# COMPETENCY BUILDING OF HEALTH PERSONNEL: IN-SERVICE TRAINING OF HEALTH & FAMILY WELFARE FUNCTIONARIES IN JAMMU & KASHMIR

THESIS

SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

By

Dr. YOGESHWAR KUMAR GUPTA

UNDER THE SUPERVISION OF
PROF. UDAI PAREEK

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE
PILANI (RAJASTHAN), INDIA

2000

Dedicated to my dear father

*Late Sh. Harbans Lal Gupta*

"*Delayed but not denied*"

# BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE
## PILANI (RAJASTHAN) INDIA

## <u>CERTIFICATE</u>

This is to certify that the thesis entitled "Competency Building of Health Personnel : In-service Training for Health & Family Welfare Functionaries in Jammu & Kashmir" and submitted by Dr. Yogeshwar Kumar Gupta, ID. No.91PZY645 for award of Ph.D. Degree of the Institute, embodies original work done by him under my supervision.

**PROF. UDAI PAREEK**
**Distinguished Visiting Professor,**
**Indian Institute of Health Management and Research,**
**Jaipur, (Rajasthan), INDIA.**

**Date:** /05/2000

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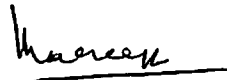
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# List of Abbreviations

| | |
|---|---|
| AD | Allopathic Dispensary |
| AGT | Awareness Generation Training |
| AI | Artificial Intelligence |
| AMT | Auxiliary Medical Training School |
| ANM | Auxiliary Nursing Midwife |
| ANMT | Auxiliary Nursing Medical Training School |
| ARI | Acute respiratory infections |
| ATC | Awareness Training Courses |
| ATHRDC | Administration, Training & Human Resources Development Cell |
| AWW | Anganwadi Workers |
| BEE | Block Extension Educator |
| BHW | Basic Health Worker |
| BMO | Block Medical Officer |
| CAIs | Computer-assisted instructions |
| CERPA | Centre for Research, Planning & Action |

| | |
|---|---|
| **CHC** | Community Health Centre (Sub-District Hospital) |
| **CHO** | Community Health Officer |
| **CME** | Continuing Medical Education |
| **CMO** | Chief Medical Officer |
| **CPD** | Continuous Professional Development |
| **CPE** | Continuous Professional Education |
| **DDC** | Diarrhoeal Diseases Control |
| **DHO** | District Health officer |
| **DIO** | District Immunization Officer |
| **DMIEO** | District Media Information, Education Officer |
| **DTO** | District Training Officer |
| **DTTs** | District Training Teams |
| **Dy. CMO** | Deputy Chief Medical officer |
| **DY. Director** | Deputy Director |
| **EUSCCCIP** | European project for the Use of Standards of Competence in CPD for Construction Industry Practitioners |
| **FMPHWs** | Female Multipurpose Health Workers |

| | |
|---|---|
| FPA | Field Practice Area |
| FW | Family Welfare |
| GOI | Government of India |
| GPs | General Practitioners |
| HCW | Health Care Worker |
| HFA | Health for All |
| ICAI | Intelligent computer-aided instruction |
| ICDS | Integrated Child Development Scheme |
| IEC | Information, Education, Communication |
| IIMS | Indian Institute of Management Studies |
| IMPA | Institute of Management & Public Administration |
| IPP | India Population Project |
| ISM | Indian System of Medicine, Ayurvedic, Unani & (Amchi, Tibetian) |
| J&K State | Jammu & Kashmir State |
| Jr. Sts. Asstt. | Junior Statistical Assistant |
| LHV | Lady Health Visitor |

| | |
|---|---|
| **LOGIC** | Learning in Obstretics and Gynecology for in-service clinicians |
| **MCH** | Maternal & Child Health |
| **MIS** | Management Information System |
| **MMPHWs** | Male Multipurpose Health Workers |
| **MO** | Medical Officer |
| **MOCOMP** | Maintenance of Competence Programme |
| **MOHFW** | Ministry of Health & Family Welfare |
| **MoU** | Memorandum of understanding |
| **MTP** | Medical Termination of Pregnancy |
| **NACO** | National Aids Control Organization |
| **NGO** | Non Government Organization(s), Voluntary Health Organizations |
| **NICD** | National Institute of Communicable Diseases |
| **NIHFW** | National Institute of Health & Family Welfare |
| **NMEP** | National Malaria Eradication Programme |
| **NRR** | Net reproductive rate |

| | |
|---|---|
| **NTI** | National Tuberculosis Institute |
| **OHT** | Oral hydration therapy |
| **OJT** | On the Job training |
| **ORS** | Oral Rehydration solution |
| **PACE** | Personal assessment in continuing education |
| **PBL** | Problem-based learning |
| **PC Diary** | Computer based programme for recording stimulus to learning (The Canadian maintenance of competence programme), Registered by The Royal College of Physicians and Surgeons of Canada |
| **PHC** | Primary Health Centre |
| **PPC** | Post-partum centre |
| **RCH** | Reproductive Child Health |
| **RFPTC** | Regional Family Planning Training Centre |
| **RIHFW** | Regional Institute of Health & Family Welfare |
| **RIS** | Rehbar-I-Sehat Scheme |

| SCOPME | The Standing Committee on Post-graduate, Medical & Dental Education advises Ministers in England on Post-graduate Medical and Dental education of GPS and of hospital specialists |
|--------|------|
| SDL | Self-directed learning |
| SHINE | Stanford Health Information Network for Education |
| SIHFW | State Institute of Health & Family Welfare |
| SPM | Social & Preventive Medicine |
| TA/DA | Travelling Allowancel/Daily Allowance |
| TAC | Training Advisory Committee |
| TBA | Traditional Birth Attendant |
| UIP | Universal Immunization Programme |
| UNICEF | United Nations International Children Emergency Fund |
| VHG | Village Health Guide |
| WHO | World Health Organization |

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# 1

## COMPETENCY BUILDING: THE NEED & SCOPE OF THE STUDY

T.H. White, an American author, has said the following on the value of learning:

> *"The best thing for being sad... is to learn something.*
>
> *This is the only thing that never fails.*
>
> *You may grow old and trembling in your anatomies,*
>
> *You may lie awake at night listening to disorders of your veins,*
>
> *You may miss your only love,*
>
> *You may see the world about you devastated by evil lunatics, or*
>
> *Know your honour trampled in the sewers of baser minds.*
>
> *There is only one thing for it then-to learn.*
>
> *Learn why the world wags and what wags it.*
>
> *This is the only thing which the mind can never exhaust,*
>
> *Never alienate,*
>
> *Never be tortured by,*
>
> *Never fear or distrust, and never dream of regretting."*
>
> *--T.H. White*

## Introduction

In the late 80's an editorial in the Indian Express stated: "The continued lack of concern about the unhealthy state of medical education in India is shocking. The various authorities who could do something about it are either unwilling or simply powerless to do so. . . . there are states, universities and colleges where medical education has been reduced as utter farce. Cases have come to light of deliberate dilution, often abandonment, of the requisite standards of teaching, inadequacy of laboratory and hospital facilities, minimum requirements for admission and gross corruption in examinations and results. . . ."

This is true even to-day!

"The goal of medical training is the production of the 'ideal' doctor: a competent and caring individual who remains aware of the advances and benefits of modern medicine but who recognizes the fundamental importance of applying clinical skills and the need for continuous learning."[37]

World Federation for Medical Education in 1994 recommended[75] that "Good Medical Education demands a useful match with the healthcare system. A contemporary doctor cannot be trained in university hospital alone. Without such partnership, the educational program will be of limited relevance to the realities of practice, and will not provide training to meet the needs of the population to be served. Such disjunction, when the medical education system is divorced from the health care delivery service, is still an unfortunate reality in many countries," including our country more so in our state.

"At the end of an undergraduate training program in a medical college (in India) it is expected that the doctor is able to master 87 skills. Out of this list many would be achieved during undergraduate course, while mastery in the rest of skills will be achieved during internship period. The consortium (consisting of CMC Vellore, JIPMER Pondicherry, AIIMS New Delhi and BHU Varanasi) which finalized the above list of essential skills also recommended in 1990 that either the clinical and practical examination in clinical and practical examination in clinical subjects be held after internship; or log books be prepared for monitoring internship period. Internship certificates be issued only if satisfactory acquisition of skills is demonstrated by perusal of the log books."[71]

Today's problems come from yesterday's solutions. Peter Senge in the Fifth Discipline

Past major events have also failed us badly and we have got doubtful on account of several reasons, the supreme being our catastrophic experience with ROME.

"ROME[58] stands for reorientation of medical education, a national program set up in 1979 to try to shift the emphasis of medical training away from ivory tower Western oriented medicine towards community health and preventive services. This was to be achieved by changing the undergraduate curriculum (to include more on community medicine), by arranging weekly visit, and by senior medical staff and students conducting outpatients in an outlying rural health center and thus fostering "awareness" and promoting communication on both sides. The scheme was funded by a one-off grant to each medical school and a generous if ill-conceived gift from the British. The latter took the form of massive white Bedford lorries (three for each of the then 106 medical schools) that were beautifully equipped as mobile medical clinics. They were to travel to the rural areas and be the focus of the hospital teams' activities. Unfortunately, they turned to be a dismal failure: firstly, the customs duty was heavy; secondly, they could not negotiate the narrow dirt roads; and, thirdly, those few that did were soon stripped of their possessions for no one had made financial provision for a garage and there was no way to stop pilferage. Finally, they had no air conditioning and were too hot to work in many areas. These lorries, affectionately referred to as white elephants, are not extinct- many are used for family planning clinics-but they do appear to have been a classic example of inappropriate technology".

"Health professionals in practice readily acknowledge the deficiencies in their training in such critical areas as coping with diversity, working in teams with other health care professionals, practicing prevention and effectively utilizing community resources.[61] Although the health care system is beginning to develop models of interdisciplinary team care, health profession schools have been slow to respond with interdisciplinary curricula. Rene Dubos,[40] winner of the Nobel Prize for medicine, remarked "Health is a potential: it is the ability of the individual and the group to adapt constantly so as to function better at present and prepare for the future."

"President Clinton has called for a nationwide system of reporting medical errors in the wake of last year's Institute of Medicine report[7], which found that between 44000 and 98000 Americans die each year from medical mistakes. This plan will also require all fifty states to adopt error reporting systems, to be triggered whenever a hospital mistake results in serious injury or death. Hospitals reporting errors would be publicly identified, but the name of doctors, nurses, patients would remain confidential. Medical errors include the use of wrong drugs, surgery on the wrong body part or the wrong patient, errors in blood transfusion, and improper insertion of catheters or feeding tubes." In UK "the Prime Minister launched the Commission on Health Improvement (CHI)[43], which will inspect health services in England and Wales and respond to services in trouble because "... 6% of senior doctors in the NHS had a performance problem in a five-year period."[11]

## The Need for Competence Building

"Unavoidably[55], about half of all practitioners will have performance figures that are below the national average, even if all practitioners are equally good and have the same failure rate in the long term. But not all practitioners are equally good. The one with the best performance figures will be at the top of the list, probably not by chance, and will be there, or thereabouts, if the list is renewed periodically. Unfortunately, not all patients can be seen by the best doctor" and "a small fraction of practicing physicians – for a whole range of reasons – function in their practices at less than optimal level.[54] ("Dyscompetence[54] is a word coined by David Davis to describe the entire gamut of suboptimal behaviors" and prevalence of dyscompetence in physicians is variously estimated at from 5 to 15 percent) Remedial education is an organized effort to assist these less than competent physicians to return to competence."

Since "medicine has a culture of hiding errors and forgiving those who make them"[39,60] together with the unconscious assumption among those who after having joined J&K Health Services think that "they know all they need to know," compounds the position of the patient in a situation "when the public is not in a good position to judge the quality of a service, the training, qualifications, and codes of ethics and behavior of a self-regulated profession having traditionally provided the desired protection."[6] For effective and efficient health care delivery, especially in rural areas and urban slums, in-service and refresher training of various categories of medical and paramedical workers has always been emphasized by health administrators.

We should become proactive and careful before the press initiates investigation/s about dyscompetence amongst those serving the health services similar to what we have seen in the United Kingdom, where "the last few years have seen a progression of "rogue doctors" and health care scandals through the media."[1] There are innumerable reasons for competence building but those consequential and applicable to our framework are documented below:

1.  Doctors in clinical practice are recording blood pressure daily and this is one of the first techniques taught in the very first semester. How do we know that they are doing their job correctly? "How to take blood pressure is usually the first clinical procedure taught at medical school. It is taken for granted that the proper technique is used especially when medical graduates are taking blood pressures for the purpose of patient care or clinical trials. But, as clinicians at this year's annual meeting of the American Society of Hypertension learned, this may be a rash assumption to make. According to a report from Medical College of Wisconsin, a large proportion of medical students fail to remember the proper technique even after hours of intensive instruction."[20]

2. Of the numerous recommendations made by various studies, it is felt that doctors should have the following attributes:

    a) Pew Health Professions Commission[47] has recommended the following qualities for a good physician:

        Care for the community's health.

        Expand access to effective care.

        Provide contemporary clinical care.

        Emphasize primary care.

        Participate in coordinated care.

        Ensure cost effective and appropriate care.

        Practice prevention.

        Involve patients and families in the decision making process.

        Promote healthy lifestyles.

