIES:

- Travel concessions for the disabled by train, bus and rail.
- Income tax concession
- Customs concession for individuals and institutions
- Free distribution of aids and appliances for people with disability who cannot buy them.
- Scheme of assistance to disabled persons for purchase and fitting of aids and appliances
- Loans at concessional rates of interest for starting self-employment activities
- National and state awards
- Family pension/Disability pension
- Reimbursement of medical expenses and school tuition fees
- Financial assistance for persons with disabilities.

DIRECTORY

A 'Directory' on the different organizations and resources available should be maintained as these can help further extend services and tap resources through networking.

THE ADDRESSES OF SOME REFERRAL CENTERS THAT SHOULD BE MAINTAINED:

- Family Planning Centers
- Immunization Centers
- Institutes for
 - a) Genetic and Metabolic work up
 - b) Ophthalmology
 - c) Ear nose and throat problems
 - d) Neurological problems and orthopedic problems
 - e) Orthotic and Prosthetic problems
- Deaddiction Centers
- Small Scale Industries

ADDRESSES OF NATIONAL INSTITUTES

1. **National Institute for the Mentally Handicapped**
Manovikasnagar
Secunderabad 500 009
Andhra Pradesh
Tel: 040-27751-45 (5 lines)
Fax: 040-27750198
Email: hyd2_dirnimh@bsnl.in
Website : www.nimhindia.org
2. **Ali Yavar Jung National Institute for the Hearing Handicapped**
K.C. Marg Bandra (West)
Mumbai - 400 050.
Tel: 022-6400215/228
Fax: 022-6422638
Email: director@glasbmol.vsnl.net.in
Website : www.ayjnihh.org
3. **National Institute for the Visually Handicapped**
116, Raipur Road,
Dehradun
Uttar Pradesh
Tel : 0135-2744491, 27848147
Fax: 0135-748147
E-mail : nivh@sancharnet.in
4. **National Institute for the Orthopedically Handicapped**
B.T.Road, Bon-Hoogly
Kolkata - 700 090.
West Bengal
Tel: 033-23510279, 25310789
Fax: 033-25318379
E-mail : nioh@cal.vsnl.net.in

5. **National Institute of Rehabilitation, Training & Research**

Olatpur, P.O. Baroi

Cuttack - 754 020. Orissa

Tel: 0671-2805552, 2805856

Fax: 0671-2805862

E-mail : nirtar@orinic.in

Website : www.nirtar.nic.in

6. **Pt.Deen Dayal Upadhayay Institute for the Physically Handicapped**

4, Vishnu Digambar Marg

New Delhi

Tel: 011-23232403

Fax: 011-23239690

E-mail : diriph@reno2.nic.in

Website : www.iphnewdelhi.com

7. **National Institute for Empowerment of Persons with Multiple Disabilities**

East Coast Road, Muttukadu

Kancheepuram

Tamil Nadu

Tel: 044-27472389

Email: niepmd@gmail.com

CONCLUSION

With more than a third of its population below the age of 18, India has the largest child population in the world. One out of 16 children dies before they attaining the age of 1, one out of 11 dies before the age of 5 years. 35% of the developing world's low-birth weight babies are born in India and 40% of child malnutrition in the developing world is in India. The declining number of girls in the 0-6 age group is cause for alarm. Children with disabilities (0-19 years) account for 1.67% of the disabled population.

Children are the future citizens of the country. If the future citizens, the torch bearers of the country are grappling with such problems of disability and survival, then the future of the country is to say the least, grim. Disability in any form hampers normal development of children, and the challenge posed by disability in India is enormous. Despite the fact that so much has been done, there is still a much more to be done.

The crucial issues are to make services accessible, to involve parents and provide services to facilitate maximum development where children with disabilities reach their full potential. Governmental efforts, especially Ministry of Health should collect comprehensive data on children with disability and 5 year targets should be set for enrollment of children with disability and closely monitoring action plans implemented. There is a need to establish adequate early detection and identification services in hospitals, PHC's community based health care services with referrals system to Early Intervention service. Routine screening for high risk pregnancies and babies will help in early detection of disabilities.

All the above efforts must culminate to make our former President Dr. A.P.J. Abdul Kalam's dream project PURA (Provision of Urban Amenities in Rural Areas) a possibility. So the adage **“Catch them young and watch them grow”** best defines Early Intervention.

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APPENDIX

This section contains pamphlets and other publications of NIMH, which are intended for reference. Only sample copies (part) of the assessment forms and other materials have been enclosed. Organizations are free to design their own assessment forms tailored to suit their requirement and need.

Early Intervention Brochures



E A R L Y
I N T E R V E N T I O N
S E R I E S

Your Newborn

Birth - 1 Month

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

Do you know what a child can do in the first month?

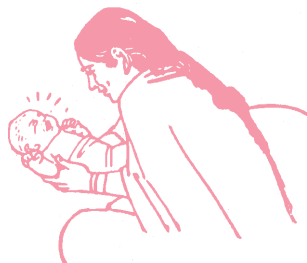
0-1 month

Now you are the proud parents of your child. Watch your child during the first four weeks and you will really enjoy seeing the baby grow.

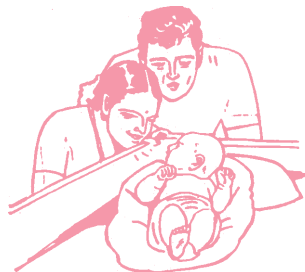
1. A baby can feel hunger and thirst right from the first day.



2. A baby expresses by crying for different needs such as hunger, discomfort, fear.



3. A baby starts responding to sound by turning towards source of sounds. They show preference to human voices.





**E A R L Y
INTERVENTION
S E R I E S**

Your Newborn

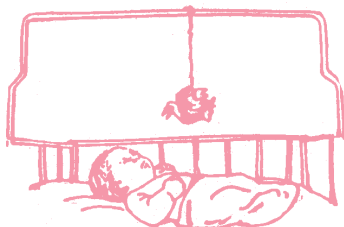
Birth - 1 Month

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

4. A baby likes to sleep most of the day and night. Baby is awake and alert for few minutes at a time.



5. A baby can see and focus on a large bright coloured object by first week of life.



6. A baby can respond to smell by turning towards source of smell. E.g.. Mother's breast.



7. A baby can respond differently to differently tastes like milk, medicines etc.



This is only the beginning. You will enjoy playing with your child. When your baby is awake show bright coloured toys that makes sounds, play by talking to your child. Observe your child's reactions.



EARLY INTERVENTION SERIES

Watch them Explore

2 - 6 Months

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

Did you know your child can do so many things?

2-6 Months :

Your child has passed one month. Now your child does many more things that you would like to observe.

1. A child starts noticing dangling toys held in front. By two months, he begins to focus on objects at different distances and by four months can see like an adult.



2. At 3 months, a child starts smiling in response to your smile.



3. A child likes to take fingers and objects to the mouth.



4. A child enjoys waving hands and kicking feet and recognizes toys.



5. A child starts cooing, laughing aloud and begins to babble sounds such as "ahiee" while you are talking or playing.



6. A child likes banging, shaking and pulling toys or objects and tries to repeat newly learned activity, such as shaking a rattle, ringing a bell.





EARLY INTERVENTION SERIES

Watch them Explore

2 - 6 Months

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

7. At 4 months, a child begins to notice differences among shapes and forms by looking at object for one minute or longer.



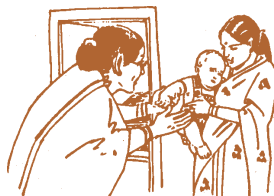
8. At 5 months child begins to reach for an object or toy of interest.



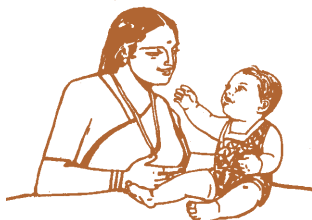
9. When a child is seated in your lap baby looks at the toy/object that falls down.



10. At 6 months a child recognizes familiar faces and may resist interaction with strangers.



11. A child shows special preference for mother/caregiver to seek attention and approval.



You will enjoy seeing your child doing all this Hang a toy/object before the baby and give toys and objects that are colourful and make sounds. Give the child toys like teething rings, rattles and bells that child can hold easily. Observe your child playing and explorings with things around. You will be surprised at his ability.



EARLY INTERVENTION SERIES

Give them chance Watch them Learn

6 - 12 Months

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

A child starts learning many things :

6-12 Months :

Now your child has crossed 6 months. Watch how the baby tries to learn about things and people around. So watch them learn in the next 6 months.

