DEVELOPMENT OF INFANT STIMULATION PROGRAMME

The present study aimed to develop an Infant Stimulation Programme to train Anganwadi Workers (AWWs), the grassroots level workers of Integrated Child Development Services (ICDS). The training programme was envisaged to help AWWs to work with mothers of young children, for fostering infants' development.

The Infant Stimulation Programme aimed at creating understanding of infant's developmental milestones and processes as well as related stimulation activities. The programme included:
1. Motor and mental developmental milestones from birth to 30 months,
2. Stimulation activities to foster infant's development
3. Guidelines to implement the programme to mothers, including guidelines to use various audio-visual aids and materials.

A brief description of the topics for each unit of the programme have been given in Figure 6.

The programme framework

For the programme the milestones of development were derived mainly from observations of mother-infant dyads at home and items selected from the motor and mental scales of Bayley's Scales of Infant Development (BSID) and UNESCO/UNICEF co-operative programme (Ved Prakasha, 1986) in consultation with a pediatrician. A unit-wise allocation of the developmental
FIGURE 6: Sessions of the Training Programme for AWWs and Mothers

Infant Stimulation Programme

Motor Development Package

Mental Development Package

Session I
- Rapport Building (through puppet making)
- Introduction to the Importance of Infants' Development
- Orientation to the Objectives of the Program & its relevance

Session II
- Developmental Progression & Stimulation Activities for Lifting Head to Sitting Independently (0-9 mths)
- Developmental Progression & Stimulation Activities for Lower Limb Movements (3-30 mths.)

Session III
- Developmental Progression & Stimulation Activities for Upper Limb Movements (0-30 mths.)

Session IV
- Developmental Progression & Stimulation Activities

Session V-VIII
- Sessions of the Training Programme for AWWs and Mothers

Session XI
- Conclusions & Guidance to AWWs for Conducting Programme
- Guidelines to Monitor Programme Implementation

Audio-Visual Aids
- Poem
- Drama
- Puppet & Clay Models
- Shadow Play & Flashcards
### PROGRAMME PACKAGE ON MENTAL DEVELOPMENT

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<td>Conclusion and Guidelines</td>
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<td>Progression &amp; Stimulation Activities for 0-3 months</td>
<td>3-6 months</td>
<td>6-12 months</td>
<td>12-15 months</td>
<td>15-21 months</td>
<td>21-30 months</td>
<td>AWWs</td>
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**Audio Visual Aids**
- **Song** (explaining need for infant care)
- **Drama**
- **Narration of Krishna Kanhaiya's Childhood**
- **Puppet Show**
- **"Katha" (Story narrated in form of "Katha")**
- **Flash Cards**
- **Poem Depicting Luv-Kush growing up in Vashistha Ashram & learning things**

![Diagram](image-url)
milestones was made for writing the script. The motor package of the programme included three units related to milestones in the following broad areas: (a) from head control to sitting independently, (b) lower limb movements and (c) grasping and prehension movements. The mental package comprised of six units and included items related to social cognition, comprehension abilities, manipulation skills and verbal skills. Care was taken not to overload any unit of the programme.

Planning the Programme

While planning the Infant Stimulation Programme several underlying factors and guidelines were kept in mind. These included aspects regarding:

* The communication environment
* The communication content
* The communication strategy
* The acquisition of competencies and skills

Although these factors have been presented under four headings, they overlap and feed into each other in making the programme effective.

1. The Communication Environment

While planning any programme it is necessary to keep in mind the characteristics of the sample audience, as well as of the trainees, and the nature of the relationship between the two. Thus who is being trained, their background, the socio-economic and cultural context, in which the families live and act, their
familiarity with the programme, etc., all assume importance. For example the fact that mothers from poorer environments have little time to spare for providing stimulation activities for infants may deter programme acceptance. Also important is the need for establishing rapport with the concerned community, and to identify ways of reducing community resistance to outside programmes.

