Formulating, implementing and documenting a play based stimulation programme, conducive for the infants with Cerebral Palsy and Mental Retardation (CP-MR).

Introduction

Why early intervention?

The major purpose of early intervention is prevention of disability and developmental delays. The ultimate goal in intervention is to enhance normal development and independent functioning of the child, which works best if provided at the earliest.

Does family centered intervention work better?

Yes, Research by Trivette and Dunst (2000), shows that when intervention is done in a family centered manner, it strengthens the family and gives them the feeling of control and competence.

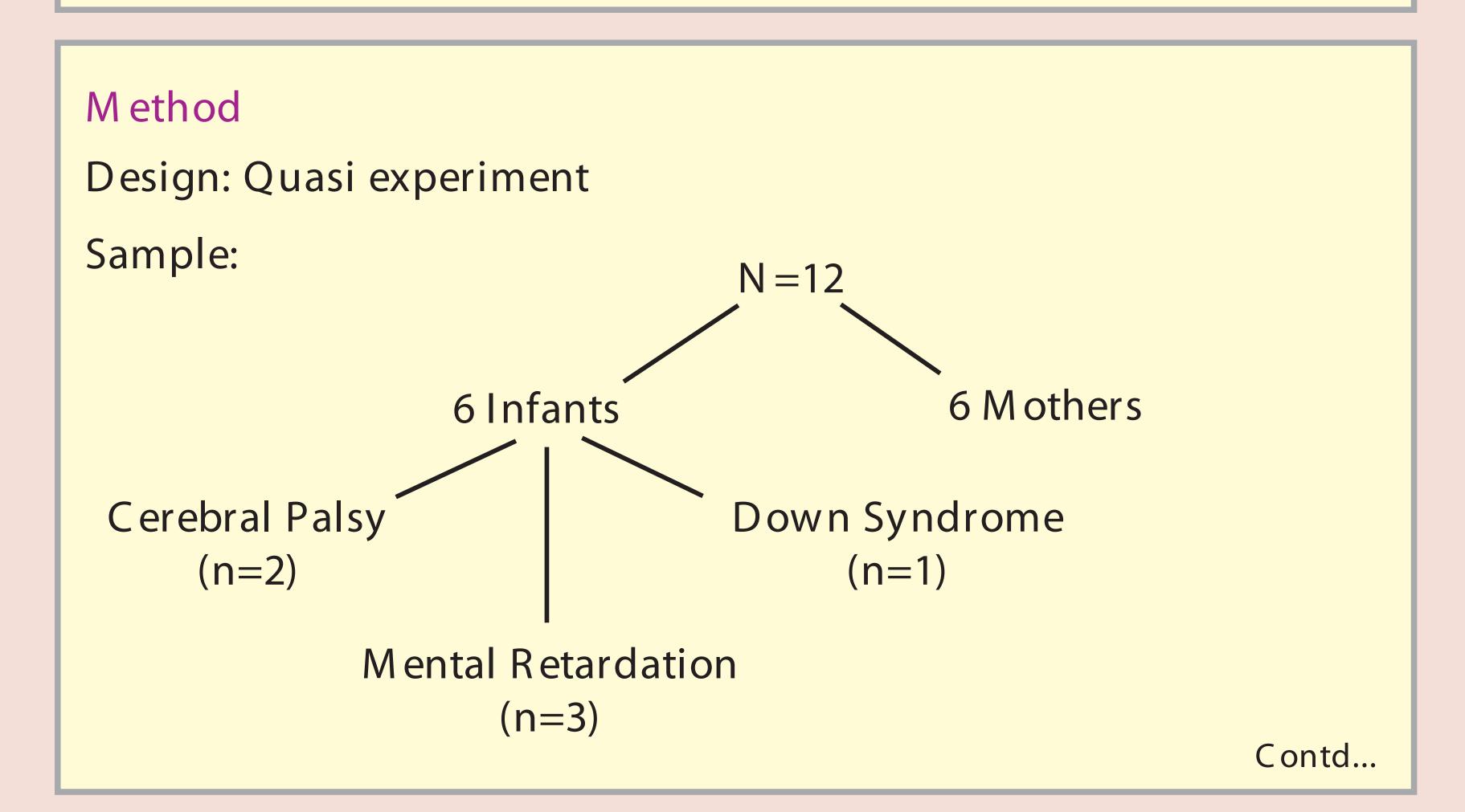
How can early intervention services be provided?