1. A child starts grasping objects and passing them from one hand to other.



2. A child likes to look at objects, touch them, pull them and feel them in the mouth. Baby also likes to drop and bang objects.



3. The child likes to combine simple tasks like putting objects one on top of the other and can play for two to three minutes with a single toy.



4. A seven months old turns in recognition when name is called. By 8 months baby can recognize the names of family members.





**E A R L Y
INTERVENTION
S E R I E S**

**Give them chance
Watch them Learn**

6 - 12 Months

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

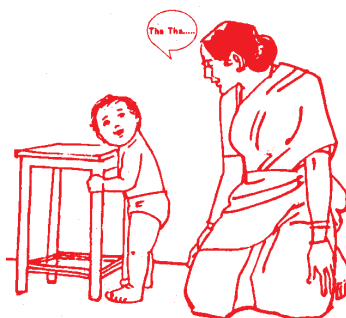
5. The child becomes goal oriented and brings the object he/she is playing with and resumes the activity.



6. By about 8 months a child can search briefly for objects that are hidden from view.



7. A child starts uttering sounds similar to the language used at home.



8. A child knows how to use toys & begins to anticipate the result of dropping an object, kicking a ball etc.





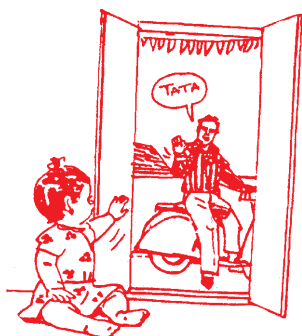
EARLY
INTERVENTION
SERIES

Give them chance Watch them Learn

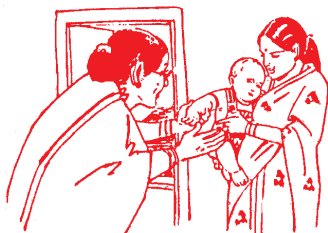
6 - 12 Months

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

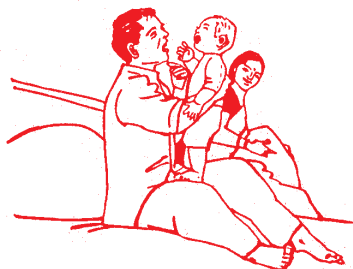
9. A child can associate words with gestures, such as waving to say good bye and indicate desire by pointing and gesturing.



10. A child does not like to go to strangers and shows mild to severe anxiety when separated from mother.



11. A child can imitate actions, he has observed such as opening, and closing eyes, yawning, laughing etc.



Your child can be taught many things. Give the baby opportunities to learn by playing games. While child is watching cover the toy partially and see how your child tries to remove the cloth. When your child finds the toy show your appreciation. Toys & objects given to the child arouse curiosity, and enhance learning.



EARLY INTERVENTION SERIES

Let me Play & Enjoy

12 - 18 Months

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

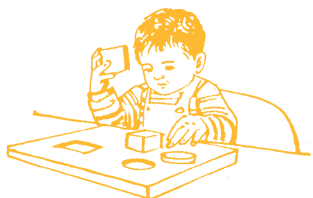
See my participation and exploration.

12-18 Months :

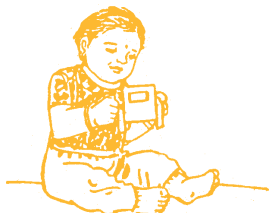
Now that my first birthday is over, see how i am trying to do things on my own!

I also participate along with my family members.

1. I am learning simple ways of using objects and toys and can use trial and error to solve simple problems.



2. I am learning to do things for myself, so i am interested in knowing how things work.



3. I become upset when I can't see my mother near me while at play.



4. I like to pull things, pick them up and play with them, so as to solve simple problems, like opening the bottle lids.



5. I like go in and out of the house and watch things, that catch my attention.





**E A R L Y
INTERVENTION
S E R I E S**

Let me Play & Enjoy

12 - 18 Months

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

6. I like to imitate small actions like coughing, sneezing, nose-blowing, eating etc.



7. I can react to expressions shown by my parents. I start crying when mother looks at me angrily.



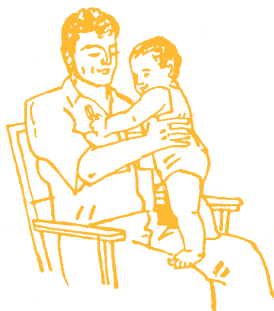
8. I am happy when i achieve something while at play.



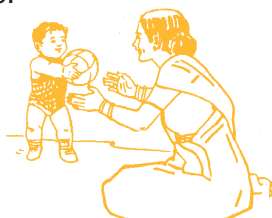
9. I like to play with other children of my age.



10. I know how to search for hidden objects.



11. I can follow simple commands, requests like "please give me ball " etc.





**E A R L Y
INTERVENTION
S E R I E S**

Let me Play & Enjoy

12 - 18 Months

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

12. I can point to body parts like hands, eyes, tummy.



14. I can discriminate size and match objects by colours, shapes and sizes.



13. I am learning how certain objects are meant to be used such as a broom, comb etc.



Your child is trying to solve simple problems by using trial and error. So provide him toys objects to enrich his learning experiences.



BREAST FEEDING

1. Babies should be encouraged to be on breast feeds soon after birth.



2. Every mother should breast feed her child.



3. Many mothers lack confidence in breast feeding. They need encouragement, practical support of their husband, health workers, family members and medical persons.

4. Sucking stimulates breast feeding.

ADVANTAGES

1. Breast milk alone sufficient for 4-6 months.
2. It is the most suitable and natural milk for baby.
3. Breast milk is easily digestible.
4. It protects the child from infections especially colostrum which is produced in the first few days.
5. Mothers giving breast milk have their menstrual periods starting late. This helps in increasing the space between this child and the next.
6. Economic Factors :
 - a. No additional supplements in first four months.



- b. No cost of tins :
Feeding bottles,
replacement of teats.

7. Emotional Factors :
Promotes close physical
and emotional bonding
between mother-child.

IF BABY GETS ADEQUATE BREAST MILK, THEN

- A. He will sleep for 2-3 hours
after feeds.
- B. He passes golden
coloured stools 7-8 times
a day.
- C. His growth is adequate.
- D. He is active and playful.

Tips

He should be fed
whenever he wants. This
method is better than 3
hourly feeding schedule.
Mother should adjust her
watch according to baby
not baby according to
watch.

ARTIFICIAL FEEDS

Feeding the child with bottle or
with cup and spoon.

Feeds include :

1. **Dairy Milk** : Cow, buffalo
and goat milk.
2. **Tin Milk** : Commercially
available.

It is definitely expensive both
in terms of money and time.

It is also more stressful to
mother and care taker.

FEW WORDS ABOUT BOTTLE FEEDING

1. Clean both bottle and
nipple with brush and soap
water and then with clean
water.



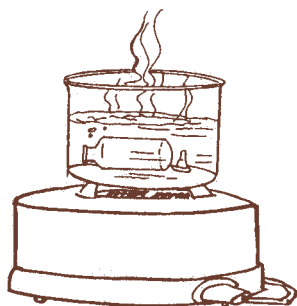


EARLY INTERVENTION SERIES

Feeding

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

2. Boil rubber teat for two minutes and bottle for ten minutes.



3. Hold the bottle in the right way as shown below.

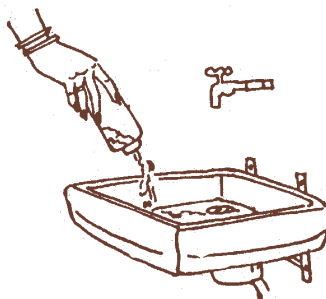
Wrong

Right



4. Burp the baby after feed.

5. Discard the left over milk in the bottle.



6. Avoid giving bottle feed while baby is asleep.

NO. OF FEEDS

Age	No. of Feeds in 24 Hrs.
Birth - 1 Month	6-8
1-3 Month	5-6
3-6 Month	4-5
6-12	3-4



EARLY INTERVENTION SERIES

Feeding

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

AMOUNT OF MILK

Age	Average Qty. Per Feed
1-2 Weeks	50 - 75 ml.
2 Weeks-2 Months	100-125 ml.
2-3 Months	125 - 150 ml.
3-4 Months	150 - 175 ml.
5-12 Months	175 - 225 ml.

