CHAPTER – I

INTRODUCTION
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Access to primary health care is a basic right of an individual and responsibility of the state. Accepting this responsibility, national governments all over the world constantly strive to improve health care services for their citizens. 'Health for all' has become a target and a challenge, particularly for developing countries. This challenge was echoed and given shape by several international declarations. The prominent among them is the Alma – Ata conference on primary health care in 1978, attended by 124 countries. The conference made the following declaration.

The conference strongly reaffirms that health which is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important world social goal...

Echoing this view Nobel laureate Amartya Sen avers that health is an important dimension of poverty. In many societies, poverty and bad health are synonymous - a person with poor health is poor. To quote Sen: ‘The usefulness of wealth lies in the things that it allows us to do, the substantive freedom it helps us to achieve [...] And among the most important freedoms that we can have is the freedom from avoidable ill-health and from escapable mortality'. Better health leads to an immediate welfare gain for the poor. It is not surprising that the Millennium Development Goals (MDG) lay emphasis on health and nutrition.

In the chapter on directive principles of state policy, the Indian Constitution explicitly declared that: the State shall regard the raising the level of nutrition and the standard of living of its people and improving of public health as among its primary duties. To translate this objective into reality, the Government has built up a vast network of health institutions spanning the length and breadth of the country.

The public healthcare delivery system in the country consists of complex network services at three levels. In rural areas, the government has a network of PHC's, sub-centres and dispensaries, which focus on provision of preventive, promotive and curative services. At the secondary level, the delivery system consists of hospitals at taluk and district headquarters. Finally, there is a tertiary level consisting of large teaching hospitals attached to medical colleges and specialty hospitals. Besides these, there is a
network of dispensaries run by municipalities in urban areas. In addition to these public health facilities, private and voluntary organisations also provide health care services.

While healthcare institutions at each level are important in their own way - primary, secondary, and tertiary care, forming important components of overall health care delivery system, primary healthcare - in the form of preventive, promotive and curative services - occupies an important place in rural areas. A vast network of primary health centers (PHC), sub-centers (SC) have been established over the years to provide primary health care in the country. There was only one PHC for one lakh population in 1953. In 1962 it was one PHC for every 40000 people. By 1983, the situation further improved to one PHC for every 30000 people in plain areas, and one PHC for 20000 population in hilly or tribal areas. This improvement was made possible by increasing the absolute number of PHC's set up during successive plan periods. The number of PHCs in the country rose from 725 in 1953 to 22936 by 2003.

In Andhra Pradesh, the primary health care network consists of 1570 PHCs and 12522 sub-centres. Manning these centres are 2561 medical officers, 1862 community health officers/ multipurpose health education officers, 2037 staff nurses, 2484 male supervisors, 324 female supervisors/public health nurses, 6409 male workers and 12428 Auxiliary Nurse Midwives (ANMs), apart from other support staff.

The impressive expansion in the health infrastructure provided by the government no doubt is a pre-requisite for improving the health situation in the country. But equally important, if not more important than the physical and capital infrastructure, is the development of human resources. Human resources have been described as the heart of the health system in any country and the critical component of health policies. The knowledge, skills and attitudes of the personnel who provide healthcare play a key role in determining the efficiency and effectiveness of primary healthcare institutions.

These skills and knowledge need to be updated periodically so as to improve the quality of services provided by these personnel, and to gear them up to face new challenges facing the government health care delivery system, through refresher and specialised in-service training programmes. Stressing the importance of training the health personnel, WHO expert committee states 'Trained people are the key to the health infrastructure. People can build institutions but institutions cannot function without people. Without the right kind of trained people, the other
resources of a health system are underutilised, if not wasted. Explaining the role of In-service training to health professionals, the committee states: Training should be a continuous process and should not culminate with basic training. Continuous training is essential because health technology is changing rapidly, and also because the work experience of individuals should be shared with others. Echoing the same sentiment but specifically elaborating the role of training in change management, Richard, W.Gable and Fred Springer note: In today's world the pace of change has accelerated tremendously. Knowledge acquired through training at the beginning point in career would be inadequate to deal with the changing situation, which is constantly in a state of flux. For a long time it has been felt that training cannot remain a one-shot affair. Personnel need exposure to training at several points during their career.

In the early stages, not much attention was paid to human resource development through training. However, emergence of the Reproductive and Child health (RCH) approach has changed the scenario. Quality being the core of RCH approach, attainment of high levels of skills on the part of health professionals is essential. Further, funding from international agencies has helped the Governments in giving boost to in-service training of health personnel.

Launching of the India Population Project-VI (IPP-VI) (1992-1997) and RCH-I (1997-2003) brought about significant and noteworthy changes in the training scenario in the state health department in terms of coverage, training infrastructure, and training methodologies. These two projects greatly strengthened the training infrastructure in the health and family welfare department, and have built up the competencies of the trainers through a series of 'Training of Trainers' (TOT) programmes that contributed to improving the quality of training imparted in the department.

Despite the rapid strides made in different spheres of training, various problems in respect of training have surfaced time and again in the department. The in-service training institutions have faced questions of appropriate organisation model, training methods being used, quality of training, faculty composition, and appropriate methodology to evaluate the training. Adequacy of training budgets, the interfaces of the training objectives with the other functions in the organisation and their location in the organisational set-up have also emerged as thorny issues.
No significant studies have been taken up to address these issues. It is high time that a concerted research is initiated on the functioning of the In-house training institutions in the department of Health and Family Welfare, which can assess their performance, analyse their problems, and offer a new framework for their successful functioning in future. The present research addresses precisely this gap. It is expected that such a study may eventually lead to more studies being taken up by individuals and institutions.

1.1 Review of literature

It is proposed to review the literature available on training in general and also relating to training of health personnel in particular. Review of literature is pertinent for two reasons. It forms the basis for providing theoretical framework and data analysis; it also enables the researcher to suggest ways and means to bring about the necessary improvements in the training system in the department of health and family welfare. The present study of in-house training for primary health care functionaries is selected after a careful and vigorous review of relevant studies in the area.

Literature on training in general

Literature on training and development is large and is expanding rapidly. Broadly, academicians and practitioners have devoted considerable attention to various aspects of training like, approaches to training, types of training, training needs, curriculum development, training process, training methods, and training evaluation. Works of some important scholars on the above stated aspects is reviewed and briefly discussed.

William McGhee and Paul Thayer (1961) have pointed out that training is most effective when accompanied by a systematic and continuous research embracing organisation analysis, operational analysis and man analysis 10.

Arthur Lumsdaine (1964) has distinguished training technology as hardware approach which stresses the importance of teaching aids; a software approach which stresses the importance of learning aids; and a combination of hard and software approaches which involve four primary activities - diagnosis, planning, construction, and evaluation 11.