        Assess and use technology appropriately.

        Improve the health care system.

        Manage information.

        Understand the role of the physical environment.

        Provide counseling on ethical issues.

        Accommodate expanded accountability.

        Participate in a racially and culturally diverse society.

        Continue to learn.

    b) Downie and Calman[12] listed the following roles that any health care professional needs to endorse:

      *Healer:* The primary function here is one of caring and healing. All professional health care groups have this as a basic function.

      *Technician:* There is a technical role in almost all professional activities, whether it is in performing an operation, dressing a wound,

massaging a leg, pulling a tooth, or knowing the relevant section of welfare legislation.

*Counsellor:* Much of the routine work of health care workers is dealing with the psychological and social problems of patients and their families. In some instances, this may even overlap with the spiritual area.

c) Essential Competencies Relevant to Primary Care are:[59] Competencies related to common prevailing conditions/ diagnosis:

Categories of prenatal care,

acute illness,

ongoing treatment of common chronic conditions.

Manage common acute and chronic medical conditions, including musculoskeletal and mental health conditions, &

perform ambulatory diagnostic procedures and simple surgery.[24]

Evaluation of undifferentiated problems.[59]

Comprehensive assessment.[59]

Interdisciplinary training[59].

Evaluation of occupational/school health related illness[59].

Detect, diagnose and manage common symptoms/physical signs.[24]

Care of patients in multiple settings.[24,59]

Care of the population. [24,59]

d) Jim Parle et al [52] have talked about 24 objectives to be achieved by the students at the completion of their studies at the University of Birmingham Medical School. The details are annexed at 1.1.

## 3) Reasons within the Physician

The driving force among the outstanding doctors interviewed in different working environments by Manning and DeBakey[41] was "their pride in performance ... a desire never to be (or to be seen as) professionally inadequate" and of course they all would also acknowledge that "learning ... does not mean acquiring more knowledge but expanding the ability to produce the true results we want in life."[63] "Keeping one's personal fund of knowledge current is one of the most formidable challenges that physicians face"[38] "especially those in rural areas removed from tertiary centers and emergency assistance, must have the training, qualifications, and confidence to meet any situation head on".[79] "The first concern is to protect patients. The second is to find out what has gone wrong and to establish the cause. The third, wherever possible, is to help doctors recover their fitness for normal practice." "Professional forces are more likely than other forces to lead to new learning activities".[19,33]

## 4) Advances in Medical Technology, Scientific Knowledge, Information & Technology

The progression in the technology used in the Health Care Delivery System is ceaseless and if doctors do not keep in touch with the knowledge around them, they will lag behind. "Scientific[21] knowledge and its technological expression will continue to grow exponentially with a doubling time of around ten years." "New[70] health technologies include diagnostic and screening techniques, medical (therapeutic) interventions and techniques for drug delivery, surgical interventions, and information technology and telecommunications. The greatest change in health services over the next decade is likely to be as a result of computers and telecommunications technology. These will promote and increase remote monitoring and diagnosis; links between hospitals, between hospitals and general practitioners, between hospitals and clinics; the speed of communication (for example, referrals and specialist

reports); and the capacity for remote consultation, operations, and teaching. These developments will require substantial changes in the skill mix of staff, and they have major training implications for medical, nursing, and technical staff." The authors finished by advocating "that the next generation of doctors will face an exploding volume of literature, rapid introduction of new technologies, more demanding patients, deepening concern about escalating medical costs, and increasing attention to the quality and outcomes of medical care."

"A[70] revolution in health care is occurring as a result of changes in practice of medicine and in society. These include changing demographics and the pattern of disease; new technologies; changes in health care delivery; increasing consumerism; patient empowerment and autonomy; an emphasis on effectiveness and efficiency; and changing professional roles. These are the challenges which will face the medical profession in the 21$^{st}$ century and to which continuing medical education must respond".

"Medical practitioners of the future ought to be able to make optimal use of new technologies, bearing in mind ethical and financial considerations and consumer ultimate benefit."[76]

"We can conclude that the next generation of doctors will be constantly learning and changing as they face an exploding volume of literature, rapid introduction of new technologies and more demanding patients."[51]

All information is now accessible on the internet either free or commercially sponsored. In theory, learners can teach themselves. Rapid access via computers and database storehouses put information at everyone's fingertips.Medical practitioners should be capable of using information technologies to systematically measure practice performance, appropriateness, and effectiveness while updating knowledge efficiently.

"Computer- based sources are available that can provide information in less than 30 seconds."[67] "Hand-held portable computers that can be used at the point of care will probably be the more useful sources."[15] "... physicians must have the ability to efficiently access optimal information when and where it is needed"[23] and "just-in-time" approach advocates that information be accessible during the process of patient care, allowing physicians' questions to be answered immediately and permitting scientific evidence to be incorporated at the time clinical decisions are made" correspondingly "providing access to reliable health information for health workers in developing countries is potentially the single most cost effective and achievable strategy for sustainable improvement in healthcare. Cost effective because the amounts of money required are negligible compared with those invested in health services. Achievable because providers of health information have the will and commitment to make it happen, and because information technology presents exciting new opportunities to complement conventional methods of dissemination. And sustainable because information access is sine qua non of the professional development of all health workers-the most vital asset of any healthcare system". "...lack of access to reliable, up to date medical information on effective treatments is one of the most important problems faced by health workers in developing countries."[50,18]

The traditional curriculum does not ensure that they become informed consumers of medical information who are capable of finding, evaluating, and applying new information as it becomes available. To be lifelong learners, doctors have to rely on new methods of learning while caring for patients, by using tools that help them to hunt and forage through the jungle of information.[64]

"No one is there to direct them towards the new information they need to learn or how to identify those pieces of their hard earned knowledge that are no longer correct".[31]

"One consequence of the death of information, ... is that health workers get used to practicing without keeping up to date. This happens in the developed world, but, according to the editor of the National Medical Journal of India, only 15% of doctors in India regularly read a journal."[36]

Peter F. Drucker[13], renowned management guru tells us that " Knowledge is different from all kinds of resources. It constantly makes itself obsolete, with the result that today's advanced knowledge is tomorrow's ignorance. And the knowledge that matters is subject to rapid and abrupt shifts – from pharmacology to genetics in the health care industry..." "The foundations of quality patient care begin during training, but with rapid developments in medical knowledge doctors have to learn continuously in practice if they are to maintain high quality care."[19] Hence, "an undergraduate medical qualification is no longer regarded as a lifelong certificate of competence to keep abreast of developments in medical practice".[28] That is why "many doctors become frustrated, however, when they find that the skills that allowed them to excel in the classroom, and even as house officers, are of little use in their medical careers. They have learned much, but they have not learned effectively how to learn." "The skills that got them through the pedagogical process are of little use when they are faced with a flood of information"[26] "... and that emphasis should move towards the development of general competencies which will be valid however medical practices develops, and particularly to promote life long learning"[69] because "inability of the traditional, pedagogical techniques to prepare doctors for life long learning has been recognized for some time."[22]

" . . . Some of the information in doctors' heads is out of date and wrong, new information may not have penetrated, and the information may not be there to deal with patients with uncommon problems. These deficiencies have become more serious as the rate of change in medical knowledge has accelerated: the doubling time of the biomedical knowledge base is currently 19 years." Accordingly "... with[19] the rapid developments in medical knowledge, doctors have to learn con-

tinuously in practice if they are to maintain high quality of care."[78]

"As a result of the tremendous explosion in medical knowledge, practitioners complain of increasing difficulty in finding the right information to satisfy the questions arising from practice."[74] "Doctors face a serious problem in keeping up to date. They do not know about important advances, feel overwhelmed by new scientific information, are not good at finding new information and do not know how to evaluate it when it is found."[74] "Science information management", conclude the authors, "is a critical professional skill that is not adequately taught in undergraduate medical education. Too often practitioners don't know that they don't know." Together with new drugs are being added to the already existing long list. Also the ideas about indications/contra-indications and side effects are changing constantly. The doctor is supposed to keep himself abreast of all the drugs being prescribed /likely to be prescribed by him. This can be achieved through continuously keeping in links with the latest literature about the drugs. The sources of information can be selected by the doctor from the available ones like Reference books, Drug compendia/ National list of essential drugs and treatment guidelines, Drug formulations, journals, verbal or computerized information or utilizing Pharmaceutical industry as source of information at least.

## 5)    Demographic change

Public health measures, famine control, and the modern availability of drugs and vaccines led to precipitous falls in mortality in much of the developing world, where life expectancy now averages 64 years.[77]

There is a shift in the disease pattern ... . Incidence of many infectious diseases has decreased but new diseases are making their presence felt in the form of increasing incidence. We are in the transitional phase from the disease spectrum of developing to the developed countries. As a result we are bearing

the double burden of diseases. . ...We are guilty of providing a poor service to our elderly patients, and we will be doing ourselves a disservice in our old age."[16]

As their populations age, nations face a dual burden of the new "epidemics" of non-communicable diseases and injuries as well as the "unfinished agenda" of infection, malnutrition, and maternal and perinatal conditions. WHO[77] report identifies four challenges for governments and international agencies: firstly, to focus health systems on delivering those interventions that will have the greatest impact on the poor; secondly, countering major threats to health, such as tobacco and antibiotic resistance; thirdly, developing health systems that offer universal access to services; and fourthly, encouraging health systems to invest in research and development."

"The "needs based" undergraduate and postgraduate curriculums in developing countries do not include study of health care for older people... and to reorient doctors already in practice to assume the new roles and responsibilities expected of them."[56] Each and every doctor, excluding the child specialist, needs to be trained to serve to the swelling population of the old.

The condition in our state would correspond to that in the rest of the country. That is "India is now faced with a disease spectrum ranging from the old diseases such as nutritional disorders, tuberculosis, and diarrhoeal diseases to the more recent atheromatous diseases and tobacco-related oral cancers. A drop in infant mortality and increase in lifespan mean that disorders of old age gain prominence. Added to these are new threats posed by pathogens such as multidrug-resistant mycobacterium tuberculosis, the new O139 cholera, and human immunodeficiency virus. This epidemiological transition is seen in many countries of the world but is nowhere more evident than in India."[46] Likewise, J&K state "is in epidemiological transition- whereby changes in the demographic profile and other determinants are shifting

the burden of disease, disability, and death from infectious and nutritional disorders to chronic lifestyle-related-diseases. The pretransitional disorders, which contributed 56% of the disability adjusted life year loss in 1990, are projected to decline to 25% by 2020. The non-communicable diseases, on the other hand, are expected to rise from 29% to 57% during the same period. Such projections are based on demographic trends, where the proportion of the population aged more than 35 years, 28% in 1981, is expected to reach 42% by 2021. Urbanization too is expected to accelerate during this period, the urban component of the population rising from 23% to 42%".[57]

The epidemiological transition towards increasing injury described by Omran and others[48,65] is clearly taking place in our state also, because Nepal, is similar in more than one way to this state and "injuries and chronic acquired diseases assume greater epidemiological importance in Nepal, emergency medicine as practiced in the United States will have increasing relevance to patient care."[45]

## 6) Greater attention to prevention

Doctors and other members of their team need to have the prerequisite competency to "promote healthy lifestyles by means of communication skills and empowerment of individuals and groups for their own health protection."[76]

## 7) Litigation threat

Application of the Consumer Protection Act on health professionals in the private sector has generated extra pressures on a self-regulatory profession like doctors. "Never before has life long learning been so important to the practice of medicine. Physicians are being held to unprecedented levels of accountability, asked to make scientifically sound decisions that are in the best interests of patients, payers, and society at large."[17]

"Given the rapid advances in medical sciences the greater expectations of an increasingly informed public and the growing tendency towards litigation it is inevitable that doctors must not only keep abreast of the latest developments, but also be seen to do so."[47]

## 8) Outcome assessment

With increased pressures on the system in the form of audits, clinical governance, and appraisals, revalidation and other form of assessments, the patient has gained importance.

## 9) Social

As "the social accountability concept ties the medical school's endeavors to its impact on society via education, research, service delivery, and health care organization" it should be true of the health Care providers."[5]
"Societies now expect evidence of the effectiveness of services and of the continuing competence of individual practitioners."[6]

## 10) Personal, professional & financial goals

Only those who desire to excel in their selected fields can achieve the personal goals they have planned for themselves. For this they have to keep on learning continuously so that they can achieve professional as well as financial targets. It is the duty of the employer, in our case the goverement to support all who desire to imcrease their professional skills.

## 11) Ethics

Health professionals are trained mostly to make medical decisions; this must be broadened to include judgment on social and ethical issues affecting health.

Although ethics has been central to medical practice, "Death and dying counseling are proposed competencies ... ."[59]
"Values/ethics are important in changing health care system. Medical Council of India (MCI) has recommended that medical ethics be taught to undergraduates as a part of forensic medicine.[44] Since we have not initiated this as yet, we may better start teaching Medical Ethics during service. "A report in the New England Journal of Medicine presented a basic undergraduate medical curriculum in ethics; some of the recommendations suitable for us are:[10]

♦ State and federal law as it relates to patient rights and physicians' responsibilities.

♦ Moral aspects of medical practice.

♦ Principles of ethics, such as autonomy, beneficence, and justice.

♦ Informed consent and valid refusal of treatment.

♦ Patient competency and incompetency.

♦ Confidentiality and truth-telling.