There are a variety of service models available. Two of them are, at the home or at the centre or a combination of both. The home visits provide a perfect opportunity for the service providers and the parents to establish and maintain rapport, as well as to discuss the effectiveness of the previously planned and implemented activities. The centre-based intervention facilitates the provision of team members who can work closely with the child and have an easy access to him/her. Thus a combination of both, works best.

Why is programme evaluation needed?

Programme evaluation is needed to ensure quality assurance in the delivery of best and effective practices to its beneficiaries. It can be done by two methods: formative or summative evaluation.

Rationale: To enrich the ongoing programme by adding the component of home based services and mother intervention and to assess the effectiveness of these inputs.



A ge range of infants:

Chronological age - 2.5 to 5 years

Mental age -8 months to 2 years 5.7 to 23 months. Motor age -Mothers' age -26 to 44 years.

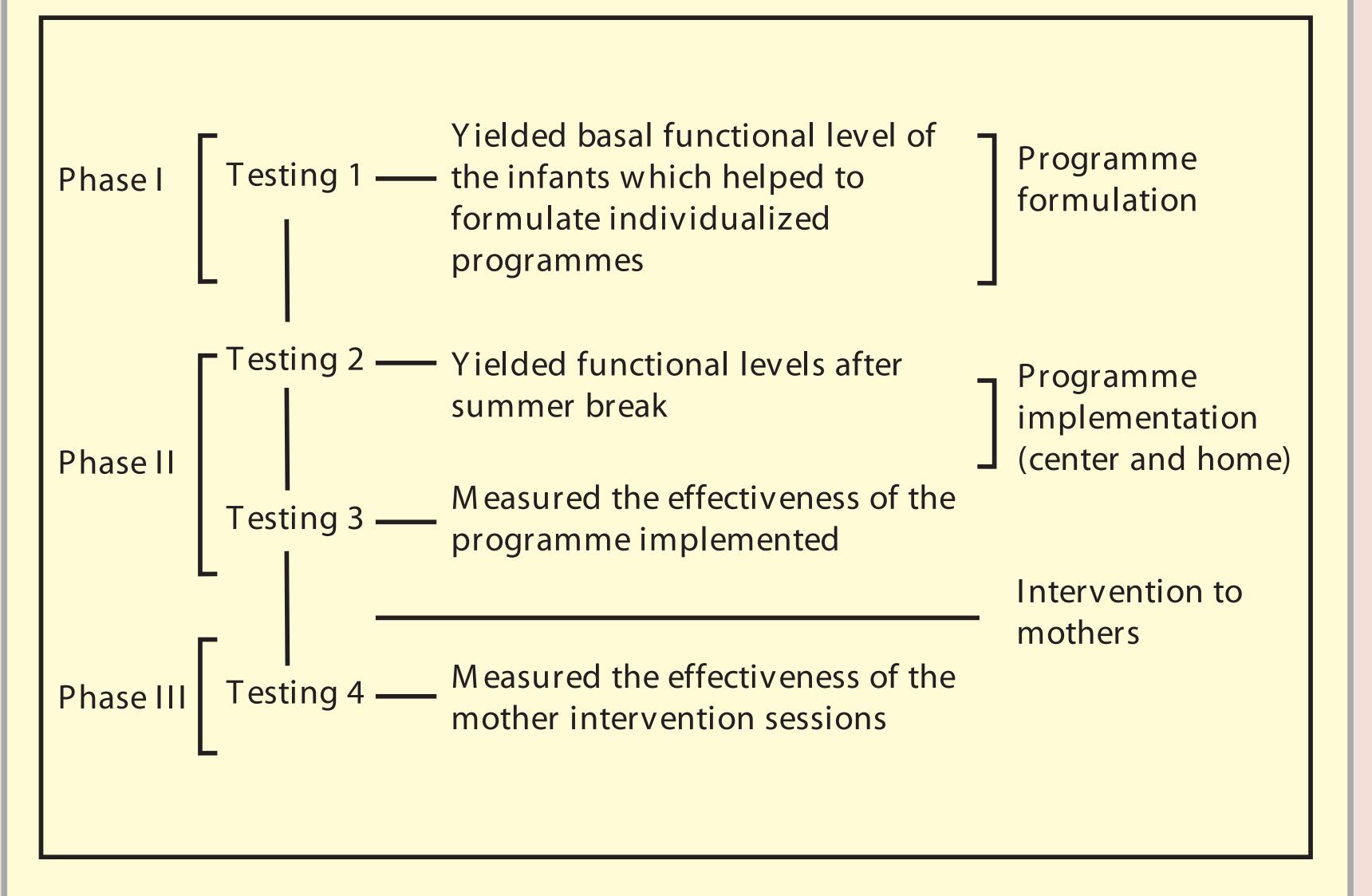
Tools:

- . Developmental Assessment Scale for Indian Infants (DASII) -It is an Indian adaptation of Bayley's Scale of Infant Development. DASII, has been developed by Ms. Pramila Phathak (1970) and standardized on Baroda infants making it very culture and local context relevant. DASII is used for infants in the age range of birth to 30 months and measures their motor and mental ages. DASII scale has two sub parts - Motor and mental scale.
- 2. Interview schedule for the mothers-
- The schedule consisted of three domains namely a) Understanding of mothers about their child's condition
- b) The mother's queries and the constraints faced
- c) The mother's coping

Procedure of data collection

The entire research consisted of five major components namely:

- a) Individualized programme formulation
- b) Programme implementation at the centre and the home
- c) Interviewing mothers
- d) Parental intervention
- e) Testings



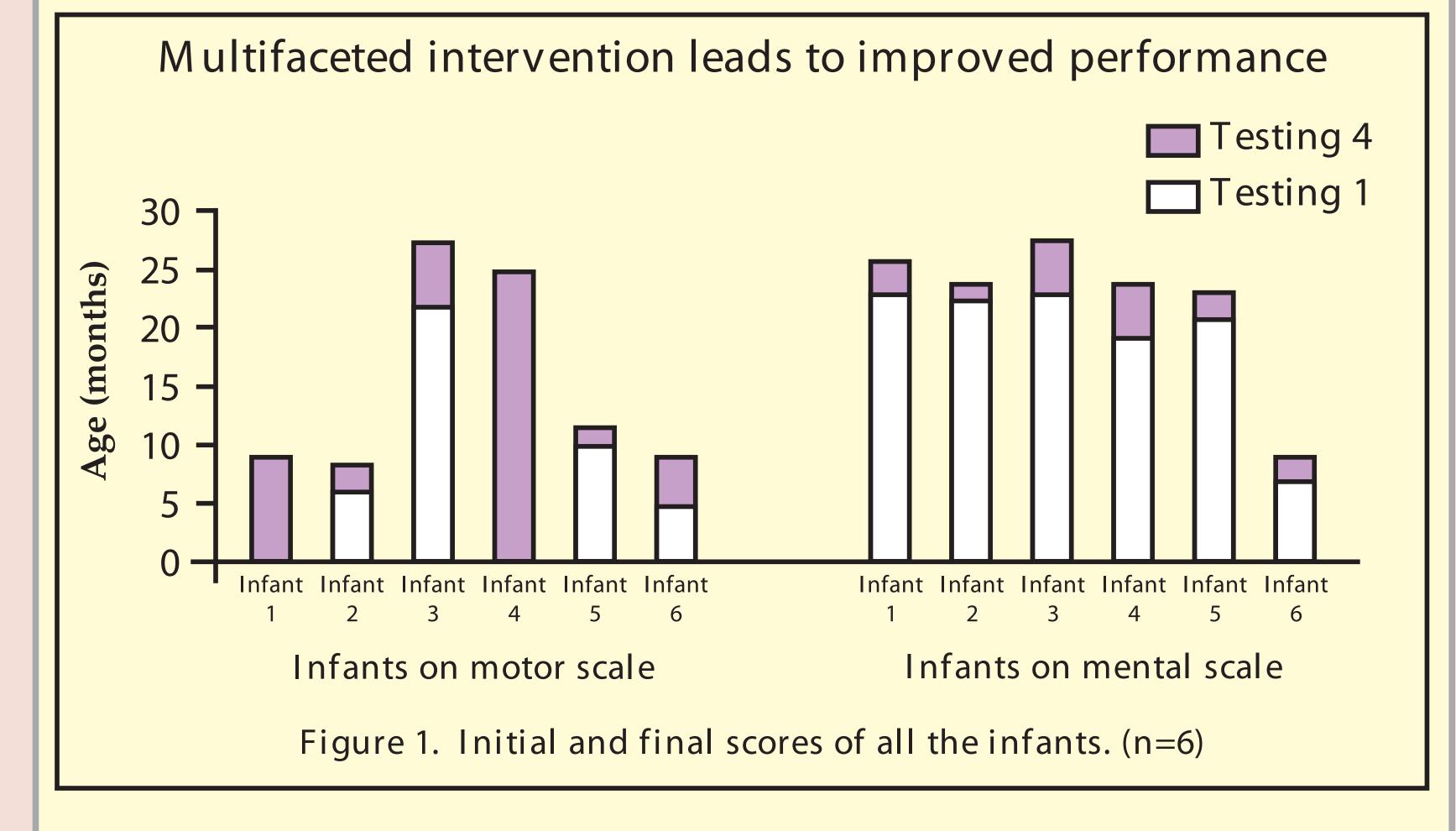
Comprehensive results

A) Data related to infants

Table 1. Clusters focused in intervention, according to the condition of the infants.

Clusters	Infants with CP	Infants with MR
	 Manipulation Locomotion Manual dexterity Differentiation by use, shape and movements Language 2 (Vocabulary and comprehension) 	 Manipulation Locomotion Manual dexterity Reaching and manipulation Understanding relationships. Language 2 (Vocabulary and comprehension).

The comprehensive results for all the infants consist of their initial and final scores i.e. scores obtained in Testing-1 and Testing-4, under the motor scale as well as the mental scale.



Infants with Cerebral Palsy

Marginal increase in motor score (Refer figure 1, infant 2) whereas for infant 1 there was no change in the motor age. For both infants increase was observed in mental ages.

Infants with Mental Retardation

More increase in the mental score as was found for infant 4 and 5. This shows that for the study, there has been more increase in the mental score across all the infants, irrespective of their condition.

B) Data related to mothers.