Johnson (1967) has categorised training needs in terms of those which an individual or group has, must be met immediately, can be met in future, call for formal training activities, call for on the job instruction, call for off the job instruction, the
company can meet within itself, the company can meet best through outside resources, and individual can meet in concert with others and an individual can meet only by himself.\textsuperscript{12}

According to Mumford (1971), a systematic approach to training depends on a rigorous review of the present situation, a clear statement of objectives, a well-balanced assessment of alternative ways of achieving those objectives, and a careful evaluation of the results of the training programme in its totality. It involves three basic steps of training cycle viz. analysis, action, and evaluation.\textsuperscript{13}

Boydell (1971) suggests systematic training in ten steps. These comprise identification of training needs, examination of occupation, analysis of the job, specification, selection and appraisal of the people to be trained, setting up to the training objectives, drawing up a syllabus, planning the training programme, and follow-up of training.\textsuperscript{14}

Goldstein (1974) classifies the instructional technology into three phases: the assessment phase, training and development phase, and the evaluation phase.\textsuperscript{15}

According to Tracy (1974) the application of the systems approach to curricular development and the utilisation of the hardware and software of training technology are a must for the trainer. He, however, qualifies that the potential contribution of technology to training and development hinges on several factors like the application of research, improvements in the design of the training system, and improved transmission and dissemination of the results of research in the use of technology.\textsuperscript{16}

According to Hamblin (1974) the process which occurs as a result of successful training can be divided into four levels. Evaluation can be carried out at any of these levels. They are reaction level, learning level, job behaviour level, and functioning level. Further, Hamblin says that evaluation helps in providing feedback for improving training.\textsuperscript{17}

Kirkpatrick (1976) has provided a sound conceptual base for evaluation of training. He has suggested that evaluation criteria are needed at four distinct levels – reaction, learning, behavior, and results.\textsuperscript{18}
Michael Jinks (1979) explains how training benefits both the trainee and the employer. He also discusses the steps to be followed in each stage of the training process to make it more effective, with a special focus on training methods 19.

An Expert Group of the Commonwealth Secretariat (1979) in its report on the effective use of training methodologies made a distinction between the concept of training methods and training methodologies, the method referring to a general or isolated description - e.g., role-play or syndicate - while the methodology applies to the practical application of the method within the specific programme, and its working environment. The group recommends that instead of treating methods as individual techniques, a number of methods should be considered while developing a comprehensive training methodology 20.

Michalak and Yoger (1979) identified nine steps in the training process, starting with identification of need for training and ending with evaluation, giving the finishing touch to round-off the process 21.

Blank (1982) comes up with two different approaches to training: the competency-based and tradition-based, which according to him are as different as day and night. These two approaches differ in at least four principal ways, what trainees learn, how they learn, how they proceed from task to task, and finally what students learnt from each task is determined and reported 22.

According to Kubr (1983) four factors should be considered in the selection of training methods; these are the human factors, objectives of teaching and training, subject areas, and time & material factors 23.

Virmani and Premila Seth (1985) conducted an exhaustive research on evaluation of management training & development (T&D) in India. The authors designed tools for evaluation of T&D. Apart from that, they focused attention on job improvement plan to elicit information from trainees on the effective transfer of training to their job situation 24.

According to Friedman and Yorborough (1985), there are two broad approaches to training, namely the adoptive, and the descriptive (top down). Proponents of each maintain that their approach is superior in terms of ability to motivate and transferability to work situation. However, the authors feel that neither of the claims is valid. Though
seemingly they look contradictory, both can be effective when used appropriately. In fact both are necessary.\textsuperscript{25}

Nadler (1985) has designed a model of training programme that he calls as 'critical event' model. Essentially, this model has eight elements and each element is looped to evaluation and feedback. Unlike other models, this model envisages evaluation and feedback at every stage of implementation of training.\textsuperscript{26}

According to Warren (1986) curriculum is a processing system with a mission. He describes the mission as "production of an instructional design and materials to carry out the actions required to fulfill the training plan". He further states that the curriculum outlines a step-by-step strategy and set of activities to which learners will be exposed, that it \textit{identifies all the things that will enhance the achievement of the training objectives}.\textsuperscript{27}

Chowdhry (1986) describes three kinds of training methodologies, viz. instructive, interactive and participative. He outlines seven different approaches to training methodology as didactic, participatory, motivation, creative, analytical, investigative, and planning.\textsuperscript{28}

Stanley (1987) has developed a system of synthesis of several models and presented the training process as a circular model. Its components are research and diagnosis, identification of training needs, setting up of objectives, formulation of a plan, implementation of the plan and evaluation.\textsuperscript{29}

Saiyadain (1987) conducted a survey of training function in Indian organisations related to training facilities and costs, need identification, training methods and evaluation of training.\textsuperscript{30}

Leslie Rae (1988) suggests ways in which any form of training can be assessed for effectiveness and value. It covers the whole training process from the selection and planning of a training event, through to the validation and testing of its outcome in both the short-run and the long-term. He elaborates on approaches needed at each stage and also provides instruments needed for testing training effectiveness.\textsuperscript{31}

Margaret Anne Reid (1994) has reviewed a number of approaches to training that have evolved over a period of time. She suggests that a number of general approaches to training have gradually evolved over a period of time, to meet the diverse
work situations which fall on a continuum ranging from trainer directed at one end to trainee centered at the other.

However these approaches are not mutually exclusive, and may be used to compliment each other. Further she emphasised on two other aspects of training - the training strategy and the learning strategy, the first one emphasising as to how training will be planned and resourced, and the second which lays emphasis on the learning methods to be adopted and the medium appropriate to it.

Singh R.P (1994) argues for building strong teams of trainers for managing training programmes in different sectors. Training is an activity, which involves a team of trainers. Unless the members of the training team are well acquainted with the characteristics of an effective team, training programmes cannot be conducted effectively. The author experimented with Wood Cock's (1979) team-building approaches on "Management of training programmes under 'training & visit system of agricultural extension' in Haryana" in 1994. The results of the study were encouraging.

Saxena (1997) discusses the results of his research findings concerning evaluation of training and prevalent evaluation practices in different organisations. He makes a number of suggestions to improve the practice of evaluating training.

Malcolm Knowles (1998) suggests that training adults calls for different skills than training students in universities, or children. Adults working in an organisation have opinions and experiences of their own which they might have imbibed during the course of their work. They are likely to reject any teaching that does not fit into their frame of experience. Hence, a good trainer should be well-versed in adult learning theory (Androgogy) and practices. A trainer should necessarily use these principles while using any of the training methods.

T.V Rao (1999) views training as an important sub-system of HRD and advocates a comprehensive 'Audit' of HRD function to rejuvenate it and to make it more business-driven. He provides a framework and detailed methodology of HRD audit to examine the adequacy of the existing HRD systems, structures, culture, and competencies. He presents a unique 'HRD Score Card' to assess and benchmark the maturity level of the HRD function including training in an organisation.

Frances and Roland Bee (2000) stress the importance of systematic assessment of needs, methods, and results of training. They provide a four-stage systematic
evaluation process that allow the managers to assess whether training has been successfully transferred to the work place, and whether it serves the organisational objectives and provides value for money 37.

Mathur (2002) makes a distinction between induction training and in-service training and elaborately discusses various issues and trends in in-service training in government departments 38.

Uday Pareek and T.V Rao (2002) discuss the plight of training in organisations as playing the role of a call girl, or the role of decorative feudal wife rather than modern housewife. They opine that in many organisations, training seems to be suffering from low status, non-professional image and is considered as a peripheral activity. They suggest a system of training that makes it a central and key activity in organizations 39.

Lynton and Pareek (2004) state that in the past three decades, the whole field of training has undergone a sea change in terms of training designs, methods, and materials. They state that training systems at present must also address the issue of fitting their efforts into the overall change strategy of organisations. According to them, training managers and policy-makers in the current scenario must focus on four core issues to make training effective: making training fit change strategies, outcome evaluation, organisational readiness, and support for training 40.