♦ Care of the terminally ill.

♦ Suicide and euthanasia.

♦ Termination of pregnancy.

♦ Nutrition and hydration in terminal and comatose patients.

♦ Advanced directives: living wills and durable powers of attorney.

♦ Futile treatment.

♦ Access, cost, and rationing.

## 12) Health Economics

Health care providers will have to take care of the cost of treatment they are providing, firstly, because it is justified and secondly,because the Government as well as the community does not have the requisite financial resources. Hence, the services need to be efficient and effective. They have to be trained and re-trained continuously on the subject since this is yet to be incorporated in the medical curriculum at the undergraduate/postgraduate level.

Subsequently, they are not providing services at the price people can afford. Cost reduction through the rational use of drugs can lead to huge saving.

Think of the money that is saved on account of patient going home earlier than anticipated, took lesser medications and went back to work earlier than expected.

## 13) Government of India wants trained Human Resources for Health in the Health Policy Statement

The Government Of India has issued "Guidelines for developing in- service training plan at district level" and training/s under all National Programs like AIDS Control Program, RCH, Leprosy, TB program etc.are supported /funded by them. Despite the priority being given to these programs, these National Health Programs are not being implemented as visualized. There are several reasons contributing to the nonsuccess of these programs and are not part of this study but the most important and fundamental determinant is the competency of the health care providers and the program managers. They are either not trained or are trained only in theory. Superbly designed programs have failed primarily because of this reason. Another reason could be that every program is conducting training in isolation from one and other member of the Primary Health Care Team.

The adaptation of health workers to a changing as well as new roles (e.g., a change in the organization of the health service that leads to health workers being asked to carry out different kinds of work, transformation of HCWs from unipurpose to multipurpose workers. The need of competence building is imperative when a HCW is assigned a new job on his promotion or otherwise.

## 14) Motivation of the Physician to be a learner

Nearly all Health Care Providers are by probity of their training and profession encouraged to learn." Motivation[32] in learning has been an important theme of learning theorists." Increased motivation creates the conditions for a more effective workforce. To translate this increased motivation into improved health service performance, of course, it must be matched with effective management practices and supervision. Motivation to learn is a critical element in health services.

## 15) Cultural Competence

A native of Kashmir valley when s/he goes to a doctor for treatment of diarrhoea is advised to take, along with medicine, plenty of hot soup, especially, mutton/ chicken soup. But when s/he comes to a doctor from a culturally different part like Jammu division, he will advise him/her to take 'Khichari' along with the drugs for the control of his ailment. This is unacceptable to the patient. Culturally competent care has been described as having five components 1) awareness and acceptance of cultural differences, 2) self-awareness, 3) understanding the dynamics of difference, 4) basic knowledge about the patient's culture, and 5) adaptation of skills (McManus 1998).

Pre- service education does not include educating culturally competent health care workers and "a[9] culturally competent system of care acknowledges and incorporates, at all levels, the importance of culture, the assessment of cross-cultural

relations, vigilance towards the dynamics that result from cultural differences, the expansion of cultural knowledge, and the adaptation of services to meet culturally unique needs"

## 16) Health Teams

Health Care Workers as a team have yet to receive any reorientation or update training for primary health care in our state. In the delivery of health care heterogeneous members are involved, they work as teams in providing Primary Health Care but are trained/educated independently. Pre-service learning is particular for distinct categories of different individuals of what would be the future Primary Health Care Teams (*groups*)? As Handy "points out", groups are not necessarily teams.[27]

This brings forth a practice dilemma in the field and to resolve this problem, during the service, they need to be trained individually as well as in-groups so that we can have "Teams".

As an example, we might realize the distinction in 'Primary Care teams' and the teams working in a tertiary care. In a surgical operation all members of the team are trained to work collectively to carry through the achievement of surgical intervention, each knows his/her role.

Doctors should accomplish realistically in teams within the health sector and between health and other sectors that influence health. "Increasingly[49], the "myth of the omnipotence of the independent practitioner" is being challenged as we discover the gains in quality and savings in cost when health professionals work together well." Moreover when "new[30] initiatives to improve management of diseases such as asthma, diabetes, or congestive heart failure invariably point out the need for interprofessional collaboration."

"Most doctors work in teams with other doctors, other health professionals, and administrators. Successful functioning depends not only on the doctor but also on the performance of the whole team. This multiprofessional team represents a complex learning system."[3]

"Research does show that age and competence are connected in certain situations; physicians in solo practice without hospital privileges, for example, are at risk as they become older, presumably because they lack day-to-day educational stimuli. But viewed in the context of all learning by physicians, age does not stand out by itself as a single factor in maintaining competence."[3]

It is no longer possible or desirable for medical care to be provided by individual doctors working in isolation. This is true of both primary and secondary care.[42]

"As team care becomes prominent in the future of health care delivery, those teams that are most successful will encompass the following essential elements[61]:

i.  Team members provide care to a common group of patients;

ii.  Team members develop common tools for patients' outcomes and work to reach these goals with the patients.

iii.  Appropriate roles and functions are assigned to each team member and each member recognizes, accepts and respects the role of others;

iv.  The team possesses a mechanism that allows all to contribute and share information essential for effective patient care;

v. The team possesses a mechanism to ensure that patient care plans are implemented, services are coordinated, the team is administrated, and the performance of the team, as related to patients' outcome, is evaluated.

"They will work alongside other health professionals in sophisticated multidisciplinary organizations that place value on the integration of learning and practice."[51]

## 17) Spiritual Factor

A growing body of evidence supports religious involvement as an epidemiologically significant protective factor that promotes healthy behaviour and lifestyles. Hence the future doctors would require to be competent in factors that support spiritual health in the form of meditation, yoga and other such fields.

## Conclusion

Above justifications may not be comprehensive for Competence Building of Health Care Workers for an organization which is achieving the desired results but for the J&K Health Services, we should lay stress on the stated competencies, on account of the fact that the "Health workers in the developing world are starved of the information that is the lifeblood of effective health care".[36]
Hence he/she has to find many methods of keeping up to date ...and the significant attention to the need for continuous learning in the business and manufacturing industries has lead to the term the "knowledge-rich workplace", of which clinical practice will be a prime example."[66]

Improvement begins with the belief that improvement is possible. The toughest, most fundamental, most frustrating barrier to improvement – the square at which we seem most often to get stuck – is the barrier we carry within: the barrier of the mind. How we think limits more than anything else what we may accomplish

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in improving our work. Peter Senge[63], calls this as 'mental models'. Hence, we all need to believe in our capacity to come out of the present situation. As no policy on strengthening the competence of the workers has been formulated yet, everything within the system is adhoc.

"Continuing medical education does not just mean keeping up to date with one's own specialty interests. It has to be extended into the wider aspects of continuing professional development, including computer literacy, ethics, appraisal, management, and evidence based medicine."[29] And "...doctors have to learn continuously in practice if they are to maintain high quality care."[19]

We have not yet initiated the process of continuous professional development of the in-service Health Care Workers in the State whereby improvement in their Continuous Professional Development is linked to accreditation or service promotion and career development. Undergraduate and postgraduate training is yet to be reoriented towards the goals of Health Policy and Primary Health Care. There is no promotion of research in Human Resources for health in the State. Tools and methods from West, not society's needs, have determined the Health Care research agenda in the State. Statistics show that diarrhoeal disease, respiratory illness, and infections including malaria and tuberculosis are the main cause of morbidity. HIV-AIDS are just around the corner. The preponderance of tourist places, religious places, Defence Personnel are recognized reasons for promiscuous behavior. Also we have a great population of men folks working outside the state for their livelihood. One wonder's just as we couldn't control/contain STD's how we can combat the HIV/AIDS threat.

From our personal experience, we know that the majority, if not all doctors serving the Health Services are neither trained nor updated to perform cardio-pulmonary resuscitation and other important life saving measures to be taken as teams or individually to save lives during natural or man made disasters like accidents,

bomb blasts,earthquakes etc.

When resources for Health Care Delivery are sparse, rational, cost-effective and quick solutions must be designed for Competence Building. Considering that Medical Colleges in the state have no direct responsibility after the students graduate and join service, government needs to provide and support a system so that the HCW keeps on learning to enable the organization to achieve the desired results efficiently as well as effectively because "the[25] learners can only be guided in their learning process". Just as Mark Twain never let his school interfere with his learning, health professionals inservice should also never let their service interfere with their continuous life long learning. Enlightenment from providing patient care is the foremost learning. This sums up all that we should strive to accomplish.

**The scope of the study**

We are all aware that the "medical education in India is based largely on the western model and unfortunately, both undergraduate and postgraduate curricula fail to match local health needs. Thus, products of such a system are mismatched with the existing expectations of the workplace and find it difficult to tackle many problems in their work situations."[14]

General Medical Council (In UK) discussed its proposals for revalidation for every doctor in the United Kingdom[6]. And we are not even conscious of the condition of those who render us medical care. To discover the position of in-service training, the inputs, the process, the infrastructure and the methodology adopted and output produced it was assumed that a study might be conducted.

The scope of the study in brief would be to find out the status of in-service trainings and identify the shortcomings, recommend the remedial measures, so that we could improve the in-service training system. The idea behind all this was to implement our health policy to the best of our capabilities within the available

resources. The scope was to analyse different aspects of trainings in the department of Health and Family Welfare in J&K State viz: *Vision, policy, strategy, organization, pedagogy and inputs of in-service trainings of 'Health Care Workers'.*

## Background of the Study

No study has been conducted so far on in-service training in J&K state and no framework is available about training system that is meaningful and effective. Under India Population Project-VII (J&K), a World Bank Aided Project, an attempt was made to start in-service trainings for HCWs but even after the completion of the project, a proper system has not been evolved to utilize the infrastructure created by the project to achieve its objectives. Every person viz. policy makers, divisonal, district and block head(s) of the health organisation and its health workers responsible for delivering health care to the people appreciate the need of attaining competency by acquiring the latest knowhow about the skills and the latest trends in diseases' spectrum and treatment thereof, but coordination of thoughts and actions is lacking so as to give a practical shape to continuous professional development of HCWs through in-service trainings.

The need for competency is being recognised, desire to be competent is there and financial component is also available from Govt. of India/World Bank through projects like IPP VII(J&K) and others, but the will to utilize the resources to evolve a system of in-service trainings is lacking. Apart from IPP VII, Govt.of India makes provision for in-service trainings under various national programmes. (AIDS control programme, Leprosy eradication, Reproductive Child Health Programme to name a few.) But there is a lack of initiative to utilize all these resources and opportunities purposefully to improve the competency of HCWs thereby providing relevant, cost-effective and scientifically sound health care to the community.

There is a need to transform the behaviour of officers and Health Care Workers from lamenting and finding excuses to a behaviour which is motivated, responsive and eager to initiate something for improving the functioning of the health organization for which they are working thereby fulfilling their job-requirements and also serving community.

In the context of this background, certain objectives have been identified. These projected objectives of the study have to take into account the existing working pattern of the health organization of the state, its shortcomings in various spheres and the measures to overcome these. The study aimed at the following :

## Specific objectives

a. To analyze the training policies, strategy and infrastructure available for in-service training of health and family welfare personnel in the J&K State, and availability of trainers/faculty in the training institutes etc.

b. To study the training procedures used in various in-services training institutions.

c. To assess the impact of in-service training on work performance of the trained personnel.

d. To study the status of development of human resources for health in J&K State.

e. To design/formulate/suggest an alternate in-service model, if required.

## Variables

(i) Existing training guidelines for in-service training Physical Infrastructure

(ii) Types of training institutions for in-service training

(iii) Trainers available/Faculty in various Training Institutions

(iv) Facilities for training available like lecture halls, hostel, teaching/learning aids.

## Study Population, Size of the sample and method of sampling

I. Trainers, faculty from medical colleges, retired personnel, consultants, faculty from the Jammu as well as Kashmir University, Institute of Management and Public Administration, J&K, and others. All out of this group who had been involved in the trainings under the IPP-VII continuously were administered the instrument coded-002.

II.     Policy makers who included the Health Secretaries/Additional Health Sec-
        retaries who had served in the health Department during the last 05 years.
        Directors of Health ·(Jammu, Kashmir division) along with their teams in
        two directorates as well as the Chief Medical Officers. All out of this group
        were administered the instrument coded-001.

III.    Staff IPP VII. All out of this group who had been involved in the trainings
        under the IPP-VII were administered the instrument coded-004.

IV.     Selection of Districts for Survey.

J&K has two different geographical as well as political divisions as explained
clearly in Chapter 5. Jammu is distinctively separated from Kashmir. Out of 6
districts in Jammu division, 4 were randomly named. These districts are Jammu,
Kathua, Poonch and Rajouri.Out of the 6 districts of Kashmir Division, the 3 randomly
chosen were, i.e. Baramulla, Badgam and Anantnag. From the Ladakh region of
Kashmir division incorporating two districts, Kargil & Leh, Leh was randomly
chosen.

From the districts selected the blocks were in the same way unintentionally
chosen. The blocks selected were as follows:

**Limitations**

The study has its own handicaps, thereby leading to its limitations. No previous
research in this field is on record in J&K State. The maintenance of records
of the Health organization is not taken seriously and their updating is not proper
from the block level to the Directorate. In the absence of any previous research
and paucity of record keeping, this research is a somewhat handicapped attempt
in the field. The fact of Kashmir being disturbed due to militancy, compelled this
study to limit itselfs largely to the Jammu division. However, an attempt was made
to include Kashmir valley in the study to the extent possible under the prevailing
militancy.