**Steps taken to improve the communication environment:**

* Pilot studies were undertaken to collect base line information.
* The sample group was pre-tested to know their level of understanding about infant care, development and stimulation. AWWs were interviewed and mother-infant interaction were observed.
* Initial visits to meet mothers in the community were made with AWWsHelpers as contact persons.
* AWWs were also used as 'mediators'/information disseminator's as they already had a rapport with the mothers and families.
* The Child Development Project Officer of the ICDS Scheme was made aware of the relevance of the programme for the ICDS staff and beneficiaries and also involved in the programme.
* Participation of supervisors in implementing the programme was also another factor which ensured smooth co-ordination and implementation.
Throughout the training programme respective AWWs' and supervisor's time and convenience was given due consideration (e.g. the scheduled staff meetings and meeting on salary day were used to conduct the pre-test with AWWs).

The first session of the programme was devoted to rapport building with the group to ensure acceptance by them.

2. The Communication Content

Most Early Child Care and Development (ECCD) messages bear the risk of losing out in competition with the more familiar or more immediately usable information such as health or nutrition messages. The audience thus had to be oriented regarding importance of the programme. In addition the programme message should also be able to capture the interest of audience.

Step taken to orient the audience:

* The first rapport building session was also utilized to explain the importance of the ISP, and the audience's role as adults.

* The programme content was designed according to the clienteles' needs based on assessments made during the pre-programme test level.

* The content and training approach was made compatible with the home culture (e.g. home based routine activities and traditional cultural practices were used as sources of stimulation activities for infants).
The information about the programme was imparted in ways that captured the attention of the audience, for e.g. weaving the concepts of motor and mental development in story themes familiar to the audience such as the childhood activities of mythological characters like Lord Krishna and Luv-Kush (sons of Lord Ram) which were popular in the local community.

3. The Communication Strategy

For any programme to be useful, its content should not only reach the audience, but should also stay in their minds. Various strategies were utilized in this programme to make it more easily comprehended and retained. Some of the communication strategies commonly used during the programme are listed below:

* Use of easily comprehensible, local language.
* Use of culturally relevant, indigenous materials.
* Implementing the programme messages in small units; presenting one concept at a time and maintaining linkages between the concepts.
* Reinforcing concepts through use of aids, immediate evaluation of AWWs after each session and prior to that of next session. For highlighting important aspects, use of similes were also made (e.g. the introductory song mentions that just as a seedling needs fertile soil besides sunshine and water to grow and thrive, similarly the infants' needs go beyond physical care to include the need for a stimulating environment.
* Use of multi-method approach in presenting programme messages to hold audience interest (e.g. use of Drama, Flashcards Bhavai, Puppetry).

* Encouraging involvement by participatory approach such as use of methods of learning by doing (e.g. making puppets and other aids in groups) and group discussion after each session.

* Emphasis on eye contact and verbal reinforcement for each individual in the group.

* Maintaining loud and clear mode of expression.

4. Competencies and Skill Training

The success of training programme depends not only on whether the AWWs have understood the programme messages but also whether they are able to implement the programme to mothers. Particular attention was given to ensure that AWWs inculcate certain planning and organizational skills to implement the programme. These were:

* Preparing aids such as glove puppets.

* Handling aids simultaneously with delivery of script content, (for e.g. use of flashcards/puppets with story narration).

* Skills of communication such as voice modulation, having eye contact with audience etc.

* Ability to organize mothers at the venue.

* Confidence to communicate to a larger group.

* Ability to lead group discussions with mothers.
Developing the ISP

The Script Format

Scripts were written on each unit, weaving the concepts of developmental milestones in a story theme. In a few units poem and rhymes were composed to convey the programme messages. For each session of the programme, the script details were written in the following format:

- Purpose
- Knowledge Base
- Methods and Aids Used
- Content
- Suggested Stimulation Activities Used
- Expected Outcomes

In each unit, stimulation activities to foster infant’s development have been suggested. (For details refer the programme manual). These have been formed on the basis of informal talks with mothers/caretakers and home observations of caretaker-infant interaction and play patterns at home.