Bottle can be a bond too. Let the mother hold the child while bottle feeding also

WEANING

Starting semi-solid foods



1. Four to six months onwards child needs other Food + Breast milk

2. Give fruit juices, fruits like mashed banana, mashed vegetables and semi-solid foods. Consult your doctor for specific needs.
3. A child under 3 years of age needs to be fed five to six times a day.
4. Enrich the food with vegetables, green leafy vegetables, oil, eggs, crushed nuts etc.

HERE ARE SOME TIPS

1. 2 to 5 years children develop Food Fads for which parents may be responsible.
2. Give the child a regular home made food.



Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

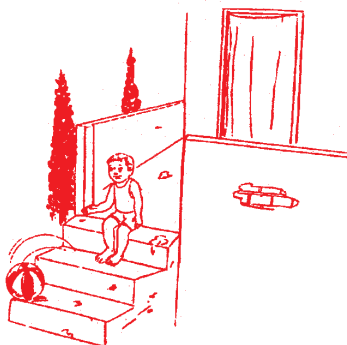
3. Assess the appetite and introduce the foods slowly one by one giving 15 days gap. If the child refuses stop the food initially for a few days and restart some times later.
4. Encourage regular meal time.
5. Sometimes they need a story.
6. Avoid moving around the child and carrying the child for feeding.
7. Do not over feed the child.
8. Usually likes and dislikes for food items result from remarks of older members. Good harmony between parents and child should help the child feed varied items.
9. Avoid bribing.



EARLY INTERVENTION SERIES

Safety Measures

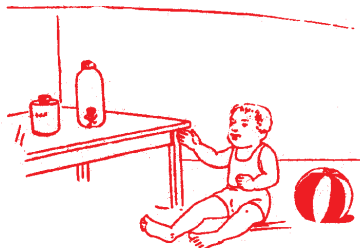
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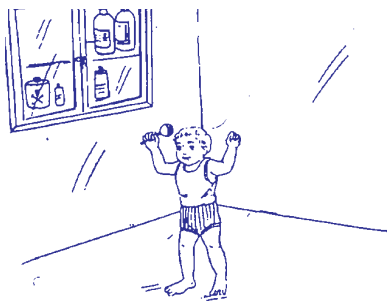
Do not leave your child alone at door steps.



Keep a wooden plank at the door to protect child from falling.



Do not leave medicines, pesticides, other hazardous material within child's reach.



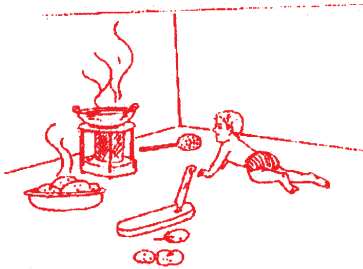
Keep all medicines, pesticides and other hazardous material in the shelf and lock it.



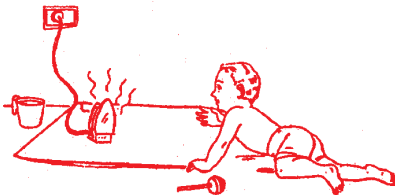
**E A R L Y
I N T E R V E N T I O N
S E R I E S**

Safety Measures

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays



Do not leave you child alone near the stove and never keep the stove on the ground.



Do not keep electrical appliances within child's reach and never keep the socket uncovered.



Keep the stove on a raised platform and mother should be around.



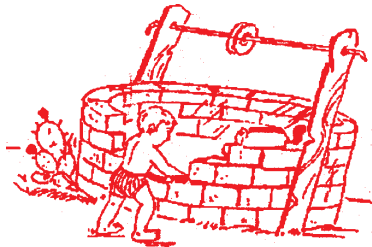
Keep the electrical appliances at a raised platform and switch it off when not in use. Keep the sockets covered.



**E A R L Y
I N T E R V E N T I O N
S E R I E S**

Safety Measures

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays



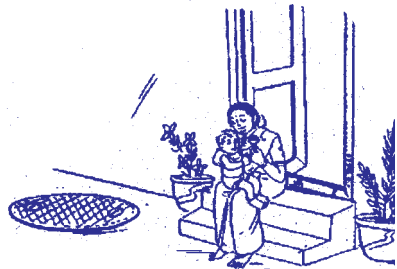
**Do not leave your child
alone near well.**



Keep a fence around the well.



**Do not leave your child alone
near open drainages,
manholes.**



**Keep the manholes,
drainages covered.**



EARLY
INTERVENTION
SERIES

Home Hygiene

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

Many diseases can be prevented by

- A. Washing hands with soap and water before and after handling food.



- B. Using clean water for cooking and washing.



- C. Vegetables and fruits should be washed thoroughly.



- D. Boiling drinking water.



- E. Keeping food clean and covered.



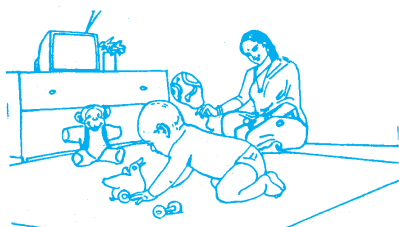


**E A R L Y
INTERVENTION
S E R I E S**

Home Hygiene

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

F. Making children play in a clean place.



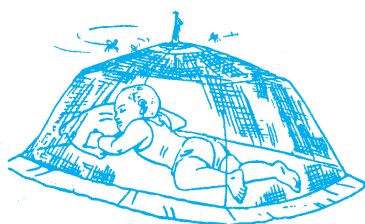
H. Burning or burying household refuse.



G. Using latrines for safe disposal of night soil.



I. Using Mosquito net during sleep.





COMMON ILLNESSES

There are few common illnesses which occur more frequently in children. They may be caused either by viruses or bacteria. They may present with fever, cold, running nose and may be associated with skin rashes. Some of the common illnesses are discussed below such as, fever, common cold, diarrhoea, ear infection, measles, chicken pox, whooping cough, tetanus and polio.

1. FEVER



Increase in normal body temperature. High temperature can lead to loss of body fluids

(dehydration). Children with high fever are usually irritable and cry a lot. Some of them may have fits during high fever.

So

1. Keep the baby cool.
2. Adequately covered.
3. Sponging of the body if temperature rises above 100° F.
4. Plenty of fluids and energy foods.
5. Consult a doctor.
6. Indiscriminate use of medicines at home should be avoided.



2. COMMON COLD



**It is usually self limiting.
The common features
are**

- Watering eyes.
- Running nose.
- Irritating cough.
- Fever.

**Mother should consult
doctor if:**

1. Fever is persisting more than 2 days.
2. chest retraction
3. Fast breathing
4. Sick look
5. Not accepting food

6. No improvement with routine treatment
7. Repeated vomitings.

3. DIARRHOEA (Loose Motions)

It is a condition when frequency of motion is increased and consistency of stool is loose and watery.

Consult a doctor as early as possible.

Care at Home

1. Give plenty of fluids. Eg. ORS

ORS -Oral Rehydrating Solution is a special fluid which is given during Diarrhoea. It can be prepared at home by mixing 3 finger pinch of salt and one small close fistful of sugar in a half-a-litre of boiled and cooled water. Commercial preparation of ORS is also available in the market.



**E A R L Y
INTERVENTION
S E R I E S**

COMMON ILLNESSES IN CHILDHOOD

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

2. Continue breast feeding
3. During recovery, give one extra meal everyday for atleast one week
4. Keep the home clean.
5. Prevent Diarrhoea by :



- a. Breast feeding
- b. Immunization
- c. Using Latrines
- d. Keeping food and water clean and covered
- e. Washing hands before handling foods



4. EAR INFECTION (Otitis Media)



Chronic discharge through ears can cause deafness. The discharge can be watery, pus, blood or foul smelling.

1. The discharge from the ear should be wiped out with a cotton wick or a tissue paper roll.
2. Do not use any sharp objects.
3. Dry ear heals fast.
4. Never put oil in the ears.
5. Consult a doctor.



5. MEASLES



This disease is caused by a virus. It lasts for one week. Measles rash is blotchy red in colour. It appears on 5th day of fever. The measles rash first appears behind the ear then spreads to whole body. The rash may appear along with skin in his eyes and intestines. Child also suffers from cough, cold, watering through eyes.

Mother must continue to breast feed the child if the child is breast feeds.

Child should be given more fluids and energy foods.

Consult a doctor if child has

- a. fast breathing
- b. sunken eyes
- c. bleeding rash
- d. unconsciousness
- e. convulsions
- f. ear discharge
- g. vomiting

Till the rash disappears, let the child be indoors. Otherwise he may infect other children and as his protective power is low he may catch infections easily.