*Inspite of these limitations, a small begining through this study is being
made to set the wheel of re-search in health care in J&K rolling for future research.
Just, as to build a skyscraper, the beginning is made from below the level of the
ground, this study is a beginning from scratch so as to initiate the research(s)
and infuse an element of introspection in the health organization of J&K state
to awaken it from its deep slumber and give it impetus to evolve a realistic, scientifically*

*sound and cost effective system for continuous professional development of its HCWs. If the spirit of this study and its implications are accepted positively by the policy makers, the researcher believes that it shall go a long way in recuperating the competency of HCWs and thereby the health organizations. Health personnel shall be able to provide cost effective health care to the community which shall be culturally and socially accepatable as well. The HCWs shall be given many options through the model to be proposed to keep on learning throughout their productive life. They will be motivated to serve as well as learn. Health status being an important component of the social sector will improve within the already resource starved system by developing human resources for health care in the government sector.*

*The fact of service compulsions, shortage of time for training, dearth of funds and resources and deficiencies of staff who are devoted to teaching must be admitted before if realistic, attainable, and feasible answers to the dilemmas of Competence Building can be established. We can begin from where we are and formulate on prevailing conditions, not asking anyone to change their ways completely but cheering everyone on to adapt just a little, in ways that they feel comfortable with.*

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**Annexure 1.1**

Twenty –four Objectives to be achieved by students at the Completion of their Studies at the University of Birmhingham Medical School.

At the endof the course, the student will be required to:

1. Recognize the need to respond effectively to continuing change, understanding and valuing the role of the individual doctor as both instigator of and respondent to change in the organization of health care and the professional role.

2. Demonstrate the skills of independent and self-directed learning and a commitment towards the maintenance of clinical competence through continuing professional development.

3. Obtain and critically evaluate comprehensive evidence in relation to clinical problems and demonstrates scientific method and professional judgement in its application.

4. Demonstrate proficiency in the use of information technology in professional learning and professional practice, recognizing its value and its limitations.

5. Demonstrate competence in the application of the biologic sciences in clinical practice: recognizing the need for continuing learning in this field as a part of professional development.

6. Demonstrate competence in the application of the behavioral sciences in clinical practice: recognizing the need for continuing learning in this field as a part of professional development.

7. Practice in a manner that demonstrates an understanding of the effects of the trauma, illness, and treatment on sexual and reproductive function.

8. Practice in a manner that demonstrates an understanding of the normal aging process and the alterations in patterns of health and disease that accompany it.

9. Practice in a manner that demonstrates an understanding of mental and physical disease processes and the social, cultural, and individual factors that affect disease presentation and patient reaction.

10. Practice in a manner that demonstrates an understanding of the importance of social and environmental factors as determinants of disease and a commitment to the public health roles of the doctor.

11. Practice in a manner that demonstrates effective interpersonal and communication skill in complex interactions with patients, their significant others, and colleagues; demonstrating an understanding of human relationships.

12. Demonstrate proficiency in obtaining and recording a comprehensive patient history and competence in focusing on the patient's problems.

13. Demonstrate proficiency in performing a physical and mental assessment of the patient.

14. Demonstrates a level of proficiency in the evaluation and interpretation of evidence from the history and physical/mental assessment of the patient, which enables him/ her to generate a differential diagnosis showing a knowledge of clinical probability.

15. Demonstrate proficiency in formulating plans for further investigation and treatment, recognizing that this must be undertaken in partnership with the patient and / or the significant other.

16. Demonstrate proficiency in a agreed-upon repertoire of basic clinical procedures and an ability to utilize these appropriately.

17. Demonstrate an understanding of a an agreed-upon range of problems presented to doctors and the range of preventive, investigative, and therapeutic actions that they have available.

18. Demonstrate an understanding of the principles of therapy that will effectively underpin current practice and continuing professional development.

19. Demonstrate competence in first aid and resuscitation and an understanding of life–support techniques.

20. Practice in a manner that demonstrates an understanding of the ethical and legal framework for the professional role and an awareness of the responsibilities placed on the individual practitioner by the need to maintain the highest possible quality of care.

21. Demonstrate a capacity for self-audit and effective participation in peer-review: showing an awareness of his/her own strengths and weaknesses and a commitment to working safely within the current limits of his/her professional knowledge.

22. Practice in a manner that demonstrates the ability to work as an effective member of both the medical team and the multi-professional team.

23. Demonstrate an understanding of health care organization, funding, and provision and a recognition of the need to practice within economic and practical constraints.

24. Practice in a manner that demonstrates an understanding of the scientific method and a recognition of the way in which research affects patient care, showing an ability to undertake small-scale research and a commitment towards continued active involvement in research processes.

# 2

COMPETENCY BUILDING: SURVEY OF LITERATURE

## Introduction

"According to the Concise oxford Dictionary, competence (or competency) denotes the 'ability to do' something or the 'ability for a task'. The Macquaire Concise Dictionary defines competence as 'the quality of being competent', where competent means 'properly qualified' or 'capable'. Significantly, in both of these dictionary definitions the prime focus is on the competent people having the ability or capability, which will enable the satisfactory completion of some task(s). a description of the abilities or capabilities required for competent performance of an occupation typically invokes term such as 'knowledge', 'skills' and 'attitudes', i.e. relevant personal characteristics that underline competent performance."[40]

"Competence includes a broad range of knowledge, attitudes, and observable patters behavior which together account for the ability to deliver a specified professional service. The competent doctor can correctly perform numerous (but not necessarily all) clinical tasks, many of which require knowledge of the physical and biological sciences or comprehension of the social and cultural factors that influence patient care and well-being." [40]

"Competence in this sense also involves adoption of a professional role that values human life, improvement of the public health, and leadership in settings of health care and health education. The competencies are many and multifaceted. They may also be ambiguous and tied to local custom and constraints of time, finance, and human resources. Nevertheless, a competency-based curriculum in any setting assumes that the many roles and functions involved in the doctor's work can be defined and clearly expressed. It does not imply that the things defined are the only elements of competence, but rather that those which can be defined represent the critical point of departure in curriculum development. Careful delineation of these components of medical practice is the first and most critical step in designing a competency-based curriculum."[69]

## Dyscompetence

"David Davis has introduced the term "dyscompetence" as such a noun. Its first syllable is the early Greek root "dys-" (similar to the Latin prefix "dis-" found in "disease"); it is a common medical prefix – one that adds to the rest of the word the meaning "lack of" or "opposite of." The rest of the word, "competence," is one of those attributes that is hard to define but that every body understands: it falls somewhere between "capability" and "proficiency" and implies that its bearer is likely to do what is required reasonably well. We'll use, "dyscompetence" here, then, to describe the entire gamut of suboptimal practice behaviours, along with its companion adjective "dyscompetent," and the implication is that our remedial efforts are designed to effect a return to competence. Some observers prefer the phrase "personalized physician enhancement" to describe the process. The spectrum of dyscompetence extends from minimal and highly focused need at one end (with its accompanying variations in the cognitive, interpersonal, and behavioral aspects) to such egregious problems as dementia, substance abuse, and felonious activity at the other end. At the "easy end" of this spectrum, voluntary participation is the norm, and "enhancement" becomes the same attractive concept it is in all of mainstream CME. The far end of the spectrum, almost by definition, is beyond the reach of self-controlled voluntary effort. Education, at least in the conventional use of the term, does not apply in such situations; instead, some degree of coercion is usually required."[83]

Hager & Gonczi[41] (1996) attempt to clarify exactly what competence is and found that the logic of the concept of competence is itself such as to support a broader view about competency standards rather than the narrow one that is so often taken for granted.

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## Definitions

Many researches have given definitions of competency. Some of which are as follows:

I. "Competence may be defined in terms of what the individual brings to the job (the input), what the individual does in the job (the process), or what is actually achieved (the output). Thus, if the input is 'green fingers', the process may be sowing, weeding and pruning, and the output a thriving garden or vegetable patch."[84]

II. Cees[104] (1999) remarked about Traditional view on competence. Clinical competence, according to him, consists of a set of different components or latent attributes, each fairly distinct from each other, and relatively stable across situations and time, with growth characterized as a monotonously process with growing expertise.

III. Cees[104] also describes the components of competence that could (or should) be measured separately and different methods measure different components. And low correlation across different methods measuring different components are to be expected, he asserts.

IV. Cees[104] in addition elucidates that many more features of competence can be distinguished which are : Factual Knowledge, Clinical Reasoning, Problem-solving, Judgement, Decision-making, Diagnostic skill, Technical Skill, Doctor Patient Relationship, Cognitive Skills, Self-directed Learning Skills, Attitudes, personal Qualities, responsibility, Moral Values, History-taking, Data-gathering, Communication, Laboratory Utilization, rapport, Patient Management, Patient Education, Medical Expertise, Cognitive Processing Level.....

Explaining more, he says that the

| Competence is **NOT**: | Competence **IS**: |
| --- | --- |
| ☐ A set of distinct components | Highly integrated. |
| ☐ Generic or stable | Content and situation dependent. |

Cees[104] presents us a simple model of competence that is:

**Does** Performance assessment in vivo:

Undercover SPs, Video, Logs....

**Shows how** performance assessment in vitro:

OSCE, SP-based test....

**Knows how** (Clinical) Context based tests:

MCQ, essay type, oral....

**Knows** Factual tests:

MCQ, essay type, oral....

In conclusion Cees[104] tells us that basic method of learning process ("Meta" skills) evaluation is missing. Meta skills and reflexiveness refers to metacognition, i.e. the ability to monitor ones cognitive activities, to be able to correct and redirect when necessary, the ability steer ones learning. (Fig. on next page).
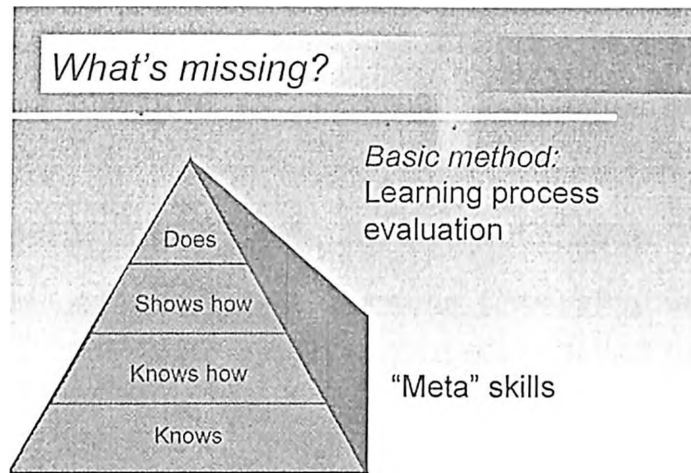
Sullivan[99] tells us about the two key terms used in competency –based trainings, which are :

• **Skill-** A task or group of tasks performed to a specific level of competency or proficiency which often use motor functions and typically require the manipulation of instruments and equipments (e.g., IUD insertion or Norplant implants removal). Some skills, however, such as counseling, are knowledge- and attitude- based.

• **Competency-** A skill performed to a specific standard under specific conditions.

**Continuing Medical Education**

Tyler[103] (1949) in this book discusses the historical roots for the Essentials of the Accreditation Council for Continuing Medical Education and the principles guiding accreditation by the Association of Canadian Medical Colleges are found in this text. Tyler is largely responsible for turning the attention of educators towards the determination of learning needs and behavioural objectives as the central issue in curriculum planning.

Bertram[5] (1977) and others by reviewing 65 articles about CME, the authors suggest new directions for successful implementation and evaluation of CME. The authors find that generalizations about CME are difficult to make because of inadequate methods of evaluation, insufficient program descriptions, lack of defining terms, and noncomparability among CME programs.

Lloyd[63] and Abrahmson(1979) in this review of the literature from 1961 through 1977 describes 47 studies which employed one or more objective methods of evaluating CME. About half of the selected studies report demonstrable improvement in at least on of the three end products following CME – physician competence, physician performance, and patient health status.

Stephen[26] (1984) tells us from 1300 to 1801, Venice required an early form of speciality certification for medical practice and the yearly attendance of refresher courses in anatomy by all licensed practitioners in the city. The latter requirement provoked ingenious evasions, which the Venetian government continually tried to overcome. This article describes the system and its implementation, based on Venetian archival documents.

"WHO Technical report No.: 803 (1990) exhorts that the Health workers at all levels can be expected to gain from continuing education in terms of improved performance, and thereby to support the functioning of the district health system, with consequent benefits for the delivery of health care. Health personnel need to be competent to adopt, or advise others on, the most efficient ways of solving new health problems. They must be well informed about, and skilled in, ways of encouraging individuals and the community to be self-reliant in health protection. They should be able to judge the validity of the information they receive. They should be aware of the extent to which people can afford new types of treatment and accept new concepts of health care and new technological developments."[108]

Engel[27] (1992) and others report that the Wellcome Tropical Institute has assisted countries in the tropics to establish viable systems of continuing medical education, particularly for young doctors practicing in rural areas. As part of this strategy the Institute has developed material for use in distance learning. The first attempt to apply the problem-based learning approach to written material use by an individual learner in the absence of a tutor led to a trial in Ghana, Kenya and Pakistan to compare a conventionally designed module with a problem-based learning module on the same topic for their respective acceptability, effectiveness and efficiency. The design, implementation and results of these three comparative trials are presented.