Developing Aids

Simultaneous with writing scripts, aids like puppets were prepared. Care was taken to see that these aids were simple to make and that materials were cheap and indigenous.
Field Testing the Programme Package

The scripts and various aids were field-tested in pilot studies by Ahuja (1989), Shah (1989) and Mathur (1988) for: (a) Content of the programme, (b) relevance of theme, (c) language, (d) suitability of technique, (e) audience response, (f) recall of basic concepts, both immediate and with a gap of 15 to 30 days and (g) perceived utility of the programme by the audience.

Based on the feedback, some of the scripts were re-written to break down long paragraphs so as to present one concept at a time and to enable effective presentation of script to suit a different method of presentation, for example the story narration (Katha) method used in the second session was changed to puppetry.

Developing a Training Kit of the ISP

Developing a module of the training programme: Based on the feedback during implementation of the programme, a manual was prepared to aid AWWs and infant-caregiver in implementation of the Infant Stimulation Programme. The module provides information regarding the following: (a) Purpose of the module, (b) different users of the programme, (c) the details regarding the sessions of the programme and (d) guidelines for training AWWs, including information on the specific communication strategies and audio-visual aids used in the programme.
Developing a video cassette of the programme: A video cassette of the programme was also developed to enable wide scale dissemination of the various concepts related to infants' development and stimulation. It can be used both for training infant caregivers as well as for the purpose of recapitulation by trained workers.

Initially a pilot cassette was made of the programme. Some modifications in the strategies were made in the training programme for better screen impact in a pilot cassette. For example, the method of Kathakali was changed to Bhavai, a traditional folk dance. Based on the lessons learnt and feedback received on the pilot cassette, a final cassette was made. The video cassette will need to be field tested and criteria for the same will be similar to that used for the training programme. Special emphasis will need to be given on clarity of the programme in conveying the messages to the audience.

Field Experiences: A Comment

An action research involves action and interactions in the field which are varied and provide a rich base of experience. Some of the experiences during the various stages of this study are mentioned here.

Sample response: The AWWs were extremely co-operative in all stages of the programme. A programme involving AWWs, mothers and infants required co-ordination which would not have been feasible without the support of the supervisors. The CDPO's (Child Development Project Officer) non-co-operative attitude
created many stumbling blocks to make the field-level work challenging to say the least.

Most mothers in the sample were co-operative and genuinely interested in everything related to infants' development and care. A few were superstitious, as indicated by a larger black dot on the infants' head, a practice done to ward off any "nazir" (evil eye). Inspite of the mother's co-operation, repeated visits had to be made during data collection when the baby was drowsy, asleep or crying and when the mothers were busy or out-of-town particularly during the festival seasons.

**Developing the programme package:** Developing and conducting the training programme required organization and co-ordination at various levels. Writing the scripts for the programme based on the milestones to be conveyed and the strategy used (drama, puppetry etc.) was an exciting phase. The songs composed on the various milestones of infancy were particularly liked by the AWWs.

**Developing the video cassette:** Making a video cassette on the training programme with a shoe-string budget was another rich experience. Initially the investigator thought that it was a short exercise of shooting the training programme which was being given to the AWWs. Gradually realization dawned that many minor changes were needed in the training programme to obtain suitable video effect. For example, the session of the training programme presented in form of songs was converted into Bhavai (folk dance) in the video-cassette.
The investigator became familiar with many of the video shooting techniques. While making the video cassette, every detail needed to be looked into as small errors would show up enlarged on the screen. For example, when the puppets used in the training programme were seen on the video screen, their faces appeared chinless, so more cotton was inserted in the puppets' chin and cheekbones. Planning visuals for every audio input was also important.

Making quick decisions and being resourceful in meeting emergencies was necessary as the video-camera was hired on a hourly basis. For example, on one occasion all the artists and musicians arrived in time for the shooting at the EME (Electrical Mechanical Engineering) Instrument Wing, except for the harmonist, so the harmonist at the EME temple nearby was requested to help out.