6. DIPHTHERIA



In Diphtheria the child has fever, sore throat and looks very ill. It may be associated



E A R L Y
I N T E R V E N T I O N
S E R I E S

COMMON ILLNESSES IN CHILDHOOD

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

with difficulty in swallowing, refusal of feeds and vomiting. In severe cases white patches on the tonsils on one or both sides may be observed, which bleeds on scraping.

What to do ?

Immediately consult a doctor. Child may need hospitalization in many cases.

Prevention

A dreaded infection like Diphtheria, can be prevented by simple immunization with added booster doses.

7. WHOOPING COUGH

This disease starts with a mild fever and an irritating cough. The cough becomes explosive and markedly aggravated. Rapidly successive cough (10-20) may occur leading to paroxysm of whoop (high



pitched crowing inspiration). It is aggravated by crying, feeding and emotional disturbances. It may be associated with vomiting and fits.

What to do?

Immediately take child to a doctor and follow the advice.

How to prevent it?

By immunizing your child as per immunization schedule.



8. TETANUS



It is broadly classified into two groups.

A. NEONATE : First four weeks of life of a new born child.

1. Baby has difficulty in sucking. Mild stimulus can lead to stiffening of whole abdominal muscles followed by generalized stiffness.

B. OLDER CHILDREN : Onset is slow. These children have local stiffness. Mild stimulus provoke spasms.

What to do ?

Immediately take your child to doctor and seek his advice.

Prevention :

1. Immunize pregnant mother with tetanus toxoid at antenatal visit. Two doses of injection are given between 6 to 8 months of pregnancy.
2. Good umbilical cord care.
3. Wound care under hygienic conditions.
4. Follow routine immunization schedule to your child.

9. CHICKENPOX

In Chickenpox child has fever and within 24 hours of fever, pearl like lesion appears on trunk. These Lesion appears in crops and they are more in trunk and back than on hands



EARLY INTERVENTION SERIES

COMMON ILLNESSES IN CHILDHOOD

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays



and feet. Lesions are highly contagious and itchy in nature.

What to do ?

It is a childhood disease and mild in nature. So there is no reason to panic.

1. Paracetamol syrup for fever.
2. Prevent itching by application of lactocalamine lotion and do not allow the child to scratch the lesions.

3. Child to be kept at home till all the vesicles have dried up.
4. Plenty of fluids and energy rich fruits and food to be given to child.

10. POLIOMYELITIS



In poliomyelitis the disease starts with fever, vomiting and loose motion. There is weakness and paralysis of muscle. Usually large muscle groups of upper and lower



EARLY INTERVENTION SERIES

COMMON ILLNESSES IN CHILDHOOD

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limbs are affected. Child may have head drop. It may be associated with breathing difficulty and irritability and sometimes drowsiness.

What to do ?

1. Take child immediately to doctor and follow his advice.
2. Strict bed rest and no injections.

Prevention :

1. Immunize your child with five doses of oral polio vaccine as per immunization schedule.
2. Oral polio vaccine added with BCG vaccine to be given at birth.

Consult a Doctor if your child has

1. Sudden loss of appetite, if it is an alteration of normal pattern.

2. Repeated vomiting especially if it upsets the child.
3. Frequent loose or abnormal motions, or sudden large loose motions.
4. Persistent crying, indication pain somewhere.
5. Sudden shrieks of pain, even if not repeated in a short while.
6. Difficulty with breathing.
7. Any abnormal discharge especially from ears.
8. Any sudden change in the child's appearance making him look ill.
9. Foreign bodies in mouth, throat, ears, eyes.
10. High fever.
11. Fits.
12. Dull and listless child.



E A R L Y
INTERVENTION
S E R I E S

Family Planning

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

Timing Births :

Birth spacing is one of the most powerful ways of improving the health of the women.

1. Pregnancy before 18 or after 35 years is risk for both mother and child.
2. Less than 2 years space between births increases the chance of complications in the mother.

Prime Messages for family planning

Family planning gives her choice of when to begin having children, how many to have, how to space and when to stop.

Family planning refers to the practices that help the couple:

1. To avoid unwanted pregnancy.
2. To limit the family size.
3. To increase the spacing between two pregnancies.
4. It can be a temporary procedure to increase spacing or a permanent one to limit the family size.

Family planning advice to mother having 1 or 2 children : (Temporary Method)

Ideal - After delivery if there are no local infections and no contra indications, to opt for Intra Uterine Device (IUD) like - CuT.



E A R L Y
INTERVENTION
S E R I E S

Family Planning

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

Advise for mother regarding Intra Uterine Device (IUD) :

1. IUD is simple, needs no hospitalization and can be inserted at the time of discharge from hospital after the delivery.
2. IUD can be safely left in place for 3 years.
3. Continue breast feeding.
4. To have regular checkup with doctor.

(If not advisable to mother, husband can use condoms)

Family Planning advice to couple intending to limit the family : (Permanent Method)

Mother : Tubal Ligation

Father : Vasectomy

Addresses of the centres :

1. Government Hospitals
2. Family Welfare Centres.
3. Voluntary organisations working for Mother and child welfare programmes.
4. Maternity Centres.
5. Family Planning Centres.
6. Primary Health Centres.

Your local referral centres :

- 1.
- 2.
- 3.



**E A R L Y
INTERVENTION
S E R I E S**

Care to become a good parent follow these....

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

1. CARE OF THE NEW BORN CHILD

Birth of a new born baby is gift of nature to parents.

Baby needs adequate care and warmth to ensure good growth and development.

Parent is the best nurse to provide care to newborn



1. Warmth-Baby should be kept warm at birth and subsequently.
2. Baby after birth should be thoroughly wiped and wrapped in a dry towel or neat sheet.
3. Baby to be kept with mother to promote bonding between mother and child
4. Umbilical stump to be kept dry, Cord dries up and falls off by 5 to 10 days.
5. Any redness, bleeding or pus from the umbilical stump needs consultation from doctor.
6. The mucus, blood fragments and secretion on the skin of baby is to be wiped dry.
7. Baby to be sponged daily from the next day after birth with special attention to axilla, neck and groin.
8. The diaper area should be cleaned well with soap and water.
9. A soft unmedicated soap should be used.
10. Care of Eyes-Eyes of newborn should be cleaned with the sterile cotton swab.



EARLY INTERVENTION SERIES

Care to become a good parent follow these....

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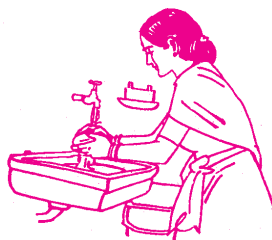
11. Avoid using synthetic material clothing for the baby.
12. Kazal application is to be discouraged as it can cause eye infection.
13. Parents are advised not to put oil into the ears, nose and umbilicus.

2. CARE OF A VERY SMALL BABY

Babies below 2 kg. need special care :

1. Do not bathe a very small baby. Wipe him clean. Encourage side-lying position. Move the baby as little as possible.
2. Keep the baby warm with mother's body contact or a bottle of warm water wrapped in a cloth.

3. Wash hands with soap and water every time before handling the baby.



4. If the baby is not sucking well at the breast, expressed breast milk can be fed with a dropper or a spoon.



If the baby does not cry well, suck or swallow the milk, looks blue or pale, or limp consult a doctor.



EARLY INTERVENTION SERIES

Care to become a good parent follow these....

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3. DO NOT GET ANXIOUS

If in first 2 weeks the baby has

1. Vaginal bleeding
2. Sticky vaginal discharge
3. Breast engorgement
4. Birth marks on the skin.

Do not treat the baby on your own. If needed, consult a doctor.

4. IF BABY STOPS SUCKING BREAST

Mother has to find out the cause such as

1. Engorged breast



2. Choking of the baby due to rapid milk flow from the breast.

3. Baby used to bottle
4. Blocked nose
5. Mouth infection (oral thrust)
6. Dull and seriously ill child

Consult a doctor for any of the above problems.

5. BABY NOT GAINING WEIGHT

Be concerned if the child does not gain 1/2 kg everymonth in the first 6 months. Poor gain in weight may be due to

1. Not sucking because of weakness or sickness
2. Less breast milk
3. Wrong preparation of milk formula. Wrong way of giving milk.
4. Feeding problems
5. Birth injury

Mother should see a doctor immediately if he is not growing well.



EARLY INTERVENTION SERIES

Care to become a
good parent follow
these....