Grant [36] (1998) informs us that the main messages that comes out of the literature on CME is that the key to effective continuing medical education is not in how to learn. It is not that there is a best teaching method or that there is a best learning method. Or that there is worst learning or teaching method. There is no best buy. The key to effectiveness of CME is in how the process of CME is actually managed.

According to him in the world of CME and what is written about it there are some confusions. First of all there is lack of an evidence base about CME. There is a lack of an evidence base of what makes effective CME. About the characteristics it should display. Even about what it is for. About how it should be defined. There are lots of competing views and schools of thought, and changing rhetoric in what is said and written about CME/CPD.

There are confused concepts. Confused definitions. We have **CME, CPD and CPE.** These confused concepts and definitions seem to imply an awfully didactic medical kind of thing. CPD seems to imply something more interactive that includes learning about management and something that isn't quite clinical. CPE takes us farther along and involves groups and other professions. So each of these terms

seems to imply something or another but exactly what is debatable.

There is widespread and, very often, unchallenged assumption that education is the most effective stimulus to change. We can see that in medicine the thing that actually stimulates change is very often organizational change. So there is confusion or may be unresolved debate. When you read the literature it would tell you definitely this is what a term means. And then you come across another paper that tells you absolutely definitely the opposite. Clearly this merits being called confusion.

Grant[36] further explains that there are different kinds of CME models such as the update model, keeping up-to-date. Another is the competence model. Is CME there to make sure that people have competencies? They might have acquired the ability to do something. And then there are performance models. When you look at the literature there are lots of different types of intended outcomes identified as well. People are after changes in knowledge, changes in skill, changes in attitude and these all go by vogue. Also changes in behavior. Or are we after changes in patients outcomes? Are we after change in public confidence? Or are we after changes in quality of health care in the health service? So when you look at the literature there are lots and lots of intended outcomes identified. There is no consistency across what people are trying to do with their CME. This lack of consistency just makes life a little difficult.

Against this background there are some challenges. The first is to differentiate the rhetoric and the opinion from the fact. Grant[36] has been involved in, doing reviews of CME has to be the best from rhetoric. People write about self-learning and all that educational stuff, and quote another paper which quotes another paper, and 16 papers down the line you will find that somebody has asserted that this is a good thing. You have to be careful with these things to differentiate opinions and rhetoric from fact. And when we do come across evidence we need to consider

how do we use this evidence to establish a well managed CME system.

We are interested in outcomes, and when we start looking at literature on this and what we find is the way that one can conduct educational research is highly problematical too. There are lots of design problems with the research that's done. Firstly, there is inadequate research. Lots of educational programmes which are looked at don't have good educational design. If you want to do research into this area you need to know what it is about. The sort of things that are written about don't have such things as needs assessment, no stated objectives, no clear design for the teaching programme, no repeatability, no sampling structure.

Grant[36] did a literature search since 1990 and found 2,561 articles, When searched on outcomes he found that of those 2,561 articles 118 dealt with outcomes. The rhetoric is massive. There were 62 from medicine. There were others from professions allied to medicine and nursing. When we looked at outcomes other than 'people felt happy at the experience of learning', we found that 16 articles only actually addressed patient care, practitioner knowledge, behaviour and performance. This also contains the 99 random control trials that Dave Davis did, and so it does include that as well. But you can see from the structure of the literature exactly the size of the problem you are up against, setting aside that you are actually doing educational research in the first place.

Grant[36] concluded that there is certainly a need for development. Credit accumulation systems which are dominant seem to have certain effects which are these:

◊ An increase in quantity and not in quality of CME programmes. It does guarantee attendance by and large.

◊ Very often driven by academic evidence, and not practice-need or relevance.

◆      Not very often outcome oriented or set up to achieve some outcome.

◆      Fails to cover a lot of professional learning. We know that doctors learn most by talking to other doctors.

So, there is challenge in all of that, which is to increase the purposefulness and the effectiveness of CME, for the reasons given here that doctors rarely attend CME for reasons of an identified need, and rarely feed their CME back into practice as a conscious thing. If CME is mandatory, what people say, and what seems to be the case, is that satisfaction with that education experience declines quite markedly. But there is also a negative effect on voluntary attendance at other events. It is reported that changes in satisfaction and changes in practice are perhaps less.

The successful CME strategies reported by Grant[36] from the literature are these:

◆      Where activities are aimed specifically and consciously at patient outcomes changes are found. In other words if you set out to do something you can usually achieve it.

◆      Where activities are specifically aimed at practitioner outcomes change is usually demonstrated. The reason for success is there is needs assessment and the experience is linked to practice. The next point is important: there is not a single educational event that works for everybody.

◆      CME that arises from personal incentive seems to have positive effects. But many reasons are undefined, ungeneralisable things.

◆      If CME is reinforced then that is good.

♦    Not very often outcome oriented or set up to achieve some outcome.

♦    Fails to cover a lot of professional learning. We know that doctors learn most by talking to other doctors.

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The implications of this are that we need to develop a managed process for CME, so that the process is important rather than going to the activity of a CME event; and to ensure that the process contains these known characteristics that he talked about, needs assessment and so on.

## History of development through Training

Kautilya's [65] (1984) observation that a real foundation for systematic human resource management existed in India as early as 4th century BC which should be matched to the modern concept.

Kautilya and Training

| KAUTILYA'S THOUGHT | CONCEPTS TODAY |
|---|---|
| Comprehensive description of duties & responsibilities of superintendents | Task Explanation |
| Prescription of very precise but especially high qualifications (in terms of family background and personality traits) for high officials and low qualifications for junior officials | Duty requirements/ Qualifications. |
| The use of references, on-the-job tests, spying and discussion at a various phases in the selection of high officials. | Selecting criteria and promotional process . |

| KAUTILYA'S THOUGHT | CONCEPTS TODAY |
|---|---|
| Elaborate life-long training program for the development of the King and subordinate officers. | Continuing life-long learning & development. |
| Incentive scheme on the basis monetary incentives and punishment (penalties) used in controlling the performance and conduct of employees and citizens–stick and carrot approach. | Incentives/Disincentives for improved performance |
| Performance and conduct evaluation through regular supervision and espionage activities. | Assessment/appraisal |

**On Training infrastructure**

Gupta[38] (1994) and his colleagues have advocated that there is an urgent need to have a well defined training infrastructure in the country with a National Level Apical Training Institution which should provide technical guidance, support to the state level Training Institutes, along with continuous monitoring of training programmes in order to suggest suitable interventions.

and supported by State level training institutes with the following infrastructure:

◊    Training of the faculty of various training institutes in the state (in technical areas & in teaching methodology)

◊    Training of District & State level program officers.

◊ To provide technical guidance & support to other training institutions in the state especially in curriculum planning preparing training material.

◊ To undertake operation Research.

◊ To plan & monitor the training programmes for the state.

◊ To coordinate the activities of various training agencies.

◊ To provide linkage with the Directorate of Health Services in terms of training.

◊ To organize sensitization workshops for senior Administrator & Managers.

District level Training Institutes Consisting of Medical Officer, Public Health Nurse/Health Supervisor(Female), Health Supervisor(Male) and Health Educator.

They also endorsed that for the faculty growth there is necessity of the following:

◊ Creation of teaching cadre promotional avenues and training allowances for faculty.

◊ Job description for all category of training faculty.

◊ Inter and Intra state faculty exchange programmes.

◊ Net working of HFWTCs with state level & National level training institutes.

Concluding their report they have advocated for regular monitoring of training activities by the state level training cell.

**Guidelines for Continuing Professional Development/Competence building through in-service trainings in the country.**

Government keeps issuing guidelines on the subject. The guidelines[35] applicable presently are:

**1.    At the state level[35]**

i.    States will implement national guidelines. There would, however, be sufficient flexibility to allow for local priorities and existing health situations. The materials produced centrally would be adapted, translated and printed by States.

ii.    States would utilize funds available under different components of family welfare for integrated training.

iii.    States would ensure maximum utilization of existing training institutions created under family welfare program.

iv.    States would ensure availability of professionally qualified trainers at all training institutions. All training positions should be filled up on priority.

v.    All training institutions will be linked up with service deliver/hospitals for skills development. Service providers in the hospitals should be actively involved in training.

vi.    Private hospitals may be recognized for skill development of health providers if sufficient caseload is not available in government facilities.

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vi.     Private hospitals may be recognized for skill development of health providers if sufficient caseload is not available in government facilities.

vii.   States will build up a system for monitoring and evaluation of in-service training.

viii.  Training of Trainers at regular intervals (say 2 years) will be arranged by the states to ensure updating of the knowledge and skills of trainers.

## 2. At the State Family Welfare Training Institutions[35]

ix.   These institutions would carry out training of trainers. The training institutions would evolve a program to evaluate the effect of training imparted by them by following up the performance of persons trained by them in field from time to time.

## 3.   District level[35]

Planning and implementation of in-service training of all health functionaries at regular intervals will be the responsibility of the district administration. This should form an integral part of the District Annual Health and Family Welfare Plan.

i.   All district resources for training like ANM schools, district training centres, district hospitals must be utilized to the maximum.

ii.   Regular training roster would be drawn up every year and communicated to the trainers, training institutions and trainees well in advance.

iii.   The district training capacity shall be built up to meet the training needs of the district.

iv.  The training of trainers of district will be arranged in consultation with the State Government.

v.  Adequate funds, modules and materials must be arranged from the state/ Central Government.

vi.  Mechanisms for monitoring and evaluation of training will be established.

vii.  Apart from institutionalized training at regular intervals, on the job training and team training may be planned and implemented. Meetings at block/PHC level on monthly basis would be utilized for continuing medical education(CME). Need based topics can be discussed and procedures demonstrated. The CME has to be formalised and should be conducted by MO/LHV or a staff nurse.

viii.  To build up accountability for training, the district coordinator and the trainers must certify the trainee as having acquired the requisite skills.

**Training Policy:**

A training policy for Rajasthan[102] has been formulated that is based on the following guiding principles:

◊  Decentralization of Planning, Monitoring, Evaluation and Decision-making.

◊  Autonomy to all Training Institutions for implementation of training.

◊  Accountability in terms of training effectiveness and efficient utilization of resources.

◊  Synergy with the client system.

◆ Linking the training function with HRD especially the Career System.

◆ Openness to continuous feedback and new ideas and developments.

**Recommendations of various other organizations on Continuing Professional development:**

Prys-Roberts[52] (1999), in the SCOPME report has identified the following components:

I. **Opportunities:** how these can be maximised through the funding and enabling of CPD and CME, based on the premise that it is in the interests of the employer to maintain a well trained and updated workforce.

II. **Planning:** using innovative ways through which doctors and dentists can plan their own professional development and continuing education rather than having it planned for them by others, for instance, by the professional bodies. How can individuals match their plans with the opportunities provided for them by their employer?

III. **Delivery (particularly of CME):** we need to identify better and more innovative ways of delivering CME. We need to consider aspects such as self-directed learning and reflective practice, including the facilitation of education in small groups for individuals who do not have the opportunity to work in a large learning environment. Learning portfolios need to be considered together with ways in which they can be used as a rigorous method for capturing evidence of reflective practice, as a potentially useful means of assessing and accrediting CME, rather than the 'brownie points' system existing at present. Distance learning packages also need to be considered.

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**IV.** **Outcome:** this should be considered not only in terms of improvements in patient care, important thought that is. At the same time the aspect of job satisfaction should not be overlooked and also satisfaction for the purchasers and providers of CME. In the summary of their report to the Chief Medical Officer on the effectiveness of CPD, Stanton and Grant state their review of the literature has shown no educational panacea, no most effective learning method, no 'best buy' outcome measures. They also state that the effectiveness of CPD is a function of the process. We must focus on improving the quality of that process and making it more relevant to individual needs, service needs the needs of the term or the practice.

**Some of the other recommendations in the SCOPME[52] (1999) document are:**

**I.** The medical and dental professions should make a commitment that all doctors and dentists will take part in a process of review during which they would have the opportunity and be assisted to reflect and analyse their own performance, informed by the views of their peers and in the context of nationally agrees standards and local needs, and helped to take action to capitalise on their strengths and remedy any weakness.

**II.** CPD should be much better publicized and explained to doctors and dentists within the context of the development of clinical governance and incorporating the broader concept of CPD as described by SCOPME rather than limited to a narrower debate about the future of continuing education for individual doctors and dentists.

**III.** Doctors and dentists, having recognized CME and CPD as a professional and ethical obligation which is of direct benefit to them and their patients, should articulate rationales and justifications for, and give an account of, their CME/CPD activities in ways that indicate clearly how such activities

enhance understanding and promote the development of services, clinical practice and patient care within the context of their present and future roles.

**IV.**

a) Promote and support the initiatives relating to CPD in the Department of Health's consultative document, A first class service: quality in the new NHS, incorporating the broader concept of CPD as described by SCOPME;

b) Recognize CPD as a means to service development and innovation through support for, and investment in, the maintenance of quality of their medical and dental staff, and take appropriate action;

c) Recognize that CPD needs adequate and equitable funding to enable individual doctors and dentists to promote and develop their own career plans in the context and in the interests of the teams or practice communities in which they work, and take appropriate action;

d) Recognise the effect that time constraints and other barriers have in disrupting educational participation within practice communities, and take appropriate action;

e) Work with medical royal colleges to develop an integrated approach to the organisation of CPD and peer review at a local level.

