Early Intervention Program (EIP) – The Indian Experiences

E.I.P.-SPASTN–Madras Experience

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Perceiving the lack of services for follow up and intervention therapy available to the survivors of neonatal intensive care units and their families, and to address it specifically, the Spastics Society of Tamil Nadu has begun a programme of hospital based services in the city of Madras, called Developmental Tracking Clinics for high risk neonates.

These clinics have been operating from six Government hospitals and one private hospital for children, and are geographically located for optimal utilisation by a cross-section of urban and peri-urban dwellers. This programme was initiated in August 1990, and include detailed neuro-behavioural assessment and therapy apart from parent training.

The popular term “infant stimulation” which describes general developmental stimulation, programmes for infants may be inappropriate in an approach based on patokinesiology. Rather than needing more stimulation, many new borns, especially those with hypertonus or those with tremulous disorganised movements may have difficulty adapting to routine levels of noise, light, position changes and handling that are in operation in the NICU, in one-room tenements or in homes in the midst of busy thoroughfares. General stimulation can quickly magnify abnormal muscle tone and movement, increase behavioural state irritability and lability and stress fragile physiological mechanisms.

Helpful assists such as cuddling, soothing touch, movement or positioning are often not available and the caretaker may not provide skillfully administered social stimulation when the infant is ready for it, or in an optimal state to receive and respond to it.

With the above picture in mind the general goals of neonatal stimulation programmes would be:

1. To establish a fund of normal perceptual and motor experiences upon which later learning can be built.
2. To facilitate interactional skills such as visual and auditory orientation to the human face and voice.
3. To inhibit abnormal postural tone and movement patterns.
4. To support, counsel and train parents to be baby’s first and best teachers.

For intervention to be therapeutically relevant, the quality, quantity, frequency and duration should be individualised to specific

Many of us believe that Early Intervention Programs are not a regular feature in the Indian context, but going through some of the Indian experiences reveal another story. Articles included in this section may not satisfy all the journal criterias, but all the same they are experiences worth mentioning and could be a starting point for further studies–Guest Editor
motor and interactive needs. The areas of developmental intervention are:

1. Positioning-programme should be diligently administered to promote movement and postural stability from positions of flexion.

2. Sensorimotor intervention is the use of sensory modalities of tactile, vestibular, proprioceptive, visual and auditory stimuli to facilitate development. The primary orientation is eye contact with the mother and bonding. It is the eye which elicits maternal caregiving impulses and begins the process of interaction and communication between mother and child. Visual and auditory stimulation must be integrated into all parts of child-care or specifically reinforced as appropriate. Behavioural state and movement abnormalities can be influenced by swaddling and graded vestibular stimulation.

3. Feeding performance may be significantly improved by specific arousal or calming techniques before feeding. The neonate should be semiflexed with the chin tucked in and tactile stimulation of facial muscles, specific intra oral stimulation and/or manual stabilisation of the jaw may be utilised as necessary.

4. Parent training/counselling—strong continuous support is essential to help parents through, perhaps the most frightening crisis in their adult lives—the potential for death or disability of their baby. Actively listening to their feelings and concerns and explaining the situation is of paramount importance. Long range plans would include parent participation in all aspects of the developmental programme, but the timing and amount of initial teaching must be individualised to the levels of stress and acute grief present.

The targets for parent teaching would include:

1. Reading cues from baby
2. Understanding sleep/awake states
3. Calming techniques
4. Levels of stimulation necessary
5. Interaction and communication
6. Eye hand co-ordination
7. Independent handling and manipulation

Cues from the high risk baby may be harder for the parent to read than the lusty cries and ready smiles of the full term child. Stress or sensory overload could be recognised by the following signs—yawning, gaze aversion, blinking, tongue-thrust, turning away, grimacing, sneezing and hiccuping, while interest is judged by an intent look or knitted brows.

The high risk baby may have very little control over staying awake and may shift rapidly and unpredictably between being asleep, drowsy, calm or upset. Understanding this is essential for social interaction with the baby.

Some infants may be lethargic and hard to rouse while others are irritable and slow to be soothed or calmed. Levels of stimulation should be gauged appropriately and previously mentioned signs of stress looked for.

Interaction and communication depends upon noting the cues of the infant by the parents, and responding appropriately by adjusting or modifying their response; it takes extra sensitiveness and calmness to achieve this interpersonal synchronicity.

A 45 minute video film on "A Non-medical Assessment and Intervention of High Risk Neonates" is now available at the Spastics Society of Tamil Nadu, Opposite T.T.T.I., Taramani Road, Madras-600 113. Phone: 2350047