

## Chapter II

### SOCIAL INTERVENTION - SOME CORE PRECEPTS AND

#### FIELD PROJECTS

In order that the experimental research undertaken had a viable, impactful and an efficient design, evidently, it was essential that the researcher began with sufficient conceptual clarity on the subject of Social Intervention; and also made a close scrutiny of the models, strategies and lessons available from some successful field intervention projects in child health. Thus, the voluminous literature reviewed, for the present purposes can be summarised into two major sections as follows :

Section 2.1 : covering some theoretical precepts on Social Intervention and its core aspects by established authors on the subject; and

Section 2.2 : Presenting an analytical overview of actual intervention projects and research studies on growth - monitoring and health of underfives in India.

It may be pinpointed here at the very outset that all the studies in this area came mainly from two allied disciplines of nutrition and medicine while quite ironically, only a little was available from professional social work.

#### Section 2.1

An exhaustive review of literature on the subject presents a high level of concurrence amongst leading social scientists on the concept of intervention. Few definitions by established authors substantiate the above observation. According to Algyris C. (1970 : 15) to intervene is to enter into an ongoing system of relationship, to come between or among persons, groups or objects for the purpose of helping them. There is an important implicit

assumption in the definition that should be made explicit : the system exists independently of the intervenor. Thomas E.J. (1984 : 29) stipulates the element of planning in intervention as per his definition : intervention is a planned intrusion into the life or environment of an individual, couple, family or other target unit that is intended to bring about beneficial changes for the individual or others involved. Compton B. and Galaway B. (1984 : 11) highlight active participation by the client in the intervention process when according to them - intervention refers to deliberate, planned actions by the client and worker to resolve a problem. Thus intervention occurs after a problem has been defined and after the desired resolution (or the goal) has been identified. In practice, when interventions are accompanied by research objectives it becomes necessary to distinguish between intervention research and action research. Fineman S. (1985 : 15) differentiating between the two, says that unlike much action research, the end of intervention research is not just client action or change : the researcher has his or her own particular conceptual interests. The intervention provides a vehicle for exploring these interests, perhaps describing a situation, generating new concepts, or testing some hunches or hypotheses.

#### 2.1.1 Pre-conditions for Intervention Activity :

Are there any basic or necessary conditions that must be fulfilled, if intervention activity is to be impactful ?

One condition that seems so basic as to be considered axiomatic is the generation of valid information. Without valid information, it would be difficult for the client to learn and for the interventionist to help.

A second condition almost as basic is that interventions should be so designed and executed that the client system maintains its discreteness and autonomy. Thus, free, informed choice is also a necessary process in an effective intervention activity.

Finally, if the client system is ongoing (existing over time), the clients require strengthening to maintain their autonomy not only vis-a-vis the interventionist but also vis-a-vis other systems. This means that their commitment to learning and change has to be more than temporary. It has to be so strong that it can be transferred to relationships other than those of the interventionist and can do so (eventually) without the help of the latter. The third basic process for any intervention activity is therefore the client's internal commitment to the choices made.

## 2.1.2 Levels of Intervention

There are three levels of intervention, viz, primary prevention, crisis intervention and secondary intervention. More about each level follows.

2.1.2.1 Primary Prevention : This involves anticipating and forestalling the eruption of conflict, in an individual, family or community, especially that which could result in some sort of setback or violence. For instance, research indicates that the period around birth offers a unique opportunity for assessing parents and their babies for potential problems in their interaction with each other - Gray J. et al (1976); Schneider et.al (1976); and Dean J.G. et al (1978). Similarly, if we could identify violence prone couples at an early stage in their relationships, should we place them on At Risk Registers and what kind of supportive intervention be introduced ? Supportive action could range from introducing more effective educational programmes to help people anticipate common problems in family life to counselling certain couples not to live together or get married - The open University (1980). In our local setting illustrations of Juvenile Guidance Centres or School Readiness Programmes can be given as interventions for Primary Prevention.

2.1.2.2 Crisis Intervention - This may involve rescuing the victim or removing the perpetrator of abuse and further help restore some measure of equilibrium immediately after a crisis, providing relief from

conflict on a temporary basis, or using a crisis for long term ends. The term is frequently misunderstood and misused especially in relation to situations of conflict and violence. For example, it is used indiscriminately to describe both family's crisis and the professional's or community's anxious response often in form of piecemeal, ad hoc intervention. It must be noted that, crisis theory is about the family's or community's accessibility to change and not about the level of anxiety or urgency in the professionals or the community. Inter alia, crisis intervention theory suggests that during crisis often individual's or family's usual methods of coping with problems prove inadequate and events which in themselves may seem trivial or unimportant become linked with earlier experiences and therefore trigger off unresolved or partly resolved conflicts from the past. By definition, the period of crisis does not last long and within a few weeks a new equilibrium is usually reached according to the kind of help received and the individual's or families' adaptive capacities.

In Indian setting, cases of pregnancy out of wedlock, rape, sudden deformity or disabilities resulting from accidents or illnesses, failure in love or board examinations, death of a close relative or friend, natural or manmade disasters etc. could precipitate genuine crisis needing crisis intervention.

- 2.1.2.3 Secondary Intervention - This may be short term or long term intervention. It involves superficial monitoring of a situation to contain recurrence of violence or destruction and any further deteriorating trends. In this context, it may include affecting fundamental changes in individuals or whole families, their personality, behavior, patterns of interaction or environmental and social circumstances. To accomplish the aforesaid intervention goals any of the following techniques, alone or in a judicious combination may be used; case work; psychotherapy; psychoanalysis - in few cases; positive reinforcement; direct provision of material aid; affecting major or minor structural change in local community or society

through social action; recourse to legal aid; teaching of social and communication skills; mobilizing resources for creation of services like housing, recreation, day care centres for young, elderly, handicapped or any other vulnerable group: catalysing formation of self help groups like tenants' association, alcoholics' anonymous; Dalit Kranti Sangth (Organisation of the downtrodden); Wali Mandal (Parents' Association) etc.