In the second part of their book, Lynton and Pareek (2004) focus on the needs of hands-on practitioners of training, the position of training in the operating system, methods to be used to achieve training objectives, and managing training programmes, including post-training support 41.

David Turner (2004) explains the dos and don'ts in a 'role play' when used as an instructional method. Use of role-plays call for good experience on the part of the trainer. According to him, important stages of a role-play include selecting and briefing participants, review, feedback, and debriefing. He also provides valuable tips for making role plays successful 42.

Buckley and Caple (2004) make a distinction between systematic training and systems approach to training, and explain the interrelationship between the two. They also elaborately discuss the various stages in a systematic approach to training 43.
Based on his research on training practices of nine public sector enterprises at Hyderabad, Ratan Reddy (2005) elaborates on strategies for effective human resource training and development in the 21st century. The strategies cover the entire training cycle - from training needs assessment to the conduct of training.

Literature on training of health personnel

Though many studies have been conducted at national and international level to study certain of the aspects of training in health in general, very few comprehensive studies have been conducted to study the training system as a whole in the government health sector. Research studies, surveys, reports and articles that deal with training systems in healthcare are presented.

A study by Dhillon and Gupta (1973) on evaluation of training being conducted by regional family planning training centres in India attempted to find out the techniques of evaluation by these institutes, the methodology and instruments in evaluation, and the mechanisms adopted for feedback and improvement. The study found that a variety of ways were being used to evaluate training; these included planned observation of class sessions both by faculty and trainees, observation of field projects by the supervisory faculty, review of daily diaries maintained by trainees, and periodic faculty meetings. The study identified gaps in evaluation of training, especially with regard to on-the-job follow-up studies of trainees.

A study conducted by Gupta (1973) on various aspects of family planning training programmes in India stress the importance of learning by doing as a training technique. The study also emphasizes adoption of indigenous methods of training based on local conditions for better results rather than depending on successful methods in different environments.

A report by Gupta et. al. on the functioning of health and family welfare training centres (1973) in India identified the deficiencies in the training institutions in various states. The report suggests the need to strengthen physical infrastructure in these institutions, the need for integrating various types of training conducted in the department, and the rationale for selection of trainers based on their aptitude for teaching, training and research. The report also discusses other issues like promotion and transfer policies for trainers in the training institutions.
Dr. Cook (1979) makes a call for a return to traditional priorities in medical education. The author finds the orientation in medical training 'towards treating the masses and away from the doctor-patient relationship' quite disturbing. He appears to associate what he sees as inappropriate biases in education with a misdirection of the majority of medical aid to rural areas, to the exclusion of urban medicine.

Essentially, these views rest on the fact that the author sees training of doctors and healthcare delivery as two separate issues. He believes that medical graduates 'will rapidly adapt to the local spectrum of disease', but that to maintain standards it is essential that they be first trained to a high level of excellence in clinical medicine, which includes learning about diseases rare in their own environment. The delivery of health care is, he insists, essentially a political, not a technical problem. Departments of health should take responsibility for seeing that healthcare is delivered more effectively.

According to Jarvis and Gibson (1980), mature trainees have some problems to overcome as well as particular contributions to make, when they take part in training courses. They tend to find it more difficult to memorise new information; the pace of learning is slower; they often have to 'unlearn' wrong information or incorrect skills; and their attitudes are sometimes entrenched. On the other hand, they have a wide range of experience that can often be put to good use. The authors offer some ideas on the measures that can be taken to help trainees get most out of their training.

Katz and Fulop (1980) presents a record of 27 experimental educational and training programmes from all over the world launched over the preceding 25 years. In one such innovative training at the Institute of Health Sciences at Tacloban, Philippines, a series of training programmes were given to health staff ranging from health workers to medical officers, with various entry and exit points, and interspersed with periods of work in the community. The experiments demonstrate how a radical reorientation of health training can have a profound impact on community involvement, access to health workers, relevance of health worker skills, and the types of candidates selected; this in turn, has implications for their attitudes and personal goals.

Waterson (1982) argues that medical schools need to pay more attention to primary healthcare schemes. The functions of the doctor in a primary healthcare system are consultation, supervision, and training. Doctors who will participate in the primary healthcare system themselves need appropriate training, which would include joint
learning with paramedical staff and learning outside the hospital. Both tend to be resisted due to the conservatism of medical schools. The author argues that the nominal content of elements of the curriculum is less important in fostering a concern for the community than is the style of teaching and the emphasis of the teacher. If a doctor is to operate as a part of a team, he or she needs skills in solving problems and making judgments and decisions. Such skills are not taught in the lecture hall.

The WHO expert committee (1983) on new approaches to health education in primary healthcare called for review of current approaches to health education in order to identify those that continue to be relevant, to abandon those that are no longer valid, and to develop new approaches which could help in achieving the objectives of health for all through primary healthcare. It calls for a people-oriented health technology that meets people’s needs and aspirations. In this context, it advocates adequate training to healthcare providers to: (a) assimilate the concepts of a people-oriented technology and broaden their concerns beyond disease prevention or control; (b) act as “facilitators” of action by the people; and (c) assume an advocacy role for the cause of health vis-a-vis people as well as decision-makers.

For this purpose the committee recommends that the training programmes should: (a) be realistic, and preferably start in the field rather than in a classroom setting; (b) use teaching methods that call for participation and that should thus prepare trainees for the approach they are expected to use later with individuals/communities, and (c) provide opportunities for trainees to learn together with workers from other professions, so as to recognize how they can make a contribution to the promotion of health.

According to McNaught (1985) there is little point in spending scarce resources on developing policies and plans for the health service, if the managers who run health centres and clinics do not have the skills, understanding or authority to implement these plans. The author feels that higher priority should be given to management training of health managers manning the health centers.

In their paper, Dowling and Ritson (1985) advocate the production of relevant learning material for health workers. They believe that developing countries should be encouraged to produce training materials that meet the specific needs of their primary healthcare workers, and they describe the work done through the Health Learning Materials Programme (established by WHO and UNDP) to this end.
According to Abbot and McMahon (1985), in the literature on health worker training and management, there are constant calls for more relevant curricula and teaching methods which, as well as equipping students with technical knowledge and skills, will impart communication and decision-making skills and promote attitudes needed for the delivery of primary healthcare.

While supporting the view, that authors call on trainers of health personnel to rethink their approach to training. The approach they advocate is: thorough task analysis with teachers defining what the students need to learn so that they will come up with a range of skills and knowledge. They can use this information as a basis to plan a course, and assess students as well as teaching methods. The authors also describe teaching methods suitable for teaching and assessing different types of skills and knowledge, and methods of evaluation.

The WHO expert committee (1985) on 'Health Manpower Requirements' lays emphasis on the primary healthcare approach as the key to achieving the goal of health for all; and, that trained manpower was the key to effective primary healthcare. The committee calls for reorientation of health personnel training. The reorientation must concentrate on development of effective educational programmes that are community-oriented and community-based, multi-professional in character (team-oriented) student-centered, competency-based, and geared to solving problems, with their foundations firmly anchored in science. The expert committee recognised that teaching is a life-long process and that health workers should continuously adapt to the changing requirements of health systems; the committee recognized that the motivation to pursue life-long learning depends on career mobility and advancement.

A study by Joseph (1985) conducted at Christian Medical College, Vellore on training of doctors for primary healthcare brings out the importance of evaluation at various stages of training, as also the importance of field-based training.