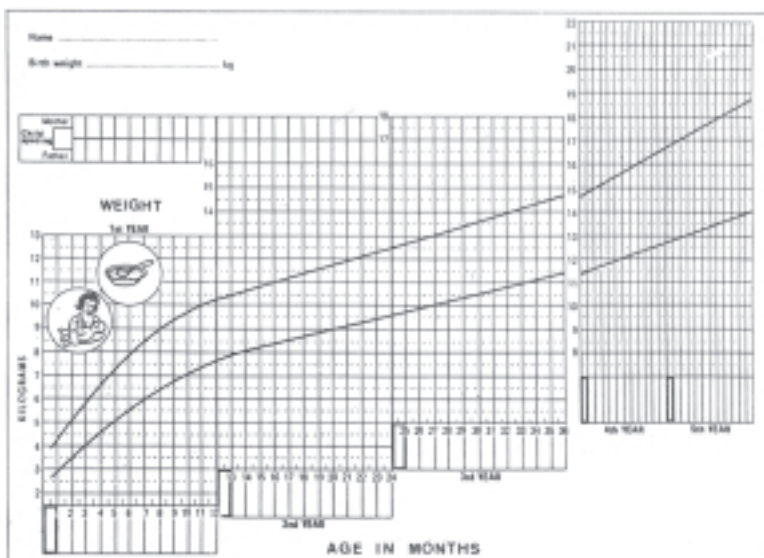
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6. RECOGNISING HEALTHY CHILD

1. Playful and active.



2. Arm circumference 14 cm. at 1 year.
3. Pink lips and conjunctivae
4. No disease signs
5. Complete immunization
6. Normal development
7. Rising growth curve.





EARLY INTERVENTION SERIES

Hearing Screening Checklist

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

At Birth - 3 Months

1. Does your child wake up at loud noises.

Yes/No.



2. Does your child startle or cry at loud sounds.

Yes/No.



3-6 Months

1. Does your child listen to soft sounds

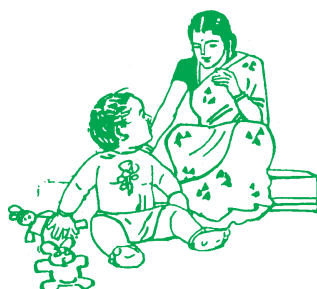
Yes/No.



2. Does your child seem to recognise mother's voice. Yes/No.



3. Does your child stop playing and appear to listen to sounds or speech. Yes/No.



4. Does your child try to turn towards the speaker Yes / No.



EARLY INTERVENTION SERIES

Hearing Screening Checklist

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

6-9 Months

1. Does your child respond to his/her name

Yes/No



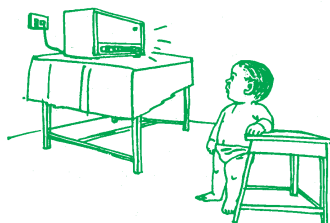
2. Does your child turn his/her head towards the side, where the sound is coming from.

Yes/No



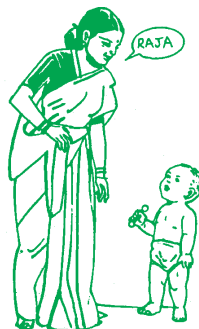
9-12 Months

1. Does your child search or look around when hearing new sounds. Yes/No.



2. Does your child turn to look up when you call.

Yes/No



3. Does your child respond to simple commands/queries such as come here, Do you want more etc.

Yes/No



EARLY INTERVENTION SERIES

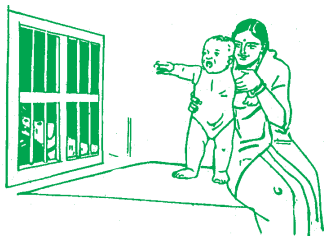
Hearing Screening Checklist

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

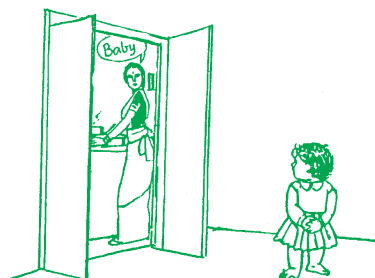
12-18 Months

1. Does your child distinguish sounds such as door bell, and train/barking dog/ automobile horn.

Yes/No.



2. Does your child hear you when you call from another room. Yes/No.



NOTE :

Read each question and check. If majority of the answers are 'No' or if you suspect problem in hearing consult an Audiologist and Speech Pathologist.



Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

Children learn through play. The right play material at the right time is not only enjoyable but also helps the child to learn new things.

Avoid following things while selecting the toy.

- F Toys with sharp edges.
- F Metal toys as they get rusted, hurt the baby if baby mouths it.
- F Small objects, beads, buttons on toys which could be swallowed by child.
- F Painted toys, when paint can be toxic.

Select toys that are

- F Colourful and attractive
- F Non-toxic
- F Washable

Some of the toys can be sound making, dangling and mobile or animated type. The following table gives you the approximate age of child, child's activity and toys to be bought or made at home.

Age	Activity
-----	----------

0-6 months

- 1- Begins social play with mother or care taker



- 2- Can hold and look steadily at a small toy given to him





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- 3- Can grasp an offered rattle with whole palm



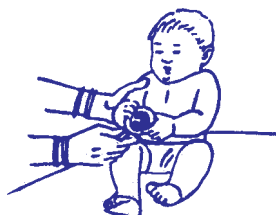
- 4- Shakes rattle, takes it to mouth and leaves it



- 5- Can drop rattle by opening hands



- 6- Can hold rattle between two hands with support.



TOYS REQUIRED : Rattles, Mobile toys, Dangling toys, Ball, etc.

6-12 months

- 1- Stretches to grasp toy in sitting position



- 2- Can hold a small toy or object in both hands simultaneously (Without any support)



- 3- Can pass a toy from hand to hand.





E A R L Y
I N T E R V E N T I O N
S E R I E S

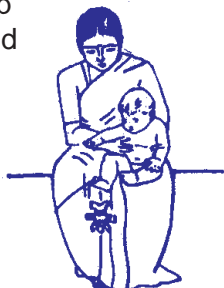
Play

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- 4- Starts looking for a toy hidden in front of him



- 5- Will drop a toy and see how and where it falls



- 6- Bangs/shakes/slides toys to produce sounds



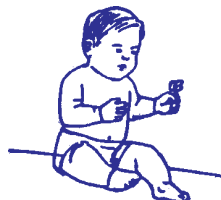
- 7- Picks up an object/toy from floor



- 8- Pokes a toy or an object with an index finger



- 9- Grasps small toys/objects between thumb and finger



- 10- Can take pegs out of holes



- 11- Picks up small objects with thumb and index finger





Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

- 12-Starts to show hand preference (eg. left hand - right hand).



- 13-Pushes or pulls large toys, cars, trucks etc.



- 14-Will imitate ringing bell stirring spoon in cup etc.



- 15-Starts to show interest in pictures



TOYS REQUIRED : Rattles, mobiles, ball, small objects, soft toys, squeezing toys, blocks, pegs, simple puzzle boards (2-3 pieces) spoon, cup, pull along cars, trucks, buses, bell, picture cards, books with clear pictures etc.

12-18 months

1. Holds a crayon and imitates scribble.



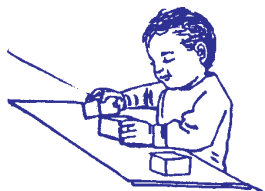


EARLY
INTERVENTION
SERIES

Play

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

2. Builds tower of two cubes or beakers.



3. Enjoys putting objects in and out-of container.



4. Plays with dolls, involves in acts like combing, feeding, dressing etc.



5. Enjoys playing with musical toys.



6. Enjoys watching pictures in books (turns several pages at a time).



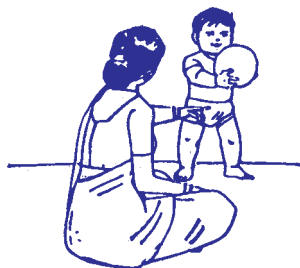
7. Enjoys nursery rhymes and tries to join in.





8. Obeys simple instruction
eg. sit down, come here,
give, take etc.

TOYS REQUIRED : Crayons, notebooks, drawing sheets, blocks, build-up beakers, construction toys, pegs, containers, tea set, kitchen set, drums, telephone, picture books, rhymes cassettes/book etc.



FEW MORE TIPS

1. Always select the toys which can be used in various situations.
2. Also use household objects for play which are safe for the child to use.
3. Prepare toys at home using available materials which are less expensive and it also makes you feel proud and happy when your kid plays with them.



EARLY INTERVENTION SERIES

First Aid

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

• CUTS, BRUISES AND MINOR ACCIDENTS.