### 2.1.3 Dimensions of Intervention :

Conceptual clarity of various dimensions of intervention considerably help in selection of specific intervention approaches. These dimensions as highlighted by The Open University (1980 : 25) are -

1. how causal factors are perceived and identified;
2. with relation to the aims and desired outcomes, whether the emphasis and level of intervention is on prevention, on dealing with and utilizing crisis, on control and maintenance or on implementing change (e.g. by promoting growth, or relieving symptoms or problems;
3. whether the focus is on an individual, two people, an entire family or a wider network;
4. whether the emphasis is on the past or the present, on experience or behaviour, on utilizing apparent strengths or focusing on pathology;
5. whether the emphasis is on offering professional help and support or on encouraging self help;
6. whether statutory authority and responsibility exist;
7. how much time, knowledge, skill and other resources are available to those who intervene.

#### 2.1.4 Objectives of intervention or Change Objectives

Change objectives indicate the goals towards which the efforts of helping should be directed and can influence all components of the helping strategy/intervention design. Some of the principle objectives relevant to intervention design alongwith their brief description and relevant examples are summarized in Table : 2.1

TABLE : 2.1

Selected Change Objectives with Examples

| Change Objective | What It Is  | EXamples   |
|------------------|---|--|
| Remediation      | Intervention directed toward altering a problem that is a source of difficulty for the client | Providing assertive training for an unassertive young person. Sex therapy for a young man with psychological impotence, or communication training for marital partners who disagree excessively.   |
| Enhancement      | Intervention directed toward improving functioning above an already satisfactory level        | Providing a sexual improvement programme for martial partners whose sexual adjustment is already satisfactory to make the sexual satisfaction greater or a parent training program for parents whose children do not have severe problems and who already handle most problems well. |
| Competence       | Intervention directed toward strengthening the client's ability to handle not                 | By focusing on self-induced relaxation and cognitive coping providing anxiety management training for individuals who  |

| Change Objective | What It Is   | Examples   |
|------------------|--|--|
|                  | only an existing difficulty but also a variety of difficulties in a given area, including those that may rise in that area in the future.    | also have other areas of anxiety, doing so in such a way as to strengthen the individual's ability to manage existing anxieties as well as anxiety-evoking situations that may come up later; training parents to handle any of a variety of child management difficulties that may be presented now and later.  |
| Education        | The presentation of information to facilitate understanding in an area of intervention.  | Presenting information to the family of a substance abuser concerning, for example, the nature of the substance its adverse effects, the typical course of addiction, possible ways in which the family members may cope with the ill effects of the substance abuse, and how they may assist in rehabilitation. |
| Prevention       | Intervention directed toward eliminating potential difficulties before they arise or become sufficiently problematic to require remediation. | Training adolescent children in secondary school in conflict resolution, communication, and decision making to provide the participants with skill so that possible future discord in intimate relationships would be averted.   |

| Change Objective   | What It Is  | Examples   |
|--------------------|---|--|
| Advocacy           | Speaking up for and taking other actions on behalf of the client to protect the client's rights and to pursue client interests.         | Assisting the client to take legal action in connection with alleged discrimination; negotiating for the client to obtain more satisfactory housing. |
| Resource Provision | Provision of such resources as food, clothing, shelter, money or medicine.  | Giving food to the unemployed who have exhausted unemployment benefits; providing shelter to flood victims.  |
| Social Control     | Interventions directed toward protection of the client and/or society, generally through provision of special residential arrangements. | Incarceration of legal offenders establishing separate residential facilities for the mentally impaired, the aged, or those terminally ill.          |

Excerpted from : Designing Interventions For The Helping Professions  
by Thomas E.J., Sage Publications, Beverley Hills,  
1984 pp. 31.

While each objective with its own strengths and limitations has a legitimate place in social intervention, the objective of remediation is the most common and widespread. Problems calling for remediation are generally quite pressing and intervention methods directed towards remediation have been the best developed. More about each objective may be read from table 2.1 Contemporary intervention has often been criticized because it does not focus sufficiently on the vital objectives of competence and prevention. However, fortunately of late, attitudes



are changing for the better and interventions focussing on competence and prevention are now beginning to receive the attention they deserve.

#### 2.1.5 Planning for Intervention

The purpose of establishing an intervention plan in the first place is to know where we want to go and how we are going to get there. While such a plan does not guarantee that we will reach our destiny, it does improve our chances of getting there and reduces the probability of our getting lost on the way.

All therapists therefore, must formulate treatment plans that identify intervention methods appropriate for addressing particular client concerns. The fashioning of an intervention plan calls for consideration of suitable alternatives, given available methods, as well as new approaches that might be adopted to meet the problem in question.

Although carried out with a particular client or clients for given service purposes, such planning is a limited form of design that can result in producing a novel intervention for cases of that type. Powers G.T. et. al. (1985 : 203) have highlighted the major considerations that need to be made before an intervention plan is drawn up.

Firstly, they point out that in planning strategy for intervention, it is important that the client and practitioner agree on the immediate, intermediate and long range goals to be pursued. Goals not only provide incentive and direction for what is to be achieved, but they also provide an objective basis for determining achievement itself. Further, there should be mutual agreement between the professional and clients on relevant issues like - who will be expected to do what; where is it to take place; within what time frame is it to be accomplished? such commitments by the involved parties, in turn, provide

the basis for what may be thought of as "working contract" or agreement concerning the division of labour.

The above stated are not the only questions that need to be addressed in planning interventions. For example, who or what should be identified as the target of intervention ? The fact that the client experiences a problem does not necessarily mean that he or she should be viewed either having caused it or as having it within his or her power to do anything about it. It is important, therefore to identify precisely where the locus of change is (to take place) - in the client, or in some other facet of the client's environment ? What systems will need to be involved in the change process besides the client - the client's family, his or her work place, the school system, additional human service agencies, or other community systems or organizations that either directly or indirectly impinge upon the client's life ?

Next consideration is of the modes of intervention to be employed in the practitioner's attempt to resolve the situation - work with an individual or family, use a group, organize a resource system in the community, or some combination of two or more of those. Clients like other people, differ widely with respect to motivation and/or capacity to participate in various practice modalities.

It is also important to be clear as to who should be included among the change agents. Practitioners and clients themselves are rarely the ones who can affect change in the client's situation. In fact, in some instances they may be relatively powerless to do so. Therefore, consideration needs to be given to the question of what other resources within the environment might be brought within the purview of the change process.

And finally the important issue of the practitioner's orientation to practice itself. Practitioners differ widely in their perspective - a perspective that influences everything, from the assumptions they make about people and their problems, to the way they define the nature of client - practitioner relationship, and to the selection of the very practice techniques they rely upon to promote change.