A study by Roy (1987) studied the training needs for healthcare management in India. It states that management training needed for block-level staff included job analysis, needs assessment, and participative observation. Generally, training modules were prepared to conduct training with the help of consultants. The study identified lack of appropriate educational material on management as a major constraint in conducting management-training programmes for healthcare in India.
A WHO study group (1987) on community-based education of health personnel states that primary healthcare as an approach to improving healthcare involves reorientation of health education and training based on community-based learning activities. The report gives six reasons as to why health education and training should be community-based. 1. It gives health personnel a sense of social responsibility by enabling them to obtain a clear understanding of the needs of the local community and the problems they and the country as a whole are facing. 2. It enables them to relate theoretical knowledge to practical training. 3. It helps to breakdown barriers between trained professional and the lay public. 4. It helps to keep the educational process update by continuously confronting the trainees with reality. 5. It helps the personnel to gain in competence. 6. It is a powerful means of improving the quality of community health services.

Newbrader et.al (1988) opine that in the era of decentralisation of health services, there is a need to provide extra managerial inputs to lower level staff. In an intervention project in Papua New Guinea, managerial deficiencies of provincial staff were identified and regular training provided through well-prepared distance education modules. In-service training was given where ever found appropriate. Evaluation of the interventions indicated very encouraging results.

According to Flahault (1988), medical practitioners sometimes seem to resist the health-for-all primary healthcare approach, but this may be because they have only a vague notion of what it means. If they are to successfully fulfill the new role required of them - in which the treatment of individual patients is only one of the requirements - doctors need appropriate basic and continuous education and training. Only when the medical profession has sufficient members who are convinced of the need for a change and of the value of the solutions offered, will it willingly make the necessary innovations.

The WHO study group (1988) on "Learning together to work together" opines that community-oriented, multi-professional education of health personnel has an important place in strategies to achieve health for all. It recommends introduction of necessary reforms in faculties of medicine, health sciences, and other relevant training institutions so that in addition to their technical training, health personnel will become imbued with the philosophy of health development. The committee feels that multi-professional education will: 1. Develop the ability of trainees to share knowledge and skills collaboratively. 2. Enable the personnel to become competent in the coordinated team.
work needed to prioritise health problems 3. Helps to 'decompartamentalise' curricula, which is a factor in resistance to inter-professional collaboration. The committee calls for further research in the area of multi professional education 62.

A comparative study of different methods of training in the training of rural subjects for reconstitution of oral re-hydration solutions in Punjab by Natarajan, et.al, (1989) confirms the superiority of training workers of ORS therapy using live demonstrations as opposed to oral instructions 63.

The report of a WHO expert committee (1989) on "Management of human resources for health" states that with the passage of time, a trained person tends to forget both knowledge and skills, especially when they are not used. This creates a gap that can be filled only by updating and reinforcing what was once learned. Continuous education can likewise bring staff up to date on advances and changes in their particular fields of knowledge and technology. Health sector reforms all over the world are campaigning for decentralisation. Decentralisation, which brings decision-making making power closer to the level of action, greatly increases the demands on human resources.

Relevant training programmes need to be developed for mid-level and district-level managers for effective decentralisation. While identifying areas of research in health personnel management, the committee states that research & development and use of human resources cannot be expected to provide definitive solutions to problems. They can be used to accumulate information and insights that will elucidate the nature of options and the advantages and disadvantages of different approaches, so that decision-makers at any level can act on the basis of informed judgment 64.

Operations Research Group (1991) has undertaken 'Training needs assessment of health functionaries in Andhra Pradesh' at the instance of Govt. of India under IPP VI. The objective of the study was two-fold: 1.To assess current knowledge levels among the PHC and SC health functionaries in MCH and FP areas and thereby identify knowledge gaps. 2. To review the current status of the training institutes and to suggest guidelines to improve and strengthen existing facilities. Apart from identifying training needs for launching IPP VI trainings in A.P, the study also identified the gaps in training institutions in terms of manpower, and facilities 65.

A mid-term assessment study of an IEC training programme was conducted in two districts of Uttar Pradesh, by Trakaroo and Dubey (1992). The evaluation focused on
link persons, training and materials, visit schedules, teamwork, supportive supervision, outreach, evaluation and effectiveness of video use. Findings indicate that state-level IEC did not have sufficient staff involvement in training and implementation. IEC materials were not based on a problem-solving approach. Budgets were adequate but disbursement of funds was very slow. State IEC trainings, meetings should have been conducted once a month. Supervisors did not receive adequate training. At the district-level, there were also bottlenecks but the IEC training did help remove them. Supervisors increased their knowledge, improved their communication skills, and to a much lesser extent, learned new outreach skills. The study reports that on the whole, the IEC training effectively increased the capacity and commitment of workers 66.

A follow-up evaluation study by Sood et.al, (1993) studied the relevance and utility of training on logistics, supplies and material management conducted for 118 health personnel from all over India during 1989-1993. The study also identified the factors that affect the operationalisation of content areas in the trainees' job situation. Majority of the trainees felt that the content of the training was useful and relevant to the job situation. The reasons cited by participants for inability to operationalise what was learnt during training include: red-tapism, existing procurement procedure and administrative set-up, lack of motivation of staff, resistance from staff to change, irregular supplies, poor delegation of authority, inadequate communication, and inadequate financial resources 67.

A study by Schaap (1994) on IUD insertion training to female health workers in MP shows the effectiveness of manuals, insertion skills on dummies, role-plays and question-and-answer sessions. The study found that workers substantially improved their knowledge and skills. The study also highlights the importance and effectiveness of periodic refresher course 66.

A mid-term evaluation study was conducted by health manpower development cell (1994), directorate of family welfare, Government of Andhra Pradesh to review the National Training Project under IPP-VI. The study evaluated training being imparted to important categories of health functionaries. The basic objectives of the study were to do a situational analysis of the existing training from the trainee's perspective. The study revealed that though most of the functionaries were satisfied with the training, there was demand to make the training more field-based. A majority of them reported average improvement in knowledge and skills 66.
A research study (1995) by Ramdas Murthy to determine the extent to which the current undergraduate medical education and training of multipurpose health professionals equips them for their role in primary healthcare delivery, came out with the following findings: 1. There is an urgent need for the training of trainers in the application of principles of educational technology in medical education. 2. The learning settings of medical undergraduates have to be modified to render them predominantly community-based, and 3. Medical undergraduates need to have more hands-on experience in areas in which they need to develop special professional skills for delivery of primary healthcare to patients.70

A World Bank Report (1995) titled 'India's Family Welfare Programme' notes that a quite transformation has taken place in the family welfare training system during the preceding five years. The document states: A new infrastructure of state institutes of health and family welfare, regional and divisional training centres, and district training teams has been created. States are beginning to recognise the key importance of training for quality improvement. And where, five years ago, field workers seldom - if ever- received in-service training, most staff at the periphery have now received at least two exposures. The secondary cities and the states in the Northeast, which have serious infrastructure deficiencies, are an exception to this encouraging trend.