- Mothers were aware about the terms that were used to describe the condition.
- Mothers were not equipped with the limitations of the conditions.
- Mothers needed information on more effective methods of implementing activities that could foster independence in the child.

Sessions conducted with the mothers:

The sessions conducted with the mothers thus included the following components:

Session 1: Stimulation and its importance, Cerebral Palsy

Session 2: Mental Retardation

Session 3: Down Syndrome

Session 4-5: Milestones for normative development

a) Motor development b) Social development c) Cognitive development Session 6: A ctivities of Daily Living (ADL)

Conclusion

- Improvement in the mental scores was seen for all the infants, unlike the motor score which increased for 4 out of the 6 infants.
- Increase in the mental score was more as compared to the motor score.
- Clusters that showed more increase under the mental scale were Reaching and manipulation, whereas for the motor scale improvement was observed in the cluster of Manipulation.
- Besides the items that the child was tested on in DASII, there were other domains too in which the child showed improvement e.g. improvement in the speed of performing an activity.
- Mothers had superficial knowledge about the condition (CP, MR and Down Syndrome) and they needed information on more number of activities that could help in their child's development.
- Observations made during the home visits, and at the centre suggested that mothers laid more emphasis on the child's learning concrete academic concepts rather than the activities of daily living.
- Intervention sessions and the data from the interview indicated that time is the major constraint that all the mothers faced.
- For all the infants, the home intervention contributed more in the improvement of the test scores as compared to the mother intervention programme.

Discussion

The issues of concern that emerge from the data were:

- Limitations of DASII
- Understanding between the parents and the professionals

Acknowledgement

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