#### 2.1.6 Intervention Methods

Intervention methods are the backbone of the anatomy of the helping process and are generally central in intervention design. Further the methods are composed of one or more intervention technique and a program format.

The intervention technique is a recognized and distinctive set of helping activities that relate to a particular interventional objective. Many intervention techniques are largely accelerative or decelerative. The accelerative technique is used to increase desirable responding whereas the decelerative technique is intended to decrease undesirable responding. Providing re-inforcement in the form of praise to a child for doing his or her homework is illustrative of an accelerative technique. On the other hand, reducing pocket money (Say, a day's allowance) for incomplete homework would work as a decelerative technique. Few generalisations about the accelerative and decelerative techniques are as below :

1. All things considered, accelerative techniques are preferred over the decelerative. In the aforesaid example, if Chinky fails to do her homework regularly, it would be more profitable to announce additional pocket allowance for due completion of homework by her rather than reducing the allowance for incomplete work.
2. There are often negative effects of using a decelerative technique - for example, undesirable emotional reactions alongwith associating the therapist and the situation of intervention with unpleasant and aversive conse-

3. Deceleration need not and often does not bring about a simultaneous increase in the desired responding.

4. Accelerative techniques are not always powerful by themselves. There are difficult situations of behaviour change in which even the strongest and best techniques may be ineffective. In such contexts both accelerative and decelerative techniques can be used in combination. For instance, in addition to earning special pocket allowance for completion of homework Chinky could also lose her hours of TV viewing for failing to do it (homework).

The above stated dual approach is the preferred alternative in situations in which either type of technique by itself would bring uncertain or unsatisfactory results.

Program Format, the second component of an intervention method is the assembly of intervention elements (consisting of one or more intervention techniques). Programs may vary greatly in format depending on such factors as their scope, number of interventions, order of intervention, strength of intervention, longevity and structure. Brief observations on the aforesaid factors determining the program format follow :-

1. There is increasing recognition that the scope of intervention in a program should include more than the target behaviour itself - for example, the controlling conditions for the behaviour and related system and environmental influences. For example, a health education intervention aiming to upgrade mothers' skills in health care of underfive children should also impart knowledge of prevention of common childhood diseases and how to care for the ailing child; information of immunization and other health services available in neighbourhood and at city level; understanding of the concept of a balanced meal etc.

2. Although the variety of techniques need not always be large to be effective, there should be a sufficient number of appropriate techniques to accomplish the intervention object. Variety in application of techniques sustains clients' interest and also improves the extent of clients' gains from the program.

3. The strength of intervention should be neither too weak nor too strong; rather it should be sufficiently potent to achieve the intervention objective.

4. When determining the extent to which the program should be individualized or standardized, attention needs to be given to such factors as the appropriateness of the program for the individuals involved, the cost in time and effort, and program benefits for clients. For example, it would be highly efficacious to undertake a base-line survey of knowledge, attitudes and practices of health care amongst mothers of underfives in a given community before launching forth a health education intervention program for them (mothers). The gleanings from the base-line study would facilitate the task of designing a program format which is 'situation-practical'.

5. While there are advantages of time-bound interventions, the time allowed for interventions should be certainly enough to carry out the intervention competently.

6. Programs may be structured as tight or loose, each of which has advantages and disadvantages depending on the characteristics of the participant clients, the degree of risk in the event of program non-compliance, and the stage of development of interventions.

7. To increase the likelihood that interventions will yield long-term generalised benefits, ideally interventions should be carefully designed at the very outset. For

example, interventions that draw heavily on strengths and resources of clients, of mediators and of conditions prevailing in the environment are more likely to facilitate generalized change than interventions which rely more on professionals and agency personnel.

#### 2.1.7 Dilemmas of Intervention

There is a fundamental dilemma of intervention with which all practitioners are confronted sometime or other. This dilemma may be expressed variously as whether the effect of their intervention can be deemed as positive or negative; whether the advantages of their intervention outweigh the disadvantages; and whether, in fact, they are helping or hindering their clients. Inevitably such issues involve value judgments as well as objective measurement. More specifically, as per The Open University Text (1980 : 36) consider the following maxims in the context of a family where conflict has resulted in violence :

1. Protecting one family member may mean controlling another.
2. One kind of safety may be achieved at the price of different kind of risk.

While there can be no formatted answers to the poser above, interventionist can certainly fall back on a few tested 'dos' in their work as explained below :

Firstly, it is emphasized that although at times effective protection is vital, practitioners should be careful that protection of those in danger should not take an unduly provocative form as many victims may find themselves back in the same household at a later date. For example, in order to protect a legally minor girl from an impending marriage, the interventionist should not lodge a police complaint against the parents

of the client because such action would leave permanent scars on the parent-child relationship even if the undesirable marriage is forestalled. The damaged parent-child relationship could possibly arouse further tension and violence.

Secondly, all practitioners need to be aware that any intervention by outsiders in a family life, even if it is at a seemingly simple level or focussed on only one member of a family, may have a considerable impact on all the immediate family and may have repercussions on their extended family or social network. Indeed, the impact or repercussions could either be positive or negative. For instance, if one spouse has taken recourse to professional marital counselling, the other spouse may or may not view it favourably. Therefore, the practitioner needs to be alert when he or she approaches the other spouse, as part of the intervention plan.

Lastly, decisions about intervention in the lives of adult citizens should be made as far as possible by those citizens themselves. There is always the danger, that practitioners, especially when intervening in a crisis, will get pulled into taking charge of another adult citizen's life because that client presents himself/herself in such a passive or vulnerable way that he does not make decisions which are his to make. This serves as a note of caution to the practitioner before he/she takes drastic actions like rescuing victims by removing them elsewhere, unless ofcourse, they are in acute danger. The practitioner should first explore whether another form of temporary relief or support might be a sufficient safeguard. Further, an assessment whether the crisis in itself can be used to bring about change and serve long-term ends must be acted upon. And finally, the consideration whether once the current crisis has passed and been dealt with what sort of long-term support is indicated ?

#### 2.1.8 Program Evaluations

Program evaluation as a subject has several dimensions, of which many deserve a detailed study and discussion. However, in this paper we shall highlight three aspects: what is program evaluation; why do program evaluation; and various ways to categorize program evaluation designs.