However, the report calls for consolidation of the on-going efforts in four specific areas. 1. The skills of trainers and methodology of training need to be improved. 2. Field staff need more training in how to plan their work routines and in how to carry out quality two-way interpersonal IEC. 3. A major drive is needed to improve the quality of technical care delivered by ANMs and LHVs in clinical skills. 4. There is need to redesign the content of pre-service training for ANMs, LHVs and doctors, so that it gives them the key technical, IEC, and planning skills.71

In a USAID (1995) funded programme, IMA implemented short training sessions for private sector physicians with the aim of improving their perceptions of oral contraceptives and of increasing the proportion of women seeking family planning services from private practitioners (Population Council 1995). Base-line and end-line studies were conducted among private practitioners to assess the training projects by the Population Council, New York. The study showed physicians recommending oral contraceptives to clients increased from 55% to 78%. Trained physicians were more
likely to provide alternative family planning methods than untrained ones. Their clients are more likely to be satisfied to the quality of services and the amount of time the physicians spent with them, than those of untrained physicians. The study helped IMA to modify the training model which it later implemented in UP.72

According to Carol Barker (1996) the key to improving health services in many countries today is the capacity to develop strategy and think actively about policy. The healthcare policy process considers the relationship between planning and policy, as its starting point for an analysis of healthcare and the dynamics of the policy process. The author provides a working knowledge of the different ways policy issues can be analysed and sets out the problems involved in assessing the views of different interest groups. She stresses the importance of supporting an active process of policy development. She also looks at key concepts in analysing healthcare issues and examines some of the debates overshadowing today's health policy agenda, as set by international agencies and by developing nations. She emphasizes the importance of understanding these issues as an aid to strategic thinking on policy implications in health care73.

A research study (1996) by Lalitha Monocha, examines some the crucial aspects of health manpower planning focusing on estimation of manpower requirements and supply. The study discusses the health manpower planning process covering theoretical, conceptual, methodological and empirical aspects. It elaborates upon the linkages between various functional elements of health manpower planning process and health-care delivery system. A conceptual frame is developed to place various activities under HSMD mechanism in proper perspective The study gives state-wise rural and urban manpower requirements, problems and causes74.

An evaluation study was conducted by Daga et. al (1996) on training of traditional birth attendants in newborn care in the state of Maharashtra. The training was delivered by lady health visitors and auxiliary mid-wives. They used photographs and dolls to communicate information about keeping the newborn warm, resuscitating a distressed baby etc. Programmes evaluation highlighted the importance of brief, task-oriented sessions that use demonstration, case histories, oral questioning and review of material presented in earlier sessions. This study states that since TBAs have extensive experience in delivering babies in village conditions, they should be regarded by trainers as equal partners75.
Guidelines issued by Department of Family Welfare, Government of India (1996) on in-service training considers in-service training as a vital input for success of family welfare programme under the decentralised approach. The document notes that there was vast expansion of health infrastructure during sixth and seventh five year plans. However, the effort to provide large health manpower over a short period resulted in dilution of their training. Moreover, the vertical training programmes - such as training under CSSM programme, technical training in family planning, training under area projects, and other institutional training were conducted in isolation. This system has not resulted in the development of required competency in the workers in all components of the family welfare programme. Further, it states that some of the workers did not undergo any in-service training while others have been imparted training several times with different programmes addressing similar issues resulting in an avoidable overlap.

Murphy C. Clare and Batty Helen (1997) suggest a new innovative model of training physicians and healthcare personnel devoted to provide primary healthcare to women. They developed this model in response to the gap of knowledge in woman health issues among the physicians at a woman's college hospital in Toronto, Canada. The modal advocates incorporation of more community outreach activities into the core curriculum so that scholars receive more exposure to health concerns of woman from diverse socio-cultural backgrounds.

A project appraisal document (1997) for RCI-I prepared by World Bank, discusses various alternative strategies to improve reproductive healthcare in the country. The document endorses the coordinated human resource development and training strategy proposed by MOHFW, GOI. The strategy would address recognised weaknesses, particularly in clinical skills, interpersonal counselling skills, gender sensitivity, and managerial skills. The document also calls for elimination of wasteful duplication in several externally-funded inputs. Further, the document recommends improving the quality of training based on award of clinical skill competency certificates and technical evaluations of trained workers. It also envisages capacity development of trainers through development of core training teams throughout the country.

A study was conducted by Council of Social Development (1997), Osmania University on impact of national training programmes in Andhra Pradesh. The study revealed that the impact of training was significant in case of medical officers, supervisors and health workers. The impact on Dais, PDS dealers, DWCRA group
members and eligible couples was marginal. One very important finding of the study was that medical officers and dais had inadequate professional medical knowledge. The study also revealed that back-up support essential for effective functioning of personnel was largely missing. Though the findings are important, the study suffers from an important limitation in that it was limited to comparing of baseline with the endline 79.

A study conducted by Paruthi and Sood (1998) in Haryana on training to Panchayat Raj members revealed that one-day or two-day crash courses with large number of participants failed to make any impact on the trainees. 80

ASCI conducted a study on ‘Evaluation of training of medical officers working in PHC’s in Andhra Pradesh’ (2001). The study observes that the training institutions conducting training were not aware of the TNA report for PHC MO’s. Hence, they could not link the objectives, content, and methodology of the training programmes to the findings of the TNA. Further, the study states that there was ambiguity as to whether the training given was ‘induction training’ or ‘in-service training’. The training provided was found to be more effective in improving ‘knowledge component of the trainees’ than ‘developing skills’. The study also states that it will be more useful to specify the objectives of training in terms of areas where performance is expected to improve due to training. However, it notes that performance improvement is dependent on a number of factors, other than training interventions. 81

The National Health Policy (NHP) 2002 recommends that all rural staff, including the staff of the vertical programmes should be available for providing the entire gamut of public health services at the decentralised level, irrespective of whether these activities relate to national programmes or other public health initiatives. The policy document states that to bring about such change, public health administrators need to change their mindset, and that rural health staff also need to be trained and re-oriented. 82

The Task Force on Health and Family Welfare (2003), a research study commissioned by the Government of Karnataka has evaluated the existing training systems and programmes for various categories of health personnel conducted by the State’s Department of Health and Family Welfare. The study was carried out in three districts of Karnataka that widely differ in health and demographic indicators. The main objective of the study was to assess the various training programmes at the grass-root level that female health workers (ANMs/ LHVs) have undergone, and the extent of their
utilisation in day-to-day activities. The study identified several gaps in the knowledge and 
skills of the participants in important identified areas of primary healthcare. It also 
assessed the quality of training given, based on observation and feedback that 
participants gave. The study also gives several policy level recommendations to improve 
the quality of training and competency of health personnel 83.

A review (2003) done by Dr.Prakasamma relating to health and family welfare 
workforce at primary healthcare level in Andhra Pradesh assessed the current situation 
with respect to workforce availability in PHCs and their competencies. The review 
forecasts the demand for PHC personnel in the next five years and also assesses their 
training requirements. The report gives a series of recommendations pertaining to in-
service training of health personnel and recommendations for an appropriate training 
system in the department 84.

A rapid assessment study was conducted by NIHFW (2004) to assess the impact 
of RCH training on the competencies gained by trainees after training, and to assess the 
performance of trained health functionaries. The study also sought the opinion of the 
trainees, trainers and administrators on course curriculum, the methodology followed 
during training, and the utility of training. The study identifies the deficiencies in the 
training and suggests measures to modify training inputs under RCH 85.