1. Dirt must be gently washed out of cuts.



2. Bleeding fingers should be held upwards under a cold running tap water.

3. Tiny splinters of wood or glass must be removed with fine tweezers.
4. Dirt in the eye should be removed with the edge of a clean tissue paper, after rolling the eyelid back to find its exact position.
5. A nose bleed can be stopped by making the child sit upright and pinching the tip of the nose for five to ten minutes.
6. Many small cuts heal better if left open to, the plasters can be used wherever necessary.

Consult a Doctor :

- Bleeding persists
- Restriction of movement
- Unbearable pain

• DURING CONVULSIONS

What to do :

1. Do not panic.
2. Turn him on one side.
3. Put head end of the bed lower than foot end.



EARLY INTERVENTION SERIES

First Aid

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

4. Wipe out mouth secretions with cotton or soft cloth. Allow free flow of air in the room.
5. Loosen the clothes.
6. Remove the furniture around.
7. Keep the airway clear.
8. Take him to a doctor.

Avoid the following :

1. Forceful opening of mouth.
2. Forceful handling of the child.
3. Hot fomentation when he has fever.
4. Giving water during convulsions or unconsciousness.
5. Over crowding.

• BURNS

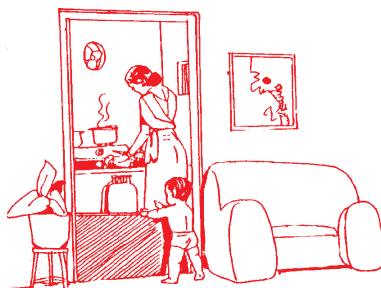
What to do after burn ?

1. Pour water on burnt part immediately
2. Keep it open. Do not apply a bandage

3. Give plenty of oral fluids
4. Keep the child under mosquito net
5. Give high calories, high protein food.
6. Do not apply any household remedies on the burnt part.

Prevention

1. Keep the baby away from fire.



2. Keep match boxes kerosene and other inflammable items out of reach for children.
3. Make sure the gas cylinder is closed when not in use.



EARLY INTERVENTION SERIES

Immunization

Prepared under project : Early Intervention to IUGR Children At Risk for Development Delays

1. Baby's Name : _____

2. Father's Name : _____

IMMUNIZATION RECORD

AGE	VACCINE	DUE ON	GIVEN ON
Birth	BCG		
	Oral Polio Vaccine - 1st dose		
	Hepatitis B Vaccine - 1 dose		
6 weeks	DPT - 1st dose		
	Oral Polio Vaccine - 2nd dose		
	Hepatitis b Vaccine - 2nd dose		
10 weeks	DPT - 2nd dose		
	Oral Polio Vaccine - 3rd dose		
14 weeks	DPT - 3rd dose		
	Oral Polio Vaccine - 4th dose		
6-9 months	Oral Polio Vaccine - 5th dose		
	Hepatitis B Vaccine - 3rd dose		
9 months	Measles Vaccine		
15 - 18 months	MMR (Measles, Mumps. Rubella)		
	DPT - 1st booster dose		
	Oral Polio Vaccine - 6th dose		
5 years	DPT - 2nd booster dose		
	Oral Polio Vaccine - 7th dose		
10 years	TT (Tetanus) - 3rd booster dose		
15-16 yrs	TT (Tetanus) - 4th booster dose		



EARLY INTERVENTION SERIES

Immunization

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IMMUNIZATION SCHEDULE

BIRTH	BCG, OPV	Oral Polio Vaccine (OPV)
6 Weeks	DPT, OPV	(DPT-Diphtheria, Pertusis, Tetanus)
10 Weeks	DPT, OPV	
14 Weeks	DPT, OPV	
9 Months	Measles, OPV	(Recommended by WHO)
12-15 Months	MMR	(No Booster Required)
15-18 Months	DPT, OPV	(First Booster)
4-5 Years	DPT, OPV	(Second Booster)
10 Years	TT	
10 Years	Typhoid	
16 Years	TT	
16 Years	Typhoid	

PRIME MESSAGES

1. Immunization protects against several dangerous diseases. A child who is not immunised is more likely to become undernourished, disabled or die.
2. Immunization is urgent. All the primary immunizations should be completed in the first year of life.
3. Booster doses of immunization should be given as per schedule.
4. Prophylactic immunization should be given as and when required.
5. It is safe to immunize a child suffering from mild illness in consultation with a doctor.
6. Every woman between ages of 15 and 44 should be immunized against Tetanus and Rubella.

PREVENT MENTAL RETARDATION

"Arrange your concerns let prevention take top priority"



National Institute for the Mentally Handicapped

(Ministry of Social Justice & Empowerment, Government of India)
Mandi Bahadurgarh, Secunderabad - 500 005, Ph : 27731741 Fax : 040-27730198
E-mail : nyd2_csmr@samcharnet.in Website : www.nimhindiia.org

GENETIC COUNSELLING

Information Brochure



Prepared by:

Dr. C. Kusuma Kumari
&
Dr. M. Sujatha

Institute of Genetics, Osmania University,
Hyderabad.

IODINE DEFICIENCY

INFORMATION BROCHURE



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EARLY INTERVENTION SERIES



MOTHER - INFANT INTERACTION



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एनआरसी ईएनआई सीरीज EARLY INTERVENTION SERIES

शिशु में सामान्य दृष्टि विकास NORMAL VISUAL DEVELOPMENT IN INFANTS AND TODDLERS



राष्ट्रीय मानसिक विकलांग संस्थान

(Ministry of Social Justice & Empowerment, Govt. of India)

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EARLY INTERVENTION FOR MOTOR PROBLEMS



NIMH

HEAD CONTROL - Floppy Child

NORMAL CHILD'S HEAD CONTROL

With normal head control the child is able to:

- ⌘ Maintain the head in midline
- ⌘ Turn the head from side to side and up and down
- ⌘ Hold the head upright



**IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP**

EARLY INTERVENTION FOR MOTOR PROBLEMS



NIMH

ROLLING - Floppy Child

NORMAL CHILD ROLLING

- ⌘ A normal child rolling, from back on to the abdomen.
- ⌘ Rotation twisting movement between shoulder and hips
- ⌘ Movement starts with head turning to side followed by shoulder, trunk, hips and legs



**IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP.**

EARLY INTERVENTION FOR MOTOR PROBLEMS



NIMH

SITTING - Floppy Child

NORMAL CHILD SITTING

SITTING ON THE CHAIR

- ⌘ The back and head are vertically straight
- ⌘ Hips and knees are bent (as shown in the figure)
- ⌘ Feet are placed flat on the floor

FLOOR SITTING

- ⌘ The back and head are kept straight
- ⌘ Hips and knees bent (as shown in the figure)
- ⌘ The outer side of the thigh touching the floor



IF THERE IS A DELAY OR ABNORMALITY SEEK PROFESSIONAL HELP

EARLY INTERVENTION FOR MOTOR PROBLEMS

CRAWLING - Floppy Child



NORMAL CHILD CRAWLING

- ⌘ Alternate limb movements
- ⌘ Adequate shortening and elongation of the trunk
- ⌘ Head held in line with the trunk

**IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP**



EARLY INTERVENTION FOR MOTOR PROBLEMS

STANDING - Floppy Child



NORMAL CHILD STANDING

- ⌘ Head and trunk are in alignment (in straight line)
- ⌘ Hips and knees are straight with feet taking proper weight

**IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP**



EARLY INTERVENTION FOR MOTOR PROBLEMS

WALKING - Floppy Child



NORMAL CHILD WALKING

- ⌘ Head and trunk are in alignment (in a straight line)
- ⌘ Alternate leg movements with proper weight bearing
- ⌘ Alternate arm swing movements with trunk rotation

**IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP**



EARLY INTERVENTION FOR MOTOR PROBLEMS



NIMH

HEAD CONTROL - Stiff Child

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EARLY INTERVENTION FOR MOTOR PROBLEMS



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IF THERE IS A DELAY OR ABNORMALITY SEEK PROFESSIONAL HELP

EARLY INTERVENTION FOR MOTOR PROBLEMS



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**IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP**



NIMH

EARLY INTERVENTION FOR MOTOR PROBLEMS



KNEELING - Stiff Child

NORMAL CHILD KNEELING

- ⌘ Head and trunk are in alignment (in straight line)
- ⌘ Hip held straight without arching of the back
- ⌘ Weight bearing is on both knees
- ⌘ Uses both hands in play or for other activities

**IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP**



NIMH

EARLY INTERVENTION FOR MOTOR PROBLEMS



STANDING - Stiff Child

NORMAL CHILD STANDING

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- ⌘ Hips and knees are straight with feet taking proper weight