It is always helpful to begin with definitions. While there are numerous authorities on the subject we quote here Attkisson C.C. and Broskowski A. (1978 : 24) for their all-inclusive definition according to which -

Program evaluation involves :

1. A process of making reasonable judgements about program effort, effectiveness, efficiency and adequacy;
2. Based on systematic data collection and analysis
3. Designed for use in program management; external accountability and future planning.
4. Focusses especially on accessibility, acceptability, awareness, availability, comprehensiveness, continuity, integration and cost of services.

Coming to the question - "why do program evaluations?" it seems strange that this question be raised at all. That is because program evaluations more often than not have been viewed as integral to agency operations for standard reasons. The reasons being :

First, agencies are expected to be accountable to clients, communities and funders for both funds and program effectiveness. Second, managers need the information generated in evaluation



to make decisions about internal operations and program changes. Third, practitioners use program evaluation data for assessing client progress, for self-assessment and for their own professional development. Fourth, program evaluation is good for community relations, for establishing agency creditability.

While there are several ways to categorise program evaluation designs, we present here a frame work by Rossi P.H. and Freeman H.E (1982 : 33). They discuss four types of evaluation activities :

1. Program planning - These are research activities designed to describe an agency's target population and its needs and to assess whether a specific program has been developed and implemented in such a way as to meet its goals.

This is frequently called "needs assessment" research. It is the most common form of evaluation of a program in its early stages of development, while initial planning is being done.

2. Program monitoring - These research activities measure whether the agency is delivering the program as intended and whether the program's services are reaching the intended target population. This is often called the evaluation of effort. Administrators find monitoring activities extremely useful in assessing how the program is operating and whom it serves.

3. Program impact - Evaluation of program impact measures the amount of change in a desired direction that can be attributed to the program intervention. It is necessary to use carefully controlled research designs to assess the impact of a program and be certain the measured impact was caused by the program. The evaluation of program impact should be done after the program

has been developed beyond its initial planning stages and when services are being delivered. Impact evaluation is what most people mean when they talk about program evaluation.

4. Program efficiency - Activities to assess the program's economic efficiency include the measurement of the costs and the outcomes or the benefits of the program. This evaluation builds on the impact evaluation and further assesses whether the program uses resources efficiently.

Most agencies use one or more of these evaluations in the standard operations of their programs. A comprehensive approach to evaluation would include a number of them.

### Section 2.1

In this section on discussion of actual intervention projects in the area of growth-monitoring and health of underfives, we first take up voluntary effort by international health agencies; then move on to voluntary work of local organisations; and finally present the state level efforts, while extracts of relevant research studies would be presented at the end.

2.2.1 The Narangwal Project is the most talked about project in the field of growth-monitoring and health of underfives (0-3 year olds) in India. The project was carried out by the Department of International Health at the John Hopkins University in ten villages in Narangwal, Punjab, India during 1968 and 1973. According to Kakkar D.N. (1987) the following were some of the policy questions which led to the Narangwal Study :

- i) Can nutrition interventions reduce the incidence, duration and impact of infections ?
- ii) Can control of infection improve nutritional status?

iii) Is there a synergism in programme effects so that a combined nutrition and infection control programme would have a greater cost-effectiveness than what would be expected from each programme along ?

iv) Can better field programmes be developed to combine the most effective measures against mal-nutrition and infection so that these measures can be implemented within the existing constraints ?

Study Design : Ten study villages in four clusters of two or three villages each scattered around community development blocks were ear-marked for differential child health services. Careful attention was paid to keep the village clusters separate to minimize communications between them about differences in the packages that were offered to them.

The service package : received by the four clusters differentially were (1) nutrition care (2) health care with main emphasis on infection control (3) integrated services i.e. both nutrition and health care (4) a control group which received no health service other than emergency aid. (5) All children were under growth surveillance.

Results pertaining to Growth and Development :-

i) Nutrition care alone or in combination with health care significantly improved both weight and height of children studied beyond 17 months of age.

ii) At 36 months, children from the nutrition care villages weighed on an average 560 gms. more and were 1.3 cm. taller than children in the control villages.

iii) Children in the health care villages had mean weights and heights intermediate between those in the nutrition care and control villages.

iv) Of the socio-economic and demographic variables, sex and caste were shown to have an especially pronounced and additive effect.

Thus, this is the first project to show in a controlled experiment significant differences in average growth rate of all children in communities receiving specific nutrition and health inputs : Regression analysis on a sub-sample of 180 children on whom exact dietary measurements were obtained showed a strong correlation between dietary intake and improved anthropometric status. Psychomotor development was found to have been directly affected by past nutritional status.

Results pertaining to Morbidity :-

- i) There was significant reduction in the average duration of episodes of infectious diseases in health care villages as compared to villages without health care.
- ii) In health care villages each episode of diarrhoeal disease was reduced on the average by two days, lower respiratory tract infections by  $1\frac{1}{2}$  days and skin infection by  $1\frac{1}{2}$  days in comparison with villages without health care.

Results pertaining to Mortality :-

The mortality figures come from the final report of the Narangwal Population Project, since reports from the nutrition project do not show mortality rates for different time periods.

- i) Infant mortality rates declined considerably in the nutrition and medical care villages between 1970-71 and 1972-73 (Pre intervention IMR of 129 per 1000 came down to 107 per thousand during 1972-73).
- ii) In the nutrition care villages, the improvements occurred entirely in the neo-natal period while in the med-

cal care villages rates in both the neonatal and post natal periods declined.

iii) The combined nutrition and medical care villages surprisingly did not experience a mortality decline although in 1970-71 they had the lowest overall levels of infant mortality recorded. The 1 - 3 year olds mortality rate in these villages was higher than in other treatment groups (i.e. nutrition and medical care clusters separately) although substantially lower than in the control group. Perhaps, the addition of family planning activities to the responsibilities of family health workers in the combined service villages resulted in a lower level of child nutrition and medical care in these villages than in the other two treatment groups.

- 2.2.2 The Tamilnadu International Nutrition Project (TINP), started with the assistance of World Bank in 1980 aimed at evolving a replicable model of a nutrition programme which would, through adopting a risk approach, be cost effective, efficient and promote better nutrition and health practices within the families. At present the project covers a total of 9 districts in the state, covering a total population of 17.3 million. Services are provided through 8965 Community Nutrition Centres (CNCs) and 2723 health sub-centres.