A ‘Training-needs assessment study’ (TNA) (2005) was conducted by 
Prakasamma for ANMs in Rajasthan. The overall objective of the TNA was to identify 
gaps in knowledge and skills of ANMs and to prepare a plan for their training, including a 
plan for training of trainers. Some of areas in which ANMs required further training were: 
Normal maternal and child health, drugs and treatment for minor ailments, disease 
conditions, latest techniques and methods, and syndromic management. The ANMs also 
expressed a strong need for good quality text books that cover all important health topics 
and their management. The TNA also studied the existing training facilities for ANMs in 
terms of physical and manpower resources, and identified the gaps thereof 86.

According to Datta, (2005) training plays a key role in health manpower 
development and management of healthcare system. Since the ‘National Rural 
Health Mission’ is a new concept, due weight-age has to be given in training to various 
components of the mission. For efficient and effective performance of medical and 
paramedical workers, a certain level of competence in the form of knowledge, skill and
attitude are essential. Various aspects of training which play a key role in imparting these knowledge and skills include: study of training needs, objectives, designing various types of courses for medical officers and paramedical workers at different levels. These courses need to be designed by experts drawn from fields of health planning, health administration and also from the domains of education and training. The new distance learning technology can also be used as a mode of continuing education for doctors & nurses, and refresher courses for other para-medical professionals.  

The National PIP, Government of India (2005) document views availability of skilled human resources as a critical variable in the achievement of RCH II goals. According to the document, achieving these goals is linked with timely delivery of training inputs and quality of training interventions. It proposes a comprehensive training framework for the functionaries under RCH II, based on the experiences of RCH I. The strategies in the framework will focus on training inventory, training approach, training content, monitoring of training, training material development, training management, and enabling environment issues.  

While the above studies throw light on specific aspects of training, it is important that a comprehensive study should be done that encompasses all important aspects of training healthcare personnel. The present research study proposes to do that.

1.2 Need and rationale of the present study

In a service-oriented department like H&FW, manpower in the key input. The effectiveness and efficiency of the health service delivery to a large extent depends on the competence and skills of the professionals manning the department. Training is recognised as an important mechanism and intervention to build up the competence of personnel in terms of knowledge, skills, and attitudes. To highlight the role of training in effective health care delivery, WHO declared 2006 as the ‘Year of Training’.

Though training of health personnel was accorded importance all through the years by healthcare authorities, both at the centre and the states, the emphasis was on providing more funds and creating physical infrastructure for training. The performance of in-house training institutions was by and large assessed in terms of the number of training courses organised, and the number of functionaries trained. No major efforts were made to look into the quality of training provided to the functionaries. It is only with the launching of RCH- I in the country that the focus shifted to the quality aspect of
training. Further, the on-going health sector reforms in the country and the state, advocate building appropriate structures and processes and bringing about systemic changes to improve the quality of training in the department. There is a growing opinion that mere provision of more funds to the training may not bring about desired results, unless appropriate systems, structures, and processes are also built.

However reforms in in-house training can be brought only if sufficient evidence and information is available through research, on the existing state of things. Situational analysis of the training system and its components will provide the starting point for any reforms. Unfortunately, research studies on in-house training of health personnel are scanty compared to other aspects of healthcare. What little work has been done relate to specific aspects in the training cycle; like designing course curricula, training modules and assessing the effectiveness of individual programmes. There is not a single study in the department, which covers the entire training cycle in an integrated manner. Since any weak link anywhere in the chain of training activity affects the efficacy of the entire process, the training process needs to be studied in its entirety.

The present study is an attempt to present a situational analysis of the training department, in terms of structures, processes and perceptions of different stake-holders on training conducted in the department. The study is also an attempt to enable sharpening of perceptions, stimulating discussions, and possibly bring about changes in the training system in the department. The researcher is optimistic that the issues that emerge from the study, the discussion on it and the suggestions that are provided will aid the department improve its in-house training. This is the overwhelming justification for the study.

**1.3 Objectives of the study**

The principal objectives of the research are:

1. To study the functioning of the in-house training system in the department of Health and Family Welfare, so as to understand the current Training Policy and practices
2. To study key training processes in the in-house training institutions.
3. To document the training pedagogy in the in-house training institutions.
4. To ascertain and analyse the perceptions of the key stakeholders in training - the trainees', trainers' and the administrators' – on specific issues related to training.

5. To identify and highlight the areas of improvement for better implementation of in-house training in the department.

1.4. Methodology

Operational definitions

Primary health care functionaries

Medical Officer, Multi purpose Health Education Officer, Staff Nurse, Multi-purpose health Supervisor (Male) Multi-purpose Health Supervisor (F), Multipurpose Health Worker (M), Auxiliary Nurse Multipurpose (ANM). They have been selected for the study in view of their predominant role in providing primary healthcare, and since specific, regular, in-service training programmes are conducted for these cadres of health professionals in established institutions.

In-house training institutions

These are the Indian Institute of Health and Family Welfare at Hyderabad, Regional Family Welfare Training Centres (for male and female health functionaries) and District Training Centers. The training institutions at these three levels cater to in-service training requirement of the Department of Health and Family Welfare, for all the health functionaries working at primary health centres.

Primary health centres (PHCs)

These are the institutions at the Mandal-level providing primary health care at the first level. The Primary health centres provide preventive, promotive and curative health care services to the community.

In-House training

Off the job training imparted to primary health care functionaries at the in-house training institutions from the time of entry in to the department.
Study population

The study population comprised of:

1. Faculty of the Indian Institute of Health and Family Welfare
2. Faculty of Regional Family Welfare training centres
3. Faculty of district training centres (DTCs)
4. Medical Officers of PHCs attending training at IIHFW
5. Multipurpose Health Education Officers attending training at RFWTC Vishakapatnam
6. Staff Nurses attending training at RFWTCs
7. Multipurpose Health Workers (Male) and Supervisors (Male and Female), undergoing training at RFWTCs
8. ANM's undergoing training at DTCs
9. Faculty at APVVP hospitals attached to RFWTCs and DTCs who provide clinical training to field health functionaries under RCH programme.
10. District Medical and Health Officers (DM & HOs), and key state level officers associated with training.

Sampling, and selection of study centres

I. Training Centres

Indian Institute of Health and Family Welfare (IIHFW)

IIHFW is the apex-training institute in the Department of Health and Family Welfare, Government of Andhra Pradesh and was included in the study.

Regional Family Welfare Training Centres (RFWTCs)

All the eight regional training centres (4 for male and 4 for female personnel) located at Hyderabad, Guntur, Visakhapatnam, and Kurnool were included in the study.

District training centres (DTCs)

All the 23 district training centres in Andhra Pradesh were selected for study and detailed analysis.
APVVP hospitals

A sample of eight hospitals attached to the training centres which provide training on clinical component to the PHC field functionaries also formed part of the study. Of the eight hospitals selected at random, three each were selected from the geographical regions of Telengana and Coastal Andhra, while two were selected from the geographical region of Rayalaseema.

II. Faculty of training institutions

Faculty of IIHFW

The faculty and consultants from all the five departments viz. Demography, Epidemiology, Management, Communication and Reproductive Health Studies were included.

Faculty of regional training centres (RTCs)

Members of different disciplines who hold teaching positions in RFWTCs were studied. They included the categories of principal, epidemiologist, medical lecturer-cum-demonstrator, statistical officer, management instructor, public health nurse, and health education extension officer.

Faculty of DTT

All the three faculty members of the 23 DTCs in the state, viz the project officer, district public health nurse, and health education officer (HEO) were included in the study.