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NIMH

EARLY INTERVENTION FOR MOTOR PROBLEMS



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NORMAL CHILD WALKING

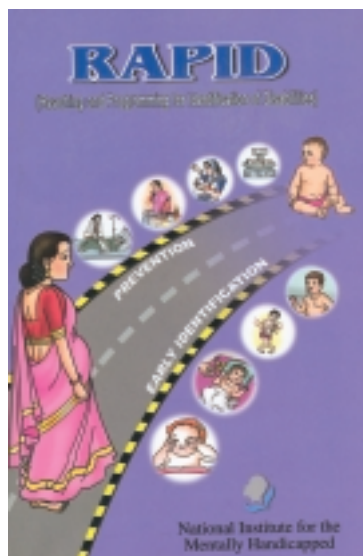
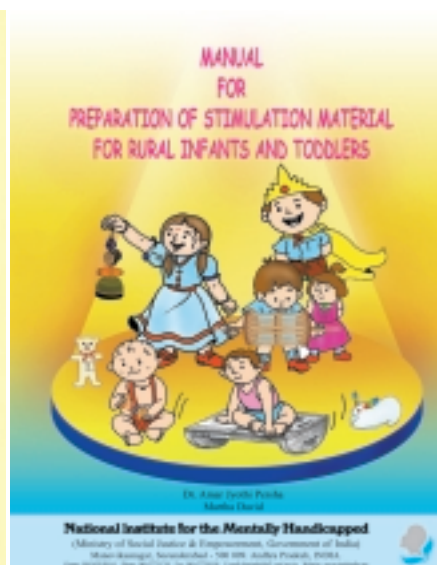
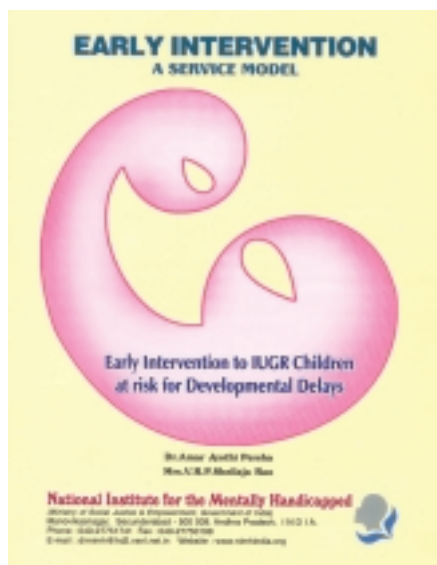
- ⌘ Head and trunk are in alignment (in a straight line)
- ⌘ Alternate leg movements with proper weight bearing
- ⌘ Alternate arm swing movements with trunk rotation

**IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP**

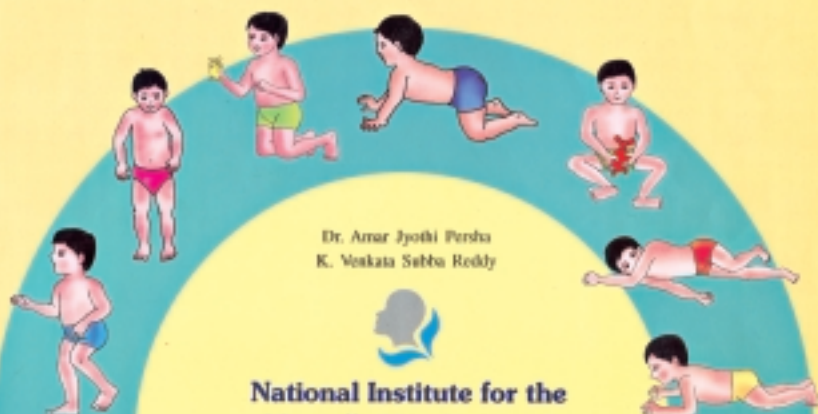


NIMH

Early Intervention Books



Positioning and Stimulation activities for infants and young children with Motor problems



VISUAL STIMULATION ACTIVITIES FOR INFANTS AND TODDLERS

A GUIDE TO PARENTS AND CAREGIVERS

Awareness of the Environment
Eye Hand Coordination
Gross Motor
Imitation
Self Awareness
Eye Contact
Tracking
Localization
Fixation



National Institute for the
Mentally Handicapped



VIDEO FILM

Early identification of mental retardation: This video film is developed for the PHC doctors, as the doctor is the first point of contact when the child is identified with a problem. It is well known that early identification helps to control further damage to the child and hence the film emphasizes the importance and method of early identification and suitable support systems. The film is for a duration of 30 minutes covering normal child development and the deviations in development. The comparison helps in early detection of developmental delays. Though developed for doctors, this film is useful by parents and other professionals working with children having developmental delays.

Early Intervention Charts



IF YOUR CHILD IS

- Unable to turn and see from where the sound is coming
- Unable to blink the eyes when light is focused on eyes or unable to turn the head towards the light
- Unable to walk or talk when compared with same age group children
Unable to understand when told
Requires repeated instructions for understanding
- Unable to hold the neck, unable to hold the objects

Then consult the doctor immediately to prevent disability.

समस्याएँ जल्द ही डॉक्टर को बताएं, समस्या रोक्ने के लिए
Ministry of Social Justice & Empowerment, Government of India

DURING PREGNANCY...

- Start your daily activities after taking the breakfast. Your food should consist of rice, chapatti, pulses, vegetables, green leafy vegetables, fruit, milk, curd, egg, meat and fish.
- Eat along with your family members
- Consult the doctor before taking any medicine. Go for regular antenatal checkup
- Keep your home environment neat and clean. Open the windows to get fresh air
- Avoid doing stressful jobs, lifting heavy objects and lifting elder children, take a minimum of 2 hours of rest after having lunch
- Be friendly with your neighbors, keep your home environment happy and joyful

समस्याएँ जल्द ही डॉक्टर को बताएं, समस्या रोक्ने के लिए
Ministry of Social Justice & Empowerment, Government of India

Early Intervention Assessment Forms

National Institute for the Mentally Handicapped, Secunderabad EARLY INTERVENTION SERVICES



Name : _____ D.O.B. : _____ Reg. No. : _____
 Sex : _____ Age : _____ Date : _____
 Education : _____ Occupation : _____ Address : _____
 _____ Date _____ Intake No. _____ Time taken _____

CASE RECORD PROFORMA

1. DEMOGRAPHIC DATA :

Name : _____ Date : _____
 Age : _____ Reg. No. : _____
 Sex : _____ Address : _____
 Father's name : _____ Locality : _____
 Age : _____ City : _____
 Education : _____ District : _____
 Occupation : _____ State : _____
 Mother's Name : _____ Referred by : _____
 Age : _____ Address : _____
 Education : _____ Religion : _____
 Occupation : _____ Informants : _____
 Languages spoken : _____ Relationship : _____

1.1 Chief Complaints :

1.2 Presenting Complaints : (nature and duration) in verbatim.

An ISO 9001 : 2000 Institution

NIMH/DRP/ANX/2-A

NATIONAL INSTITUTE FOR THE MENTALLY HANDICAPPED

(Ministry of Social Justice & Empowerment, Government of India)
Manovikasnagar, Secundersabad - 500 009. A.P., INDIA.

DEPARTMENT OF REHABILITATION PSYCHOLOGY

VINELAND SOCIAL MATURITY SCALE

Name : D.O.B. : Reg. No. :
Sex : Age : Date :
Education : Occupation : Address :

RESULTS

Total Score :
Social Age (SA) :
Social Quotient (SQ) = SA/CAX 100 =

SOCIAL MATURITY CONSTELLATION

S.No.	Social Areas	SA	SQ
1.	Self-Help General		
2.	Self-Help Eating		
3.	Self-Help Dressing		
4.	Self Direction		
5.	Occupation		
6.	Communication		
7.	Locomotion		
8.	Socialization		

Remarks :

Signature of the Psychologist



NIMH/DMS/FMT/1:B

National Institute for the Mentally Handicapped

(Ministry of Social Justice and Empowerment, Govt. of India)
(An ISO 9001 : 2000 Institution)
Manovikasnagar, Secunderabad - 500 009, Andhra Pradesh, INDIA.
Grants : MANOVIKAS Telephone : 040-27751741 Fax : 040-27750198
E-mail : dms_nimh@yahoo.co.in Website : www.nimhindia.org

**EARLY INTERVENTION SERVICES
PHYSICAL AND OCCUPATIONAL THERAPEUTIC ASSESSMENT****GENERAL INFORMATION**

Name: _____ Age: _____ Date of birth: _____ Sex: _____

Registration number: _____ Date of assessment: _____

PRESENTING COMPLAINTS

PREVIOUS INTERVENTION

Physical/occupational therapy : _____

Speech therapy : _____

Cognitive therapy : _____

Others : _____

SIGNIFICANT INFORMATION

History : _____

Other disabilities / delays,
associated conditions,
genetic disorders : _____**HIGHER FUNCTIONS**

Vision : _____

Hearing : _____

Others : _____



NIMH / DMS / FMT / 2:B

National Institute for the Mentally Handicapped
Secunderabad

राष्ट्रीय मानसिक विकलांग संस्थान, सिकंदराबाद

(An ISO 9001 : 2000 Institution)

DEPARTMENT OF MEDICAL SCIENCES

SPEECH AND LANGUAGE ASSESSMENT PROFORMA - E.I.S.