Two Innovative Features : are the hallmark of TINP. First, child beneficiaries are identified and monitored through a monthly growth monitoring system based in villages. Secondly, supplementation is continued only as long as required i.e. till the child makes adequate nutritional recovery. In the third phase, nutrition education is imparted to the mothers for longer lasting improvement in health care practices of the family.

Growth-monitoring activities : The CNC is usually housed in a rented accommodation, manned by a CNW Community Nutrition Worker and a helper. The CNW is a local resident mother of a healthy child,

The CNW weighs children every month on a Tansi scale. Weight is recorded in a register as well as a card at the centre. Another growth card is kept by the mother on which the readings are entered at the time of weighing or later during house visits by CNW.

The special feature of the growth card is that the divisions for recording weight are for 100 gms in consonance with the sensitivity of the weighing scale.

An important issue related to the use of growth cards is the extent to which they are used as an educational tool. An evaluation agency found that most mothers interviewed can interpret the trends of growth lines. Some of them actually used the growth card to explain the effect of diarrhoea on growth.

Response to Growth Failure : The action response to deviant growth in a child ranges from active surveillance, supplementary feeding, referral and finally education to the mother.

Children who have growth faltering but not to the extent that they need to be put on supplementary nutrition are given added attention by the CNW.

Supplementary feeding is indicated for children with PEM grade III & IV and those with no weight gain or weight loss. The minimum duration of supplementary feeding is discontinued when the child moves into grade II or I or following a weight gain of at least 500 gms. registered over one month in 6-12 months age group and 3 months in the 13-36 months age group.

Strengths of Growth-monitoring Content : Can be summarised as strong motivation among leaders. GM was added to a pre-existing primary health care programme; high community awareness; active participation by mothers; CNW belonging to the target community itself. And lastly the most unique strategy of TINP is formation of childrens' Working Groups (CWG). The idea behind CWGs was initiated by field workers, and is an illustration of the flexibility of the system and stress on initiative and creativity at the grass root level. The CWGs are deployed for motivating and educating mothers on health and nutrition. They work through folk theatre, drama, school functions and festivals.

Areas in which GM Content can be Improved : Response to growth faltering, if any; more frequent follow up of low birth weight babies; supplementary feeds must be so selected that they can be easily prepared at home by the mother.

- 2.2.3 Indo-Dutch Project for Child Welfare : found its origin in the personal interest that was shown by the Queen of Netherlands. The Netherlands Foundation was formally established in 1966, but the Indo-Dutch project was launched in 1970.

The Basic Objective : of the project is to improve the quality of life by enlisting community support for the overall development of children of the age group of 0-16 years through an integrated programme of health, nutrition and education. Though

initially work began in rural area of Chevalla Block in Andhra Pradesh, the urban project in the municipal area of Hyderabad city covering two blocks in ward 20 was added in 1976.

Innovative Strategy : was an experiment of a contributory scheme to inculcate the habit of sharing the costs starting with a nominal contribution of 50 paise only for registration. The contribution by beneficiaries was later raised to pay for the honorarium of the 'gram swasthika' and partial cost of drugs and protein packets to malnourished children.

Delivery of GM Services : was arranged deploying mobile health units and starting 'creches' for under 36 months children of working mothers. While the mobile health units provided antenatal, postnatal, immunization and health care of malnourished children the 'creches' included nutrition education to the mothers on an individualized basis.

A longitudinal study conducted by the project nutritionist revealed that vis-a-vis a well matched control group the mean increase in weight in the 'creche' children was more than the control group children. Similarly increase in height and mid-arm circumference were significantly greater in 'creche' children vis-a-vis the control group. This could be under the impact of supplementary nutrition to children and nutrition education to their mothers. The education service to the mothers also raised their awareness about nutritious food, importance of hygiene and better child rearing practices.

However, on the negative side, the results of mental development show that the impact of 'creche' was not very encouraging when compared with the control group. That could be attributed to the need of better trained and more qualified helpers as also educative toys.



2.2.4 The Kasa Project : aided by the WHO and started in 1971 was one of the early projects that devised the system of village level social workers on a part time basis to organise delivery of health care and nutrition services to the underfive at their door-step even in the remotest locations.

Broad Objectives : The Kasa Project situated north of Bombay started with the objective of studying the feasibility of a system for delivering integrated health, nutrition and family planning services to young children and their mothers, in which existing health-nutrition programmes and personnel of the government were utilized, community support is developed, persons from the community were used to serve as link workers in providing services to all.

The Service Package : at Kasa established a new system for delivering health and nutrition services through a domiciliary cum clinic outreach. The salient features included : integration of nutrition and health services by promotion of adequate growth of underfives through health education, immunization, treatment of illness including oral rehydration of diarrhoeal cases, provision of special care for 'at-risk' children and the most needy; the development of simplified technology and methodology which have now been found suitable for wider use, such as weighing scales having calibration in vernacular and protective cheap tin caps; swing seats for weighing children; shoulder bags; very simple weight charts; plastic over-lay stencils for assessing nutritional grades, comprehensive but simple mothers' charts; index cards for assignment; identification and evaluation and community participation through the contributions in kind by the people - Shah P.M & Junnarkar A.R. (1973).

Important Lessons : The scope of the project which was operated in the governmental set up was quite wide. Community health workers should be employed on a part-time basis. Using full-time workers involves high expenditure, transfers, associations, unions and many such problems. The workers should concentrate

on children and women as in these vulnerable segments of community, the morbidity and mortality is very high. Their efforts should not get diluted with excessive work of malaria control and running clinics. The emphasis should be on domiciliary approach for promotional and preventive activities.

- 2.2.5 Comprehensive Rural Health Project Jamkhed : is an outstanding illustration of local organisations engaged in voluntary efforts. As suggested by the title of the project, its activities extend well beyond health care of underfives but for the present purposes, quite naturally only the relevant ones should be presented here.

The Modest Beginning : The project was initiated in Jamkhed a small town 50 miles from the city of Ahmednagar in Maharashtra - by two rural service oriented doctors, namely, Dr. and Dr. (Mrs.) R.S. Arole in October 1970. Operating under the umbrella of Marathi Mission which also provided the initial financial support, a dispensary was started in what was once a shed of a veterinary hospital.