**V.**

a) Develop and publicise, on a national, regional and local basis, innovative ways to help their members and fellows comply with strategies designed to meet the needs of their own and other specialties;

b) Modify their methods of classifying and recording CPD and CME activities. There is ample scope to develop, in liaison with NHS trusts, schemes which provide opportunities for clinicians to articulate their developmental expectations and approaches, indicating the benefits derived from such activity, and describing the potential impact on services, clinical practice and patient care;

c) Develop, in liaison with NHS trusts, a system for peer review and appraisal as a potential means of assessing CPD and CME participation.

Lastly the report recommends for an urgent need for representatives of the stakeholders, including the doctors and dentists themselves, to develop an integrated approach to the organization and management of CPD.

**Six approaches to Human Resources Development:**

Rangekar[85], suggested six approaches to Human Resource Development,: (a) Queen-Bee Approach, denotes that an individual (a chieftain, King or tribal leader) utilizes all available resources for his own development; (b) Brahmanic Approach, refers to the use of all resources for developing an elite group (such as Executives) or a section of the organization; (c) Input Approach, which regards Human Resources development as a mathematical equation of a given input and proportionate output in a mechanistic manner; (d) Automation Approach, believes rationalization and over-simplification of HRD process with the creation of ability to work with computers and modern technology; (e) Motivational Approach, sees HRD as a means of motivation to all employees for greater productivity and efficiency; and (f) Creative Approach, which insists on creativity and innovation as min planks of HRD efforts.

## Debate on education and training

Glaser[32](1962) contributed that education is linked with an individual's goals more than those of the Organization, achieved through training though some overlapping between the two sets of goals may be visualized. The same author posited that training is normally paid for by the employer (though both the employer and employee may benefit) and management education may be transformed into education since it is more individual than company-oriented.

Canadian Government[34] (1962) opined that training is the process of teaching skills to an individual to enable him improve his performance on a particular job, while development is the process whereby an individual acquires new knowledge, habits, attitudes, elf-awareness and value of maturity.

Steinmetz[97] (1969) viewed training as a short-term process of education while development is along-term educational process.

Gupta[39] (1974) referred to development as the unfolding of the innate capacities or abilities of an individual.

Kuruvilla[61] (1980)argued that education is a general preparation for life without specific regard to an immediate vocational goal, while training is a more specific and vocational preparation.

In the opinion of Krishnamurti[60] (1980) "education is not merely a matter of training the mind, ... it is not merely acquiring knowledge, gathering end correlating facts, it is to see the significances of life as a whole — creating human beings who are integrated in thought and feeling and, therefore, are intelligent ... it should help man to discover the true values which come with unbiased investigation and self-awareness."

Kazmi[56] (1987)and Kizhakkaili have defined training as the process of assisting people in enhancing their efficiency and effectiveness at work by improving and up-dating their knowledge, developing their skills and inculcating appropriate behaviour and attitude towards people and work, and classified the Training Function into four phases: (a) Assessment of training needs and setting of objectives; (c) Implementation and conducting of training programmes; and (d) evaluation of training effectiveness. A distinction has been made between training and development.

## Concepts about learning and educational needs

Bandura[3] (1977) in this book provides a clear and complete description of social learning theory as developed by the author. In particular, the role of cognitively based motivation and the concept of self-efficacy are explored.

Woolf[110] (1990) discusses the PECE Plan is a system to provide direct assistance to physicians in meeting their individualized educational needs. Physicians in six semi-rural communities in Ontario, Canada, have participated in the project. Questionnaires were sent asking for detailed information on their structured and self-learning needs. The replies of 35 physicians have been analyzed. For structured learning 54 topics were requested, and for self-learning 106 topics. There was remarkable agreement in the areas of most interest for both structured and self-learning: cardiology, dermatology, emergency medicine, geriatrics, obstetrics and gynecology, pediatrics, and preventive medicine. Interest in a subject was the main motivating force, with about half as many requests related to perceived weaknesses. For structured learning, emphasis was on updates with particular interest in acute aspects of diseases and courses were the most popular format. Usually, physicians wished to attend a CME event once a year. For self-learning needs, updates and reviews were equally popular, as were acute an chronic aspects of disease. Most requests were reprints rather than abstracts, and computer-assisted instruction requests made up 23% of the total. The average cost of providing an educational package

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to each physician was $215. The system developed by PACE Plan is useful when designing part of the self-directed educational aspect of a maintenance-of-competence system.

Wall[106] & Saultz (1994) in this article provides a context for understanding the development of physician retraining programs, examines precedents for retraining physicians, describes four possible pathways through which medical subspecialties might acquire primary care training, and emphasizes the importance of defining the scope of practice and necessary skills for providing primary care. Obstacles to retraining appear to be economic (Who will pay? Is the cost worth the benefit?) and jurisdictional (Who will define core competencies? Who will credential programs and trainees?). The current absence of demand for such retraining programs suggests either that marketplace-induced changes will not take place or that the notion of a primary care provider shortage and an oversupply of medical sub specialists is overstated. The inclusion of physician retraining programs in proposed health reform legislation suggests that policymakers are convinced that such programs offer one viable solution to the nation's medical workforce needs.

Brandt[7] (1996) through this paper informs us that there is a growing body of research and educational literature on cognitive learning theory that focuses on how the mind works and effective new methods to promote learning. These findings and discussions are currently held in the educational research arena and are often directed at other researchers and educators who are already familiar with the concepts. The purpose of this paper is to introduce continuing educators to basic principles gleaned from a wide range of perspectives about cognition, esoteric theories, research and emerging implications for education. In addition, questions are posed to stimulate the exploring of new ways to think about the assumptions behind continuing educational theory and practice.

Hargreaves[43] (1996) informs us that the "Train the trainer" courses are one obvious way of enhancing consultants' teaching skills. An improved capacity to train does not, however, always lead to changed practices. Trained consultants have more confidence about training, but colleagues lacking this preparation may be sceptical of, feel threatened by, or become resistant to new ideas or practices.

Cottrell[17] (1997) explains how lectures are being replaced by small-group, interactive sessions that try to ensure physicians come away with clinically relevant information that will affect daily practice. Community-based programs also allow physicians to fit learning into their busy lifestyles.

Brigley[8] & others (1997) in this paper inform us that by the adoption of the concept of continuing professional development, which draws on learning by reflective practice, marks an important step in this direction. Continuing professional development emphasizes self-directed learning, professional collaboration, the learning needs of individuals and their organisations, and an inquiry-based concept of professionalism.

"Smoking(1998) in public places, offers a backcloth to cultural differences Americans and Australians resort pretty quickly to the law; in Britain few specific laws exist, but social pressure has acted to limit smoking in workplaces and public places; in France, in contrast, there are laws to limit smoking in bars and restaurants but social pressure to ignore them."[24]

Fox[29] & Bennett (1998) report that in the future, comprehensive CME systems will incorporate what we know about learning and change into three interlocking components. The first, most basic, and essential component is the self-directed curriculum designed by each doctor to incorporate new knowledge and make use of his or her own experience.

The second component is based on learning in-groups. Ranging from journal clubs to formal, traditional courses of instruction, these activities may be sponsored by organizations such as medical schools and professional associations. Group learning serves as a source of interaction and helps to shape the image of change and the practice of medicine.

The third component is learning within learning organizations. Hospitals, clinics, group practices, accreditation bodies, social service agencies, and governments reflect societal needs and demands indifferent ways.

These three systems must be integrated in order to be effective in facilitating change and learning in practice.

Meryn[70] (1998) elucidates that there is a need for more efficient, evidence-based and evaluated continuing medical education (CME) programs. But CME in one's own specialty interest is not enough. CME has to be extended into a broader context of continuing professional development (CPD) including personal, social and political aspects of medical practice. New methods have to concentrate on adult learning principles, individual needs and self-directed learning and have to promote performance-based assessment, outcome evaluation. Communication skills, patient education and the use of computers and telecommunication technologies. All principles have to begin before entering medical school and then be continued and supported through a new medical curriculum from undergraduate to postgraduate training according to the 'lifelong learning' principle.

Donen[22] (1998) in this paper acquaint us that there is no evidence that current approaches to CME, mandatory or voluntary, produce sustainable changes in physician practices or application of current knowledge. Ongoing educational development is an important value in a professional, and there is an ethical obligation to keep up to date. Mandating self-audit of the effect of individual learning on physicians'

practices and evaluation by the licensing authority are effective ways of ensuring the public are protected. The author recommends the use of a personal portfolio to document sources of learning, the effect of learning and the auditing of their applications on practice patterns and patients outcomes. A series of principles are proposed to govern its application.

Mazmanian[68] & others (1998) tell us that successful change in practice may depend less on clinical and barriers information than other factors that influence physician's performances. To further develop the commitment-to-change strategy in measuring the effects of planned change, it is important to isolate and learn the powers of individual components of the strategy as well as their collective influence on physician's clinical behaviors.

Reid[86] (1998) explains through this paper that over the period of a year I have systematically recorded any episodes of continuing medical education (CME) that I have attended, and reflect on the effectiveness of this system in terms of whether it has achieved its objective, that is, has my behavior changed, and whether it has achieved its objective, that is, has my behavior changed, and whether the existence of the need to record CME have been most beneficial. I conclude that the proposed level of CME is readily achievable, useful, but costly. The way in which I learn most or best is in preparing presentations or teaching sessions. There has been some debate on the usefulness of keeping a record of CME to which I would like to add my opinion. I also recommend the form of record keeping I have used as an impetus to reflection and research on the topic of education received, as this reinforces and enhances the educational experience.

**Self directed learning**

Curry[18] and Putnam (1981) in this survey finds that a majority of maritime Canadian physicians use individual learning methods (reading) to update knowledge,

but that these activities get no support from universities or continuing medical educators. The authors believe that CME·should supply physicians easy access to up-to-date information, train them in how to assist and tutor each other, and provide them with the resources to refresh their knowledge and skills at the universities.

Brookfield[9] (1984) in his paper advances four criticisms regarding the current state of self-directed learning research, and offers suggestions for shifts in direction of the research paradigm commonly guiding the field. These include: (1)the emphasis on middle-class adults as the predominant sample studied; (2)the almost exclusive use of quantitative measures to document self-directed learning; (3)the emphasis on individual dimensions, to the exclusion of the social or contextual dimensions; and (4)the absence of discussion concerning the implications of these decisions for social and political change.

Hummel[53] (1986) in this study reports on the self-directed learning activities of physicians to determine the extent to which physicians engaged in this type of learning. Both family physicians and general surgeons were included. Tough's model of a learning project form the basis for the study. Interviews focusing on nine specific characteristics of self-directed learning revealed that less learning projects occur in family physicians compared to specialists, and that motivations related to solving clinical problems.

Richards[89] (1986) the author discusses self-directed learning in the health professions. In discussing motivation, the author reviews findings concerning the role of practical motivation, cognitive dissonance, curiosity, and the need to solve a particular patient problem. Resources are discussed, as is the planning of learning projects and their outcomes.

Oddi[76] (1987) in this paper reviews work on self-directed learning as a process. The author suggests that the understanding of self-directed learning could be improved

if the process were studied as it relates to the learner's personality. The author suggests that an understanding of the characteristics of personality that lead an individual to initiate and persist in learning would provide a more comprehensive focus for the study of self-directed learning.

Grow[37] (1991) has based this book on the situational leadership method of Hersey and Blanchard *(Management of Organizational Behaviour*: Utilizing Human Resources. 5th ed. Englewood Cliffs, NJ: Prentice-Hall; 1988), the author describes the staging of the staged self-directed learning skills, and that the teacher can help or hinder that progress. The article is helpful in discussing various teaching methodologies and their match to the learner's degree of readiness for self-direction.

Candy[14] (1991) in his book presents a comprehensive survey and an analysis of self-directed learning theory and practice. It also presents a new theoretical construct for self-directed learning.

Merriam[70] and Caffarella (1991) in their book explore research and theory-building efforts in self-directed learning. The studies are categorized to include those that address, (1)self-directed learning as a form of study, including the process of self-directed learning, and (2)self-directedness as a personal attribute. Major issues that researchers must address are reviewed.

Brookfield[10] (1993) explains two inherently political dimensions of self-directed learning include: (1)recognition that the intellectual heart of self-direction involves issues of power and control; and (2)any authentic exercise of self-directededness requires certain political conditions to be in place.

Parboosingh[78] (1993) and Gondocz describe a credit system for personal CME participation . It is designed to facilitate recognition of high quality CME, and to encourage specialists to compare their CME efforts with those of their colleagues.

This is a carefully crafted attempt to encourage and evaluate self-directed CME activities by means of a diary.

## Continuous Learning:

Tough[101] (1971) in this book describes the findings and implications of studies of adult learning projects that illuminate the entire range of deliberate adult learning, self-planned learning and private lessons, as well as courses and workshops. Tough discusses what and why adults learn, how they learn, and what help they obtain in doing so.

Penland[81] (1979) uses a national probability study to verify some of Tough's work regarding self-initiated and self-planned learning. Reasons for undertaking lifelong or self-initiated projects include a wish to keep the learning strategy flexible and the desire to put one's own structure on a learning project.