Faculty of AVVP hospitals

Faculty working at APVVP hospitals and teaching hospitals attached to the training centres from a sample of eight districts (three each from Coastal Andhra and Telengana, and two from Rayalaseema) were included in the study. They included the category of pediatrician, gynaecologist, and staff nurse.

Efforts were made to cover all the trainers working at different tiers of in-house training institutions. However, only 86 percent (84 out of 96) of all the trainers responded to the questionnaire. Similarly only 71 percent (25 out of 35) of the trainers from APVVP responded to the questionnaire.
III. Primary health care functionaries

Medical officers

The study covered a sample of 65 medical officers while they underwent training at IIHFW under a APERP project. A random purposive sample of 10 medical officers was picked up from each of seven batches, such that there is equal representation from all the districts in the state.

MPHEOs

The study covered a total of 54 MPHEOs from among trainees undergoing training at RFPTC (M), Vishakapatnam.

Staff nurses

Staff nurses under training at the four RFWTCs (F) in the state were included in the sample. One batch of trainees from each of the four training centres was covered from among staff nurses being trained at these institutions. Total number of staff nurses covered in the study was 42.

Supervisors (M)

One batch of male supervisors who were being trained from each of the four RTC (M) were covered. The total number of supervisors included in the study is 57.

Supervisors (F)

One batch of female supervisor trainees from each of the four RTC (F) was included in the study. The number of female supervisors covered in the study is 43.

Male health workers

One batch of male health worker trainees from each of the four RTC(M) was covered for the study. The number covered of this category was 48.

ANMs

A total sample of 160 ANMs from twelve sample DTC's were included in the study. The DTCs were selected at random from the 23 DTC's in the state. Of the twelve, two were selected from Rayalaseema and five each from Coastal Andhra and Telangana. One batch of in-service ANM trainees under training at the centres were included in the study.

The total sample of trainees from different cadres covered in the study, formed 10 percent of all the trainees who have undergone training at various in-house training
institutions in the department during 2001-2003. The sample selected was from trainees attending training courses of minimum of 6 days duration.

IV. Administrators/ Line managers

The sample selected for administrators/line managers include all the 22 District Medical and health officers heading the district health departments, and 11 key state level officers (Joint Directors and other key officers) associated with training at the state level. Apart from administering an interview schedule, detailed discussions were held with each of them on various aspects of in-house training for primary health care functionaries prevailing at the district and state level.

Planning the study

Since the investigation involved collection of information from different in-service training institutions in the Dept. of Health and Family Welfare, the concerned authorities were approached and formal approval obtained for the study.

Director Health - For conducting the survey in RFWTCs and DTCs

Director of IIHFW - For conducting survey at IIHFW

Commissioner of Family Welfare - For obtaining information related to training in RCH

Commissioner APVVP - For conducting survey in APVVP hospitals

Period of study

As 'training' has a qualitative dimension, the period of study does not assume significance. An effort has been made to understand the functioning of the training system and evaluate its strengths and weaknesses in meeting the needs of the employees and the organisation. Broadly the period chosen for the study, 1998 -2005, coincides with the RCH-I project period. The reasons for choosing this period was:

1. Data prior to 1998 were not available in the organisation.
2. The introduction of RCH-I in 1997 made the training centres in the H&FW department the focus of activity.
Study methodology and instruments

In conducting the study, survey questionnaire/ interview method was followed. Separate questionnaires were formulated for each of the following category of respondents.

1. The trainees
2. Faculty of the training institutions and hospitals
3. Administrators/ Line managers

The content of the schedules varied with the type of respondent and the nature of information sought from him/ her. As the number of trainees covered in the study was quite large, the questionnaire for them was made highly structured for easy tabulation and analysis. The questionnaire for trainers was semi-structured containing both structured and open-ended questions. The interview schedule for administrators consisted largely of open-ended questions, with very limited structured element. Broadly all the schedules contained questions of the following types:

1. Questions with "yes – no" or "yes – no – don’t know" types of answers
2. Questions with multiple options
3. Questions seeking a graded response (5-point scale)
4. Open-ended questions. This type was limited only to those aspects testing knowledge/ awareness, or seeking suggestions

The schedules were pre-tested and modifications made before using them in the study. The schedules for MPHEO, staff nurse, supervisors (male/ female), health workers and ANM were formulated in Telugu as pre-testing indicated that language problems might vitiate the responses.

Data collection

Visits were made to the selected centres of study. These were:

1. Eight RTC at Hyderabad, Kurnool, Guntur, and Vishakapatnam (4 each for male and female multipurpose health professionals)
2. Twelve district training centres (DTCs)
3. Eight APVVP hospitals attached to training centres, and
The concerned institutions were contacted telephonically before making the first visit. Before making subsequent visits, the convenience of trainees/respondents was also ascertained.

To each questionnaire was attached a note declaring that information sought was being used only for research purposes and requesting the respondent to give his/ her considered and objective response to the various aspects included in the schedule. The investigator had a meeting with the faculty of various training institutions and the trainees attending the training programmes. The purpose of the investigation was clearly explained and their co-operation sought.

Data was collected from all available and willing respondents in the different categories. In case of the faculty of APVVP attached hospitals, IIHFW, RTC and DTT’s, several attempts were made to make personal contact, at different points of time. In case the respondent was not available or did not provide information, it was assumed that he/ she was not willing to cooperate and was excluded from the study.

In respect of trainees attending various training sessions at the selected institutions in the sample of the study, the operation was routed through the head of the institution/ coordinator who co-coordinated the activity, and specific time was fixed for meeting the trainees. The purpose of the investigation was explained and trainees were requested to respond to the different aspects on which information /opinion was sought.

The district medical health officers heading the district health departments were interviewed with the help of an interview schedule. Some of them were interviewed in their respective districts and some when they visited state headquarters to attend training programmes or official meetings. The state level officers were interviewed at the state head quarters of the H&FW department.

A special format was designed to collect data from various training centres covered in the study regarding facilities available, number of training programmes held during the past few years, number of training programmes cancelled due to personnel not being deputed for training, average size of each batch, and other relevant information. The information so collected was supplemented with data obtained from RCH training monitory visits by the consultants of IIHFW, and information available on training with the Commissionerate of Family Welfare.
Apart from the above stated instruments, facility check lists, informal discussions, and in-depth interviews with heads of institutions, consultants, training experts, review of project reports and policy documents, focus group discussions with trainees and trainers formed the basis for the study findings. Focus group discussions were held to gain proper perspective on the information provided by the respondents through the questionnaires. Two focus group discussions were held with the trainers and four with the trainees during different points of time during the study period.

Another instrument, which was used in the study, was observation. This tool was not only used during the period of the study, but also prior to the study, to identify and select the present topic of research.

**Processing of schedules and evaluation of responses**

All the questionnaires were examined and close-ended questions were given an appropriate code. As far as the open-ended questions were concerned, the responses were all studied and broadly classified. Individual responses were then allotted to respective groups by giving them an appropriate code.

**Data Analysis**

Data was fed into the computer by using EPI6 software package. Since the study is essentially on, study of systems, processes, and perceptions, and other quality dimensions, pertaining to in-house training, simple statistical procedures such as frequency distributions, averages, percentages and content analysis have been used for analysis of data. SPSS package was used for data analysis. Care was taken to ensure consistency and reliability of data obtained.