Service Delivery System : The target population is scattered over 30 villages. An individual village is considered a unit for health services. Each village has a health worker VHW, who is a well liked resident of the community, usually a woman. Jamkhed has a well equipped health centre. Most villages are within a distance of 16 km. from Jamkhed. A mobile health team supervises the VHMs on a weekly basis. Thus about 40,000 people get intensive care while an additional 40,000 people avail themselves of the diagnostic and curative services available at the centre.

All the needy underfives are given one nutritious meal a day and complete immunization. Antenatal and postnatal care of every mother is provided by the VHW. Four visits are undertaken by the nurse during the course of one pregnancy to give tetanus toxoid injections and to decide on hospital or domiciliary

delivery services is the responsibility of the VHW who is trained to conduct deliveries and recognise complications. Family planning services follow a cafeteria approach with emphasis on spacing

Training of Personnel : In each village a local woman is selected to work as a VHW and she is responsible for the health activities in her village. Her role is to undertake preventive and promotional health work and to give simple primary health care.

The VHW is given intensive training in health education, the care of underfives and maternity cases. Being part of the community, she is familiar with existing social, economic and cultural problems and is able to communicate with community members in a manner understood by them. Another advantage of her being a local person is that she is available to the community any time during the day or night.

The basic principles of training imparted to VHWs are minimal direct teaching, maximization of experiential learning, utilization of training materials developed from locally available and relevant materials and phased, on the job training.

After selection, the VHWs undergo a one week orientation training at Jamkhed. There are four lectures in a day - two in the morning and two in the evening. Each session lasts for half an hour only. That is the maximum direct teaching resorted to. The classroom climate is always informal. Considerable use is made of audio-visual aids. Due emphasis is laid on raising the self esteem, self confidence and hope of success amongst trainees through positive reinforcements. This indeed is an on-going process and does not end with the orientation period.

After the initial orientation, the VHWs are posted in their villages and asked to undertake such tasks as organising feeding programmes, convincing the people of utility of immunization, ante-natal service etc. Thereafter they report to headquarters once a week for discussion of cases, collection of medicines,

deposit proceeds of sales of medicines and receiving instructions for next week.

During the second spell of their training they observe and investigate birth and death cases. The lessons are built around the reported incidents. During the next six months emphasis remains on preventive work. Only after six months they are expected to handle primary curatology.

Strengths of the Project : This Magsaysay Award Winner project has its strengths in scientific training of personnel; an inbuilt concurrent evaluation and monitoring system; a strong community involvement evident from community volunteers identifying their health problems, providing space for clinic, helping in immunization and family planning campaigns, help in running community kitchens for underfives etc.

- 2.2.6 Child In Need Institute (CINI) Project, West Bengal : The project delivers a comprehensive package of primary health services in which growth monitoring is a pivotal activity. The nodal points of GM are a series of 10 clinics serving both rural and urban areas covering a population of 74,000. There is no home based GM service.

The Service Package : includes GM service at clinic level; home based rehydration therapy for diarrhoea cases; immunization of underfives and pregnant mothers; vitamin A deficiency prophylaxis programme; simple health care of underfives, pregnant and lactating mothers, health and nutrition education and rehabilitation of severely malnourished children.

Action Response to Growth Faltering : In case, a child suffers weight loss an assessment of the underlying causes is made and the mother is advised accordingly. The mother is also encouraged to buy supplementary food packets provided at subsidized rates. However, there is no follow up at the domiciliary level but the child and the mother are advised to visit the clinic every fortnight.

In case of grade III malnutrition cases, again, an attempt is made to identify causes and a referral service is provided. The follow up of severely malnourished children is quite good.

On the negative side, it may be mentioned that at CINI no special note is taken of inadequate or no weight gain as evaluated by a UNICEF (1986) sponsored team.

Strengths of the Project : Active involvement of mothers in discharging GM service; in-service continuous education to health workers; good rapport between mothers and health workers; frequent use of audio-visual aids in training; periodic revision of nutrition and health education messages; active involvement of mothers in developing the educational messages through communication workshops.

- 2.2.7 The Kangzha Project : which was implemented in mid-70s in 30 schools (total students 30,000) of Central Kerala, made successful attempts to strengthen the role of school teachers as health workers.

A New Model : Recognizing the role of school children and teachers as change agents in social development, a three-tier approach was adopted in which each school with a trained teacher had a health unit providing simple curative services - peripheral tier. These school units in turn were linked to primary health centre - tier 2; and a referral hospital - tier 3.

Service Package : The teachers and pupils, with the support of PHC staff, participated in the village health programme with the following aim for each school unit :

- immunization of 10 children under five years
- Organisation of compost and soakage farm manure pits for 5 houses.
- imparting simple nutrition messages to 10 families.

Important Lessons : The Kangzha Project demonstrated that the participation by pupils in the under-fives' health promotion programme sensitized the school children to the health needs of their own younger brothers and sisters and they became effective promoters of health in a development perspective. The pilot project proved that school teachers and students are a high potential resource for PHC through peoples' participations.

Malwani Project : Another interesting small scale school health programme was the Malwani Project started in 1976 when the Seth GS Medical School, Bombay worked in collaboration with the municipal school staff in low income suburbs of Malwani on the outskirts of Bombay.

Service Delivery Model : For the children in Malwani slums, it was an interesting way of using their long summer vacation; and for the health professionals it meant a field practice area for developing methods for delivery of primary health care. The maximum number of child voluntary health workers (617) were trained in 1978-79. The children were initiated through role play, discussions, demonstrations and pictorial teaching tools. The trained children assisted the health staff in identifying the needs of the community and bringing them to the attention of PHCs. The role of teachers lay in identifying suitable children for the said role and assisting them.

Results : were quite encouraging indeed. The immunization coverage increased from 20 to 90%. Hundreds of cases, including those of vitamin A deficiency, T.B., Scabies, malnutrition etc. were brought to the health centre. The success is attributed to the high commitment of project personnel and the rapport between medical college and school teachers.

2.2.9 Action Research for Community Health (ARCH), Mangrol Project : A group of individuals of diverse background and training slowly got together in Mangrol, Gujarat for diverse developmental work in the areas of health, education, rehabilitation of Narmada oustees and disaster relief etc.