Geertsma[31] (1982) and other authors describe an interview of physicians dealing with the change process. A hypothetical model of this process is proposed: (1) priming – dissatisfaction is felt about some aspect of practice; (2)focusing-an awareness of alternatives is developed; (3)follow-up further thinking about the change occurs; (4)rationalization-solutions are envisioned to practical problems associated with the potential change; and (5)triggering-the change is implemented after a clear communication regarding the desirability of the change.

Goldfinger[33] (1982) asserts that "contamination" (other sources that provide as educational message such as lectures or consultation) should not be treated as a hindrance to studies of CME, but should be recognized as an integral part of the learning process.

Neufeld[73] and Norman (1985) in this book defines competence, outlines methods for its determination, explores methodological considerations, and concludes by offering suggestions for the application of these methods across the continuum of medical education.

Lockyer[64] (1985) and his other colleagues in this paper report on the sources of information family physicians and specialists use in the process of making changes in their clinical practices. An average of 3.08 sources of information are utilized for each change and more than 50 percent of the changes are complete in less than 1 year.

Oddi[75] (1986) in this study describes the personality characteristics of self-directed, continuing learners; the development of an assessment instrument; its refinement; and its testing on graduate students. Its test-retest reliability, internal consistency, and descriptions of conduct validity suggest its use as a valid tool for identifying self-directed continuing learners.

Richards[88] (1986) in this paper discusses how physicians use reading as a model of CME. It describes how reading is a learning method on which physicians spend considerable time.

Richards[90] (1986) in this paper describes how physicians' interaction with colleagues is a major method of self-directed learning, particularly in the areas of clinical problem-solving, information-seeking, and evaluating new diagnostic and therapeutic developments.

Mazmanian[67] (1987) and other authors describe a method of self-directed learning for physicians that can be used to satisfy a portion of specialty board recertification requirements. It integrates contract learning (self-formulated learning plans), information brokering (linking physicians with consultants and community

resources), and collegial networking by discussion groups. Proof of accomplishment allows the method to be used as part of a specialty board recertification process.

Fox[30] (1989) and other authors in this book which is based on an analysis of interviews with 340 practicing physicians, and explores changes made and learning associated with those changes. Forces for change include those considered to be professional, personal, and social. Learning as process and as a response to change is explored. The interrelationship of these forces is affected by the physician's image of the consequences of the change. A model is proposed that describes the overall relationship between forces for change, learning, and types of change.

Parente[79] (1989) offers techniques for retraining memory to enhance cognition. Research is presented implying that educators should consider neuropsychological variables in discerning educational needs.

Beaudry[4] (1989) in this meta-analysis of studies of CME displays positive results in physician knowledge, physician performance, and patient health status (the last effect the weakest of the three). Despite cautions in interpretation, the author notes the "returns" in these three areas given the significant investment in CME on the part of providers and participants.

Jennett[55] (1990) and his colleagues in this study describe a medical information system pilot project to assist rural physicians with their CME. The service involves the cooperation of a trained librarian and of volunteer consultants who help with the identification and screening of appropriate resources to assist physicians with answering questions raised in practice.

Knowles[58] (1990) in this book which is a classic in the field of adult learning, human resource development, and adult education. In one volume, the book gives a wide range of research related to the field of adult learning.

Knox[59] (1990) in this article provides an overview of the complex set of personal and situational influences on participation in what the author terms "systematic learning activities, which reflect discrepancies or gaps between a learner's current and desired proficiencies." A list of suggestions are included for providers to use when planning, conducting, and assessing effective learning activities.

Osherson[77] and Smith(1990)reviewed studies in the following areas: (1) remembering, (2)categorization, (3)judgement, (4)choice, (5)problem solving, (6)cognitive development, and (7) rationality. Thinking is viewed in terms of evolution and cognitive science.

Mazmanian[66] (1991) along with others describe Program planning in terms of organizational and communicative systems. A seven-step program-planning model is presented. The rationale, decisions, and activities for each step are specified and instrumental techniques appropriate to selected learning outcomes are presented.

Davis[20] (1992) and other authors review the impact of diverse CME interventions on physician performance and health care outcomes. The majority of the 43 studies of physician performance show positive results in some important measure of resource utilization, counseling strategies, preventive medicine, and general management. In contrast, less than half of health care outcomes studies shows such change.

Renschler[87] and Fuchs (1993) in this pilot study determines what physicians thought they had acquired the competencies they used in their daily practices. Physicians were queried 5 years after completion of their formal training. Specialty education is believed to contribute most to the physician's daily practices, with a median contribution of 20%.Practice-based independent learning was found to be superior to formal continuing education.

## Use of Medical Informatics

Piemme[82] (1988) talks about the use of the computers in medical education has been in evolutionary development since the early 1960s; its adoption, however, has been less widespread than the promise of the medium should warrant. Computer-assisted instruction enhances learning, allowing the student the discretion of content, time, place, and pace of instruction. Information conveyed can take several forms, some better suited to undergraduate medical education. The use of the computer in certification and licensure could, within a decade, transform the way competence is assessed. Its greatest promise, however, may lie in providing pertinent information at the time when, and in the place where, patient care takes place. New developments in data storage and retrieval forecast applications that could not have been imagined even a year or two ago.

Haynes[44] (1989) and others talk about the advances in technology which may help physicians to manage information more effectively through more accessible, validated clinical indexes, databases of diagnostic test characteristics, computerized audits of clinical activities with feedback, expert systems, on line access to the medical literature, and other tools of medical informatics.

Williamson[109] (1989) along with his colleagues in this study question the widespread stated belief that journals are a major source of information for the practicing physician. The study examines the self-perceived problems of primary care physicians and their opinion leaders in managing health science information. Primary care physicians were interviewed using a formal telephone survey. Among the findings, less than one in the three practitioners personally searched the literature when information was needed; two out of three practitioners claimed literature volume was a problem, and very few practitioners actually analyzed the scientific soundness of the literature that they did review.

Schon[92] (1987) in this book describes a new epistemology of practice. As its point of departure, the competence and artistry embedded in skillful practice – especially the reflection-in-action that practitioners sometimes bring to situations of uncertainty, uniqueness, and conflict – is seen as the core question of professional knowledge. The book describes models and examples to better understand the implications that this theory holds for improving professional education.

Soumerai[96] and Avorn (1990) in their paper discuss some of the most important techniques of "academic detailing" include: (1) conducting interviews to investigate baseline knowledge and motivations; (2) focusing programs on specific categories of physicians as well as on their opinion leader; (3) defining clear educational and behavioral objectives; (4) establishing credibility through a respected organizational identity, referencing sources of information; (5) simulative active physician participation in education interactions; (6) using concise graphic educational materials; (7) highlighting and repeating essential message; and (8) providing positive reinforcement of improved practices in follow-up visits.

Habbick[40] & Leeder (1996) in response to major changes in the origin, expression and place of management of much illness, many medical schools are turning their attention increasingly to the community from whence to derive their curriculum and wherein to effect their teaching. The traditional hospital base of teaching is eroding, necessitating new, innovative approaches to medical education . Becoming community-oriented, or using community based learning, offers potential benefits for the schools, the students, and the public. The experience of others demonstrates the necessity of enlisting community representatives as partners in the process of change. Institutional barriers are significant and careful planning is needed to overcome them.

Clemmer[15] & others (1998) discuss about the Cooperation-working together to produce mutual benefits or attain a common purpose-is almost inseparable from

the quest for improvement. Although the case for cooperation can be made on ethical grounds, neither the motivation nor the effects of cooperation need to be interpreted solely in terms of altruism. Cooperation can be a shrewd and pragmatic strategy for accomplishing personal goals in an interdependent system. Earlier papers in this series have explored the conceptual roots of modern approaches to improvement, which lie in systems theory. To improve systems, we must usually attend first and foremost to interactions. Among humans, "better interaction" is almost synonymous with "better cooperation." Physicians have ample opportunities and, indeed, an obligation to cooperate with other physicians in the same or different specialties, with nurses and other clinical workers, with administrators, and with patients and families.

Campbell[13] & others (1999) talk that while studies in continuing education have identified the information sources most frequently used by physicians for learning, little is known of what stimulates physicians to engage in learning activities that lead to a commitment to adopt a new practice. This study reports on the recorded stimulus for learning of 8576 items of learning submitted by 652 physicians who voluntarily enrolled in the Maintenance of Competence Program (MOCOMP®) of the Royal College of Physicians and Surgeons of Canada and used a paper or electronic diary (PCDiary) to record self-directed learning activities. The most frequent stimuli for initiating learning were reading the medical literature and managing patients. The only demographic variable that significantly influenced the item stimulus profile of these physicians was the number of years since graduation (p =.0001). Physicians less than 10 years from graduation more frequently recorded learning items stimulated by an audit of practice and less than 10 years from graduation more frequently recorded learning items stimulated by an audit of practice and less frequently by a discussion with peers compared with physicians in practice more than 10 years. Physicians in practice for more than 30 years initiated learning activities primarily based on their interaction with patients. There was no significant relationship between the item stimulus profile and the physicians' specialty type (p=.47), size of the

community where their practice is located (p =.24), or their type of university association (p =0.17). This study provides evidence related to differences between the activities physicians received had stimulated learning and the likelihood that the learning would lead them to make a commitment to change practice. The stimulus code "reviewing the management of more than one patient" was 47% more likely (odds ratio=1.47, 95% CI, 1.27, 1.71, p<.001) and "audits of a clinical or laboratory practice" 31% more likely (odds ratio=1.31, 95% CI, 1.04, 1.66, p=.024) to result in a commitment to make a change in practice than reading the medical literature, the most frequently assigned stimulus for learning. The implications of these findings related to models of physician learning and studies of change in continuing medical education are discussed.

Westberg[107] & Miller (1999), the authors survey what has been published about the information needs of clinical practice, including primary care, and discuss currently available information resources potentially relevant to primary care. Potential methods of linking information needs with appropriate information resources are described in the context of previous classifications of clinical information needs. Also described is the role that existing terminology mapping systems, such as the National Library of Medicine's Unified Medical Language System, may play in representing and linking information needs to answers.

Shaughnessy[93] & Slawson (1999) explain that the Medical schools equip future doctors with some of the information they will need to practise effectively. The traditional curriculum does not ensure that they become informed consumers of medical information who are capable of finding, evaluating, and applying new formation as it becomes available. To be lifelong learners, doctors have to rely on new methods of learning, while caring directly for patients, by using tools that help them to hunt and forage through the jungle of information.

## Quality assurance in medical education

Suwanwela[100] (1995) in this paper tells us that quality in medical education is indeed a complex issue. With increasing challenges to medical practice and the medical profession, attention to the quality of medical education has become more important-indeed, essential. Some aspects of quality are absolute and can be viewed against gold standards, but other aspects depend on the mission or objectives of the nation or institution. A total quality approach is needed, covering the input, process, and output of medical education. Examinations play an important and necessary role but alone are insufficient. For medical education, methodological improvement in quality determination is urgently needed.

Vroeijenstijn[105] (1995) tells in this paper that the best way to ensure quality is by continuous attention to it. Quality depends not on measurement instruments and tools but rather on the spread of quality awareness among faculty, staff, and students. A tool for safeguarding quality is the design of a well-functioning quality assessment system, based on two pillars: a system of internal quality control and external assessment by peers. The connection between the internal and external assessments is the self-evaluation by the school. On the one side, this self-evaluation is a critical self-analysis and an agenda for improvement. On the other side, it contains information for the external reviewers. The peer review also provides input for the process of improvement.

## Learning Organization

Confessore[16] (1997) in this paper tell us that the Learning organizations may provide a mechanism by which physicians can meet the challenges currently occurring in the medical profession, such as the emergence of HMOs, increased concern over medical costs, and the need to maintain continuing competence in increasingly complex environments. Learning organisations are generative; they are responsive

and have been used effectively during times of rapid change and in chaotic, highly competitive environments. This paper describes the learning organizations and discusses how self-directed learning and communities of practice provide the beginnings for the establishment of a learning organization in the medical profession. Continuing medical education (CME) is seen as the mechanism to transfer new knowledge across all members of the community of practice and become a key component in building learning organisations.

Lawrence[62] (1998) tells us that ours is time of rapid and accelerating change. To stay relevant and effective during such times, an organization must change at least as fast its environment changes. To be innovative, the organization must change even faster and it must anticipate the future. This means it must become a "Learning Organization". There is no quick-fix in this endeavor and organisations must customize their approaches using certain principles as guidelines. Not only is there a need for radical organizational transformation and new management paradigms in the private sector. This requirement is very much a part of the new realities of the public sector. However, there are not many examples of public sector learning organisations, which in itself, may be indicative a deeper dilemma. This is not to say that efforts are not being made in this direction by public sector organizations. In fact within the Public Service of Canada, for example, there are notable recent initiatives in this directions. These include the adoption of system-wide, value-driven change such as staffing reform, recruitment reform, information-technology infrastructure universal classification system, etc. However, although these are significant steps in the right direction, the greater part of the journey still lies ahead of most public sector organizations.

A developing a learning organisation strategy, in the government, must emphasize assessment of its present status, proper validation tools for measuring progress, and be an integrative system that is linked to a clear corporate strategy objectives.