The sample frame for the study is given below

**Table 1.1: SAMPLE FRAME FOR TRAINEES**

<table>
<thead>
<tr>
<th>Type of Respondent</th>
<th>Total no. trained in 2001-2002</th>
<th>Number Administered</th>
<th>Number Responded</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO</td>
<td>243</td>
<td>70</td>
<td>65</td>
</tr>
<tr>
<td>MPHEO</td>
<td>425</td>
<td>59</td>
<td>54</td>
</tr>
<tr>
<td>SN</td>
<td>443</td>
<td>60</td>
<td>42</td>
</tr>
<tr>
<td>MS</td>
<td>994</td>
<td>60</td>
<td>57</td>
</tr>
<tr>
<td>FS</td>
<td>445</td>
<td>59</td>
<td>43</td>
</tr>
<tr>
<td>MW</td>
<td>613</td>
<td>65</td>
<td>48</td>
</tr>
<tr>
<td>ANM</td>
<td>2088</td>
<td>180</td>
<td>160</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>5251</strong></td>
<td><strong>553</strong></td>
<td><strong>469</strong></td>
</tr>
</tbody>
</table>
Table 1.2: SAMPLE FRAME FOR TRAINERS

Opinion surveys administered and responses received

<table>
<thead>
<tr>
<th>Type of Respondent</th>
<th>Number Administered</th>
<th>Number Responded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of IIHFW</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Faculty of RTC</td>
<td>51</td>
<td>47</td>
</tr>
<tr>
<td>Faculty of DTC</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>Faculty of attached APVVP Hospitals</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>TOTAL</td>
<td>131</td>
<td>112</td>
</tr>
</tbody>
</table>

Table 1.3: COVERAGE OF RESPONDENTS FOR CATEGORIES OF ADMINISTRATORS

<table>
<thead>
<tr>
<th>Type of Respondent</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Directors</td>
<td>6</td>
</tr>
<tr>
<td>Other State level officers</td>
<td>5</td>
</tr>
<tr>
<td>DM &amp; HOs</td>
<td>22</td>
</tr>
<tr>
<td>TOTAL</td>
<td>33</td>
</tr>
</tbody>
</table>

1.5 Limitations of the study

The study has the following limitations:

1. The prejudices that get reflected in the responses to the opinion survey are a major limitation. However, care is taken to read in between the lines and through cross-verification of the responses from other statements in the opinion survey. Apart from that, the researcher had a detailed discussion with the employees at various levels and the faculty at training institutions to overcome this limitation.

2. Study of training in its varied aspects is a complex phenomenon. Further, training has a significant qualitative dimension. Although sophisticated methods and techniques of evaluation are available, due to time, resource, and other constraints, the same have not been attempted. Hence, simple tools such as percentages, averages, and content analysis have been used to analyze data. Since the data has been collected from various sources,
there is a possibility of discrepancy/variation in the data, may be with little magnitude, on account of their improper or inept reporting.

3. While computing the percentages, averages, and also while using the other statistical techniques, the data is approximated. Therefore, the totals may not tally exactly at some places.

4. The present study is confined to in-house training of employees in the H&FW department, which forms a part and has important linkages with overall HRD mechanisms in the department. Interpretation of data in the light of other sub-systems of HRD are likely to throw up conclusions that vary from those arrived at.

5. The sample for the study was drawn from among those who had attended the in-house training during the reference period. It is quite possible they represent those who attend training programmes frequently, and avail opportunities to attend them. If it were so, then the opinions they expressed on certain aspects may not represent the views of those who never get to attend any training courses conducted in the department.

6. Finally, as this study is the first of its kind that critically examines various issues pertaining to in-house training, the researcher had to choose his own course of investigation to draw useful conclusions.

1.6 Chapter design

The study is organised into six chapters. Each of the chapters is sub-divided into parts for convenience, clarity, and lucid presentation.

Chapter 1 focuses on the role and significance of training for health professionals working at PHC's in the department of Health and Family Welfare. This is followed by i) A review of literature, ii) Need and rationale for the present study, iii) statement of objectives, iv) Methodology for the study, and v) Limitations of the study.

Chapter 2 in four sections. The first, 'The concept of training' deals with the definitional aspects of training, related terms used in training, rational for training, types of training, and issues and dilemmas in training. The second, 'Training Process - A Theoretical Frame' discusses different approaches to training, and training cycle and its key processes. The third, deals with training pedagogy. Different training methods their
suitability and relative merits and demerits are discussed and elaborated upon. In the fourth, a conceptual framework for in-house training is presented.

Chapter 3 presents the results in seven sections. In the first, a brief sketch of the organisation of public healthcare delivery system in the country at the centre / state levels is presented. In the second, the training philosophy and policy in the department are detailed. Findings regarding the organisational structure and linkages of in-house training institutions in the H&FW department in the state, manpower and physical infrastructure available at these training institutions, and the nature and types of training conducted for employees are detailed in the third and fourth sections. In the last three sections, perceptions of the key stakeholders in training – the trainees’, trainers’, and administrators’- on specific issues related to in-house training is presented.

Chapter 4 presents an analytical discussion on the key issues identified in the study.

Chapter 5 summarises major findings of the study and presents the conclusions from the study findings.

Chapter 6 presents recommendations and suggestions to improve the in-house training function in the department. This is followed by a select bibliography and appendices.

References
2. Asian Development Bank, Regional and Sustainable Development Department, Paper prepared for the conference on Up-Scaling poverty reduction, Shanghai, May 2004, P-1
6. Department of Health and Family Welfare, Govt. of A.P. 2005
8. Ibid., P.33
20. Commonwealth Secretariat 'Effective use of Training Methodologies, Touraine, Canada: Common Wealth Secretariat, 1979
25. Friedman, Paul G., & Yarborough Elaine A. ' Training Strategies from start to finish' New Jesey : Prentice Hall., 1985
31. Leslie Rae, How to measure training effectiveness, Gower publishing company, England, 1st ed. 1988
32. Anne Reid Margaret, Approaches and strategies, Handbook of Training and Development, Jaico Publishing House, Hyderabad. 1994
41. Lynton Rolf. P, Uday Pareek, Training for Organizational transformation, Part II for policy makers and change managers, Sage publications, New Delhi. 2004
42. David Turner, Role Plays-A source book of activity, Viva Books, New Delhi, Reprint, 2004,
44. Ratan Reddy, B, Effective Human Resources Training and Development Strategy, Himalaya publishing House, Mumbai, 1st Ed, 2005
57. Joseph. A. "Training Doctors for Primary Health Care - The Vellore model" World Health Forum (1985); 6(2); 118-21.

67. Sood A.K, Gupta M.C. "Follow-up evaluation report of logistics, supplies and material management courses for health and family welfare programmes conducted at NIHFW New Delhi. NIHFW (1993)


70. Ramdas Murthy. V. "Education of Health professionals for Primary Health Care" Ph.D., Thesis. 1995


76. Department of Family Welfare, Ministry of Health and Family Welfare, Govt.of India, " In-service Training Under Family Welfare Programme" 1996

77. Murphy, Claire C. and Batty, Helen, Women's Health Issues. Vol. 7; No. 6; pp:380-384 (1997)


85. NIHFW, New Delhi, Impact of Integrated Skill Training (IST) and Specialized Skill training (SST) under RCH Programme in the Country: Evaluation Report, March 2004

86. Prakasamma. M. "Training Needs Assessment (TAN) for functioning of Model Sub centres in three districts of Rajasthan" Report submitted to UNICEF and Govt. of Rajasthan. 2005