NAME :

AGE/SEX :

REG.No. :

DATE :

1.0 COMPLAINTS

1.1 Significant History

1.2 Treatment attempted so far

2.0 GENERAL OBSERVATIONS/ NOTES:-

3.0 PREREQUISITES FOR SPEECH & LANGUAGE DEVELOPMENT

3.1 Speech Mechanism :

Structure : Normal/Abnormal

Function : Normal / Abnormal

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National Institute for the Mentally Handicapped, Secunderabad

EARLY INTERVENTION SERVICES



Name : D.O.B. : Reg. No. :
 Sex : Age : Date :
 Education : Occupation : Address :

Date

Intake No.

Time taken

FAMILY SUPPORT SCALE

Listed below are sources that are often helpful to members of families raising a young child. This questionnaire asks you to indicate how helpful each source is to your family. Indicate "Y" sign if the source is present, indicate "N" sign if the source is absent.

S. No.	SOURCE OF SUPPORT	Yes	No
1.	My parents	1	0
2.	My spouse parents	1	0
3.	My relatives/kin	1	0
4.	My spouse relative/kin	1	0
5.	Spouse or partner	1	0
6.	My friends	1	0
7.	My spouse friends	1	0
8.	My own children	1	0
9.	Other parents	1	0
10.	Co-workers	1	0
11.	Parent groups	1	0
12.	Social groups/clubs	1	0
13.	Church members/minister	1	0
14.	My family or child's physician	1	0
15.	Early childhood intervention programme	1	0
16.	School/day care centre	1	0
17.	Professional helpers (social workers, therapists, teachers etc)	1	0
18.	Professional agencies (public health, social services, mental health etc.)	1	0

Source : C.J. Dunst, C.M. Trivette, and A.G. Deal (1988). *Enabling and Empowering Families: Principles and Guidelines for practice*. Cambridge, M.A: Brookline Books.

Adapted from Indo-US Project "Early Intervention to IUGR Children at Risk for Developmental Delays"

National Institute for the Mentally Handicapped, Secunderabad

EARLY INTERVENTION SERVICES



Name : _____ D.O.B. : _____ Reg. No. : _____
 Sex : _____ Age : _____ Date : _____
 Education : _____ Occupation : _____ Address : _____

Date _____

Intake No. _____

Time taken _____

FAMILY FUNCTIONING SCALE

Every family has unique strengths and capabilities, although different families have different ways of using their abilities. Listed below are 26 statements about families. Please read each statement and indicate "Y" sign if the statement is true, indicate "N" sign if the statement is not true.

S. No.	To what extent is each of the following statements like your family	Yes	No
1.	It is worth making personal sacrifices if it benefits our family	1	0
2.	We generally agree about how family members are expected to behave	1	0
3.	We believe that something good comes out of the worst situations	1	0
4.	We take pride in even the smallest accomplishments of family members	1	0
5.	We are able to share our concerns and feelings in productive ways	1	0
6.	No matter how difficult things get, our family sticks together	1	0
7.	We generally ask for help from persons outside our family if we cannot do things ourselves	1	0
8.	We generally agree about the things that are important to our family	1	0
9.	In our family we are always willing to "pitch in" and help one another	1	0
10.	If something beyond our control is constantly upsetting to our family, we find things to do that keep our mind off our worries	1	0
11.	No matter what happens in our family, we try to look "at the bright side of thing"	1	0
12.	Even in our busy schedules, we find time to be together	1	0
13.	Everyone in our family understands the rules about acceptable ways to act	1	0
14.	Friends and relatives are always willing to help whenever we have a problem or crisis	1	0
15.	When we have a problem or concern, we are able to make decisions about what to do	1	0
16.	We enjoy time together even if it is just doing household chores	1	0
17.	If we have a problem or concern that seems overwhelming, we try to forget it for a while	1	0
18.	Whenever we have disagreements, family members listen to "both sides of the story"	1	0
19.	In our family, we make time to get things done that we all agree are important	1	0
20.	In our family, we can depend upon the support of one another whenever something goes wrong	1	0
21.	We generally talk about the different ways we deal with problems or concerns	1	0
22.	In our family, our relationships will outlast our material possessions	1	0
23.	Decisions like moving or changing jobs are based on what is best for all family members	1	0
24.	We can depend upon one another to help out when something unexpected comes up	1	0
25.	In our family, we try not to take one another for granted	1	0
26.	We try to solve our problems first before asking others to help	1	0

Source : C.J. Dunst, C.M. Trivette, and A.G. Deal (1988). *Enabling and Empowering Families: Principles and Guidelines for practice*. Cambridge, MA: Brookline Books.

Adapted from Indo-US Project "Early Intervention to IUGR Children at Risk for Developmental Delays"

National Institute for the Mentally Handicapped, Secunderabad

EARLY INTERVENTION SERVICES

NIMH/DMS/FMT/ 9 :A



Name : _____ D.O.B. : _____ Reg. No. : _____
 Sex : _____ Age : _____ Date : _____
 Education : _____ Occupation : _____ Address : _____

_____ Date _____ Intake No. _____ Time taken _____

INFANT BEHAVIOR QUESTIONNAIRE

I will ask you about some common situations that occur with young children. For example, did the baby have to wait for food? If this situation happened, I will read you some ways babies behave in that situation. For each behavior I read, please tell me how often your baby did this during the last week.

(1) (2) (3)
 Never Some of the Time Always

"Never" is used when you saw the baby in the situation but the baby never behaved the way I described. For example, if the baby had to wait for food but never cried loudly while waiting, choose (1) Never. If the baby sometimes cried loudly for food, choose (2) Some of the Time. If the baby cried loudly all the time when waiting for food, choose (3) Always.

Section A. FEEDING

1. Did the baby ever have to wait for food or liquids during the last week? Yes No
 (If Yes) how often did the baby : () ()
 a. cry loudly ? 1 2 3
 b. fuss a little ? 1 2 3
 c. stay quiet (not react) ? 1 2 3
2. Do you usually see the baby during feeding ? Yes No
 (If Yes) How often did the baby ? () ()
 a. wave arms ? 1 2 3
 b. squirm or kick ? 1 2 3
 c. lie or sit quietly 1 2 3
 d. fuss or cry when s/he had enough to eat ? 1 2 3

National Institute for the Mentally Handicapped, Secunderabad

EARLY INTERVENTION SERVICES



Name : _____ D.O.B. : _____ Reg. No. : _____
 Sex : _____ Age : _____ Date : _____
 Education : _____ Occupation : _____ Address : _____
 _____ Date _____ Intake No. _____ Time taken _____

PARENTING STRESS INDEX

Directions :

In answering the following questions, please think about the child you brought in today for the study visit. I am going to read some statements to you. Using this scale I want you to tell me how close the statements are to how you feel.

YOUR FIRST REACTION TO EACH QUESTION SHOULD BE YOUR ANSWER

	Yes	No
1. You often have the feeling that you cannot handle problems very well.	1	0
2. You find yourself giving up more of your life to meet this child's needs than you ever thought you would.	1	0
3. You feel trapped by responsibilities as a parent.	1	0
4. Since having this child you have been unable to do new and different things.	1	0
5. Since having this child you feel that you are almost never able to do things that you like to do.	1	0
6. You are unhappy about the last clothes that you brought.	1	0
7. There are quite a few things that bother you about your life.	1	0
8. Having this child has caused more problems than you thought it would between you and your spouse/boyfriend.	1	0
9. You feel alone and without friends.	1	0
10. When you go to a party you usually think that you won't enjoy yourself.	1	0
11. You are not as interested in people as you used to be.	1	0
12. You don't enjoy things as you used.	1	0
13. This child hardly ever does things that make you feel good.	1	0