Strategies of Growth-monitoring : To impart skills and knowledge to health assistants drawn from the same community so that they can run and maintain the essential components of health services on their own, such as :

- growth-monitoring of underfives
- handling of nutritional emergencies
- training the second generation of community health workers.

Activities of Growth-monitoring : Identification of high risk children and their treatment; teaching mothers correct breast-feeding and weaning practices; oral rehydration therapy for diarrhoeal cases; comprehensive immunization; pre-natal care by identifying high risk mothers; propapagation of correct infant feeding and infant care practices etc.

2.2.10 Ghatla Project by Tata Institute of Social Sciences : The project was initially started by the dept. of Social and Preventive Medicine, L.T.M.G. Hospital in 1973, and soon later field work students of medical and psychiatric social work from TISS joined them.

The Broad Goal : To reach out to Ghatla community and help them utilize the hospital facilities so that they move towards total health i.e. physical, social, emotional and mental.

Health Care of Underfives : was accorded the attention it deserves. An underfives' Clinic was set up which provided the services of - routine medical check up and necessary treatment; Immunization against small pox, polio, Cholera and Typhoid; referrals; and high protein supplementary nutrition. Secondly, the mothers of underfives, through group work practice, were imparted knowledge of balanced diet, sickness care, importance of immunization and emotional needs of underfives, and how to use the nutritional supplements.

Communication Strategies : The women were encouraged to talk in the group on subjects close to their heart e.g. how did they manage their homes and children, what difficulties did they face, and what were their cultural beliefs affecting health of underfives etc. Secondly, besides education, recreation was an important part of group activities e.g. haldi-kumkum, picnic, bhajan sessions etc.

Important Lessons : Lobo Marie (1977) has analysed following lessons from Ghatla Project :

1. Know the culture in which work is to be done.
2. Learn to recognise those new beliefs which can be readily incorporated into the existing culture.
3. Take advantage of the pragmatic nature of people i.e. have short term achievable goals.
4. Use existing leadership whenever feasible.
5. Select the more progressive members for further teaching and training.
6. Ask payment for services whenever such payment is applicable.



7. One should equip oneself with knowledge and skill which will be necessary as one has to take the leadership role in the community, initially.

8. One should not expect automatic acceptance from the community; it has to be earned over a period of time with consistent and persistent efforts.

9. As Prof. N.F. Kaikabad says, 'one should always hope for the best even when everything seems to be going wrong and the horizon appears bleak. Remember, the darkest hours are always, before the dawn of the new day' and this holds true for the work in the community too.

2.2.11 Integrated Child Development Services (ICDS) Scheme : is one of the few programmes of child health anywhere in the developing world which has made any significant and permanent improvements in the life of the nation. The scheme was initiated by the government of India on a pilot basis in 1975, in collaboration with UNICEF. Today it has expanded to more than 1300 blocks and by 1990 about 40% of the poor underfives are expected to be covered under the scheme.

The Specific Goals : reduce the incidence of low birth weight and severe malnutrition among children;

- bring down the mortality and morbidity rates among children 0-6 years old;
- reduce school dropout rates through early stimulation programmes for children 3-6 years old;
- Lay the foundation for psychological and social development of under six children;
- enhance the capability of the mother to look after the health and nutrition needs of the child.

Organizational Structure : The heart of the ICDS is the 'anganwadi' - literally the courtyard - which is given or cheaply rented as a centre for information and help with child care. The front-line worker is the Anganwadi Worker (AWW), who is usually selected by the community and serves a population of about 1000. About 20 AWWs are supervised by an Anganwadi Supervisor (AWS). The Child Development Officer (CDPO) is officer-in-charge of 100 Anganwadis i.e. one block. The AWW is assisted by a helper, who is often a local traditional birth attendant, but could be anyone else also. The rest of the health team consists of Auxilliary Nurse Midwife (ANMs), Lady Health Visitors (LHVs) and the Medical Officers of the block Primary Health Centre.

Growth-monitoring Activities : Monthly weighing is one of the job responsibilities of an AWW. Children under 3 years who do not visit the anganwadi are weighed at home. The AWW usually combines this task with imparting of one-to-one nutrition education to the mother. Secondly, the growth cards of all beneficiary children in the form of a book are maintained at the anganwadi. In many parts of the country, initially the AWWs used a register to record weights first and then plot the graphs. But nowadays with increasing skill and confidence, plotting is done directly on the cards. Mothers do not keep the growth chart; it is designed more for the AWW's use.

Health Care Package : In addition to growth-monitoring services, the under six beneficiaries of ICDS scheme also receive periodic medical examination and treatment, referral, comprehensive immunization, supplementary nutrition which includes pregnant and lactating mothers as well. Nutrition education on an informal basis is also provided to the mothers of under six.

Strengths of the Scheme : Whether we speak of strengths or the drawbacks of the programme, it would have to be very much in a generalized form.

It is not possible to cover the individual or even the regional variations in this regard here.

The extensive coverage by the ICDS itself is an important strength in the context of a developing nation. The services of periodic weighing, immunization and supplementary nutrition are delivered as per schedule. The partial objectives of periodic weighing namely - to determine the nutritional status, eligibility for supplementary feeding and need for medical attention are also served well.

The followup action once grade III or IV malnutrition sets in is quite effective. The affected children are put under weekly observations and weighed at home by the AWWs, intensive nutrition education to the mother, a separate follow up card and double the amount of supplementary feeds. The special cards for cases of severe malnutrition are filled accurately in most cases (which facilitates follow up action).

Drawbacks : The most serious drawback of ICDS scheme lies in its training of AWWs with regard to use of growth cards for promotional aspects of growth monitoring. The AWWs usually still lack in recognising early growth faltering and consequently their response action gets delayed causing further deterioration of the child's nutritional status. Similarly, their understanding and interpretation of growth curves is weak. Few possess the knowledge and skill necessary to enlist optimum community participation. Lastly, there could be improvements in the space in which anganwadi functions and the quality of supplementary nutrition or the educational material used.

- 2.2.12 Extracts from A Research Study on "Food Dietary Intake and Feeding Practices in Urban Slums in Visakhapatnam", BUSI B.R. et. al. (1987).

Introduction : Its a study of five slums in Visakhapatnam from which 113 families were randomly selected for assessment of dietary intakes. The family dietary intakes were obtained by interview method. The breast feeding practices and supplementary foods given to the underfives were also recorded. The per capita food consumption of food was estimated from the family's diet by the use of consumption co-efficients.

Results of Breast Feeding Patterns : It was observed that all children were breast fed till the end of first year. A gradual decrease was noted from then onwards with 25% of females being breastfed till fourth year and 11% of males continued upto fifth year.

Results of Supplementary Feeding Pattern : The supplementary feeding was mostly reported as biscuits and chocolates. Only 5% were given baby foods like Farex before 1 year and 25% were given cooked foods like idli and pogadalu. Additional milk was given to 40% children below one year. The number consuming milk dwindled rapidly with increase in age. There was no proper weaning at all. Mothers had a belief that as long as the child was on the breast, there was no need for supplementary foods.

Results of Diet Patterns in Families : It was observed that consumption of rice, dal, vegetable and fish was high in small families, and generally speaking consumption of these foods decreased with increasing family size. Consumption of milk was more or less small in all family sizes i.e. about 18 to 22 ml; per day mostly in form of tea. The diet of all families was deficient in calories, minerals and vitamins while only a few were deficient in proteins. The main cause of calorie deficiency was reported to be socio-economic.

- 2.2.13 Extracts from a Research Study on "Nutritional Status of Preschool Children in Rural Hissar" by Kakker S. et. al. (1987) :

Introduction : 100 children between one to five years of age were selected at random from 2 villages of Hissar district. The data regarding general information were collected by using a pretested and structured interview schedule from the parents of the selected children. Anthropometric measurements were recorded using standard techniques of Jelliffe D.B.(1966). The haemoglobin estimation was done by Winterobe M.M. (1958) method. The nutritional assessment of children was made by comparing their height and weight statistics for a particular age and sex with ICMR (1984) values.

Results of Anthropometric Measurements : Weight for Age measure was used to determine the degree of malnutrition. Out of the 100 children under study only 18% were normal 38% were in grade I; 31% in grade II; 9% in grade III and 4% in grade IV of malnutrition. The mean height of the children in the study, surprisingly, was found to be higher than ICMR recommended values for a particular age and sex.

Results of Haemoglobin Estimation : Only 21.5% children had haemoglobin levels between 9.0-11.0 gm/dl range. The majority i.e. 56.96% belonged to 7.0 to 8.9 gm/dl category; 18.99% belonged to 5.0 to 6.9 gm/dl category; and 2.53% belonged to below 5 gm/dl group. On the whole, the picture was quite gloomy considering the WHO standard of 11.0 gm/dl as the desirable level of haemoglobin for underfive children from poverty groups.

- 2.2.14 Extracts from a Research Study on "Perceived Morbidity, Medically Defined Morbidity, Population Typology and Its Relevance in Planning for Health Services" by Pathak M. el. al. (1985).

Introduction : The data used in the study pertains to previous general health surveys carried out in slums of Nagpur city and 43 villages around Saoner town. Morbidity data was analysed according to perception of illness and medically defined illness.

Research Objective (Main) : To determine whether any association exists between perceived morbidity and medically defined morbidity. The study is based on the assumption that morbidity has a strong subjective element : many people feel ill when there is no clinical evidence to label them ill on one hand and many others who feel fit can have medically defined morbidity.

Results :  $X^2$  test was used to determine any association between perceived morbidity and medically defined morbidity was found to be highly significant at P .001 level.

Comparison between perceived sickness rate and medically defined sickness rate for total population revealed only a small difference between the two i.e. when perceived morbidity rate was 176.3 per thousand medically defined morbidity was only 138.1 per thousand.

However age-wise distribution of these rates showed that the medically defined illnesses are 2.24 and 3.6 times higher in infants and children of 1-5 year age group.

Therefore, if perceived sickness rate is used as an indicator for need level of health services, it would grossly underestimate the true need.

2.2.15 Extracts from a Research Study on "Survey of Anaemia in Children in Bombay" by Currimbhoy Z. and Phadke P. (1963)

Introduction : The report is based upon a study carried out in a hospital at Bombay. New born children and their mothers as well as children in the age group of 8 to 12 years were studied.

Major Findings :

1. About 93% of the infants were anaemic. The main causes for this were assigned as pre maturity and breast feeding upto one year. It was observed however that upto 3 years haemoglobin was unaffected.
2. The haemoglobin level fell upto one year of age. The study recommended that to improve the haemoglobin level of children it is imperative that some iron nutrient be given to them right from the age of two to three months.

2.2.16 Extracts from a Research Study on "Morbidity and Mortality in Preschool Children", Seminar Paper by Balgopal R. et. al. (1970)

Introduction : At a seminar in Madras organised by ICSW the authors presented a paper based on a survey by the noted nutritionist. Dr. Gopalan C. in 9 villages during 1951 under the aegis of peripheral paediatrics clinic of Institute of Child Health and Hospital for Children, Madras.

Major Findings :

1. 74% children were not healthy.
2. Main causes of morbidity and mortality in pre-school children were assigned as (1) malnutrition and (2) acute and chronic infections, many of which were caused by lowered resistance due to malnutrition and poor environmental hygiene.

Suggestions : The authors suggested both long term and short term plans to reduce morbidity and mortality. Health education for different categories of workers in health field, better sanitary conditions and protected water supply were suggested as the long term measures. Supply of nutritive food and nutrition education to mothers were put forth as short term measures. The authors also suggested setting up well planned and well staffed mother-craft centres in each state - thus advocating improvement of knowledge and practice of health care amongst mothers.

2.2.17 Extracts from a Research Study on "Morbidity and Mortality in Children" by Gandhi V.K. (1963)

Introduction : The study pertains to 2476 cases admitted to children's ward of hospital over a period of two years. The diagnosis was arrived at mainly by clinical means, laboratory investigations and radiological aids.

Major Findings :

1. Morbidity and mortality incidences were highest during the first two years. 28.1% cases under one year and 46.6% cases between one and two years of age.
2. More male i.e. 62.1% children were brought for treatment as against only 37.9% female children. This could possibly be a pointer towards greater attention received by male children from their parents vis-a-vis their female counter parts.
3. 69.5% morbidity and 81.9% mortality could be accounted for by respiratory, communicable, gastro-intestinal and nervous system diseases.



4. About 60.9% of total mortality occurred within 24 hours of admission to hospital. Could this be due to the fact that children are usually brought for medical treatment only in the advanced stage of their illness ?