Davies[19] & Nutley (2000) inform us that the individuals learn and enhance their personal capabilities within organisations, but what does it mean to talk of an organisation learning? Can a hospital, a general practice, or a health authority be said to learn? An organisation is not simply a collection of individuals; the whole amounts to something greater than the sum of the parts. Similarly, the learning achieved by an organisation is not simply the sum of the learning achieved by individuals within that organisation.

1. Learning is something achieved by individuals, but "learning organisations" can configure themselves to maximize, mobilise, and retain this learning potential

2. Learning occurs at different levels-single loop learning is about incremental improvements to existing practice; double loop learning occurs when organisations rethink basic goals, norms and paradigms; and meta-learning reflects an organisation's attempts to learn about (and improve) its ability to learn

3. Learning organisations attempt to maximize learning capacity by developing skills in double loop learning and meta-learning

4. Learning organisations exhibit several common characteristics and underpinned by distinctive organisational cultures.

Hanna[42] & others (2000) explain that successful remediation of severely incompetent physicians is uncertain at best, even with prolonged, intensive CME that incorporates modalities thought to be effective in changing physicians' behaviors. Alternative educational techniques may need to be developed for this select population. Conversely, there may be reasons that preclude improvement even with optimal techniques.

## Learning Portfolios

Campbell[12] & others (1995) familiarize us through this paper where in a pocket-size diary was offered to 4005 volunteers, physicians, and surgeons practicing across Canada in 10 specialties. Volunteers were requested to keep records of their self-directed continuing medical education (SD CME) activities for a period of 10 months in 1993. At the end of this period, they were surveyed to determine use of the diary, their opinion about keeping records of SD CME activities, and their acceptance of the MOCOMP* program's philosophy. A second survey was undertaken of volunteers who had not used the diary. A total of 2188 volunteers responded to the survey. Of those, 56.6% reported using the diary. Respondents concurred with four statements in the survey, which correlated with their reported use of the diary. A significant positive association was found with statements concerning their understanding of what to record, identifying which keywords to enter into the diary, and whether recording SD CME activities helped them to think about the care of patients. No correlation was found between recording activities and the ability of physicians to identify a potential impact that the SD CME activity may have on their practice. The number one reason given by those who did not complete their diaries was an abhorrence to filling in forms. Overall, the degree of the volunteers who used the diary reported that they would personally recommend the MOCOMP program to their colleagues. The next steps for the program include developing a software tool to enhance the educational value of a personal diary for SD CME activities.

Campbell[11] & others (1996) clarify the purpose of the present study which was to determine how physicians have used the PCDiary software to create a personal learning portfolio. The study findings support the assumptions that PCDiary can help physicians to take control and give direction to their practice related continued learning. PCDiary functions as learning portfolio, providing a basis for physicians to reflect on their practices, and has the potential to increase the effectiveness

of a physician's learning activities.

**What clinical information doctors need:**

Smith[95] (1996) —in this paper explains that the :

- Doctors use some two million pieces of information to manage patients, but little research has been done on the information needs that arise while treating patients

- Textbooks, Journals, and other existing information tools are not adequate for answering the questions that arise: textbooks are out of date, and "the signal to noise" ratio of journals is too low for them to be useful in daily practice

- Computer systems that have been developed to help doctors are not widely used-perhaps because they have not been developed to meet doctors' information needs

- When doctors see patients they usually generate at least one question; more questions arise than the doctors seem to recognise

- Most of the questions concern treatment

- Many of the questions are highly complex, simultaneously asking about individual patients and particular areas of medical knowledge

- Often doctors are asking not simply for information but for support, guidance, affirmation, and feedback

o   Many of the questions go unanswered, but most could be answered; it is, however, time consuming and expensive to answer them

o   Doctors are most likely to seek answers to these questions from other doctors

o   The best information sources provide relevant, valid material that can be accessed quickly and with minimal effort

o   New information tools are needed: they are likely to be electronic, portable, fast, easy to use, connected to both a large valid database of medical knowledge and patient record, and a servant of patients as well as doctors.

## Education – Policy and Administration

Evans[28] (1992) in this paper examines the growing discontinuity between medical education and the general health needs of the society. He explains and illustrates this failure of the academic medical centre in several ways; by a parable; by reporting the results of his informal survey of faculty and residents; by presenting the findings of an international conference on medical education; and by presenting the findings of an international conference on medical education; and by giving a detailed description of the design and impact of the "Health of the Public" programme, launched by the Pew Charitable Trusts and the Rockefeller Foundation in 1986. He maintains that there is an imbalance in the training of physicians and other health professionals, because academic medical centres are dominated by supply-side thinking-which is driven by new knowledge and technology and the resulting need to find patients to fit the interests and technical capabilities of specialists and the equipment and service of hospitals – and have underemphasized demand-side thinking, which concerns the patient and the health expectations, needs, and trends in the community. The author maintains that academic medical centres can continue to achieve the recognition they seek, but can do so by making the changes

needed to better balance the driving forces of supply and demand. Only by doing this will they fulfill their fundamental mission of fostering the health of the public.

Saha[91] , Colle and  Linder (1992) in this paper describes the efforts of the Department of Family and Community Health at Sultan Qaboos University in providing opportunities for the development of "hands-on" problem-solving skills appropriate for Oman. The curriculum of the Department is discussed, highlighting the unusual emphasis of this discipline in both the pre clinical  and clinical curriculum of the College of  Medicine. The importance of continuous assessment and supervision of students is discussed. Course-work in the pre clinical curriculum of the Department is kept to a minimum. Field-work forms an important part of the pre clinical training, where application and problem-based learning are emphasized. During the clinical years the students are exposed to an integrated series of lectures and practicals covering  core knowledge in clinical medicine. Practical clinical training, over a total period of 15 weeks, takes place at a variety of sites where common problems in primary health care in Oman are handled by students under supervision.

## Sustaining and Rewarding Clinical Teachings

Biggs[6] & Price (1992) report that high standards of clinical teaching are essential in the trainings of medical students but greater prominence needs to be given to its **importance**. Strategies are described by which one medical school has raised the awareness of clinical teaching and supported those who deliver it.

## Medical Ethics

Mitchell[72] (2000) along with others through this paper make known that over the past two decades in the USA, bioethics has become an accepted component of medical education, whereas in Australia, 10 years or even less would encompass the  history of most existing programmes. Given the legendary conservatism of medical schools in Australia and the intractability of the medical curriculum, this

is still a remarkable achievement. But does the teaching of bioethics change the thinking and/or decision-making behaviour of medical students or practitioners exposed to such sources? Those involved know only too well how difficult such courses are to design and evaluate, since the connection between ethics education and practice is not known and may never be demonstrated to the satisfaction of critics. Critics not only seek answers to the questions of whether the teaching of bioethics makes a difference, which is fair question, but they also seek answer to the question of whether bioethics should be taught in medical schools. Can bioethics be taught? Whose bioethics is being taught? What does the trained bioethicist contribute? Some of these questions arise from misunderstanding and some reflect the still too dominant view in medical schools which divides disciplines into those which provide "practical skills", and those which contribute only theoretical and therefore peripheral knowledge.

Strong[98] (1992) in this paper acknowledge that by integrating the teaching of medical ethics into medical students' clinical education is challenging, given the competing demands on students' time and the need for teaching to be clinically relevant. This paper describes a model programme for incorporating ethics teaching into the obstetrics and gynecology clerkship for third-year medical students. The programme is taught by two attending teachers and a medical ethicist with experience in teaching in the clinical setting of obstetrics and gynecology. Objectives pre-tests and post-tests showed substantial improvement in students' knowledge, and student feedback has been very positive.

**Problem-Based Learning**

Eagle[23], Harasym & Mandin (1992) report that at the University of Calgary Faculty of medicine in 1991, the authors sought to determine the effects of tutors' levels of content expertise on learning issues generated within problem-based learning (PBL) tutorials. For an integrative course taken prior to clinical clerkships, the 70 students in the class of 1992 divided into ten small groups, which were facilitated

alternately by content experts and non-experts. The authors found that- across 35 simulated-patient case encounters (24 with non-experts and 11 with experts) – when the groups had tutors with expertise in the clinical cases studied, the groups generated approximately twice as many learning issues per case, and these issues were approximately three times more congruent with the case objectives. In addition, when the groups had expert tutors they spent approximately twice as much time per case in overcoming identified learning deficiencies. The authors conclude that it is important for tutors (1) to be well informed about the case and case objectives and (2)to be well versed in the PBL tutoring process.

Norman[74] & Schmidt (1992) explain that several potential advantages for students' learning are claimed for problem-based learning(PBL). Students in PBL curricula may be more highly motivated; they may be better problem solvers and self-directed learners; they may be better able to learn and recall information; and they may be better able to integrate basic science knowledge into the solutions of clinical problems. Although some of these claims find theoretical support from the literature on the psychology of learning, to date there has been no review of the experimental evidence supporting the possible differences in students' learning that can be attributed to PBL. In this review article, the authors examine each claim critically in the light of evidence. They conclude that (1)there is no evidence that PBL curricula result in any improvement in general, content-fee problem-solving skills; (2)learning in a PBL format may initially reduce levels of learning but may foster, over periods up to several years, increased retention of knowledge; (3) some preliminary evidence suggests that PBL curricula may enhance both transfer of concepts to new problems and integration of basic science concepts into clinical problems; (4)PBL enhances intrinsic interest in the subject matter; and (5)PBL appears to enhance self-directed learning skills, and this enhancement may be maintained.

Des Marchais[21] (1992) familiarizes us that the Sherbrooke School of Medicine, Quebec, has restructured its entire curriculum to make problem-based learning (PBL)

the main instructional format. This complete reform is explained both in terms of process and content. The curriculum problems were clearly identified and overcome by a major structural shift-over following the stages of a strategic planning of change. Implementation over a period of 7 years is described according to a four-stage framework: need for change; selection of the PBL solution; planning for implementation; and the full-scale adoption of the PBL method. The programme is described in relation to the congruence of goals, learning and evaluation activities. Initial impact on student learning and evaluation, attracting better quality students, academic staff roles, and on financing the operation are discussed. Changing the undergraduate programme has become an institutional project directed by the Office of the Dean.

## Teaching and Learning

Hill[47] (1992) informs us that a reform in medical education is gaining momentum through the efforts of organisations such as the World Federation for Medical Education. Through the advocacy of such bodies, educational priorities have been redefined to widen the range of educational settings, upgrade evaluation systems and promote the training of teachers as educators. A system of medical teaching has been developed which addresses these issues. It is known by the acronym SCORPIO. The key elements of the system are that it is Structured, Clinical, Objective Referenced, Problem-based, Integrated, and Organised. SCORPIO involves delivering a syllabus through a series of lecture-demonstration at which students, teaches and patients gather at defined area. Following a short introductory lecture, students rotate in small groups, through a series of teaching stations. These stations are structured to provide students with a problem-based, integrated learning experience. Assessment stations may be included before, during or after the teaching circuit. The teaching system has been formally evaluated over a period of time and now has an established place in the curriculum of this medical school.

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## Teaching Teachers

Hitchcock[48], Stritter & Bland(1993) through this report summarise the recent literature reviews and resource books on faculty development in the health professions and describes findings from articles not previously reviewed. Nine conclusions about faculty development in the health professions are drawn: 1. The concept of faculty development is evolving and expanding; 2. Research skills are becoming a major focus of faculty development; 3. Teaching skills are still a prominent aspect of faculty development; 4. Fellowships are being used effectively to recruit and train new faculty; 5. The institutional environment has become a focus of faculty development; 6. Faculty evaluation is an effective approach to faculty development; 7. The efficacy of faculty development needs better research documentation; 8. Model curricula have been developed for different types of faculty; and 9. Comprehensive faculty development centres are gaining in popularity. A set of recommendations based on the conclusions drawn is offered for those planning faculty development interventions.

## The Stanford Faculty Development Programme: A Dissemination Approach to Faculty Development for Medical Teachers

Skeff[94] (1992) along with others tell us that the Stanford Faculty Development Programme, is designed to improve the instructional skills of clinical teachers, uses a dissemination model to provide faculty development activities for medical schools across the country. Selected clinical faculty attend a month-long training programme at Stanford University Medical Center and then return to their home institutions to conduct seminars for their fellow faculty and for residents in one of the three content areas: a. Principles and skills of clinical teaching, b. the teaching of medical decision making, or c. the teaching of clinical preventive medicine. Faculty from institutions affiliated with over one quarter of US medical schools have participated in the programme. From 1986 through 1991, the programme has trained 67 seminar facilitators form 47 institutions who have then conducted training

for over 500 faculty and 200 residents. The extent of dissemination indicates that this approach provides a feasible mechanism for delivering faculty development in a wide variety of institutions.

Hekelman[45] (1992) along with others tell us that within the faculty development programme of a Department of family medicine at a major research university, bulletin boards offer an alternative method for communicating new information, reinforcing knowledge previously acquired, and stimulating faculty to think about new ideas. This paper describes a five-steps strategy for integrating bulletin boards into a faculty development programme.

## Recertification, revelidation and self regulation:

Anderson[2] J. (1995) recounts that the maintenance of high professional standards is a feature of professional self-regulation, and accountability – to the public, to the state, and to "customers and consumers"-is linked to self-regulation. The concept of quality is then discussed, from quality assurance through total quality management to continuous quality improvement. This concept leads to discussion of the missions of a medical school, which must be designed to serve the needs of populations and individuals. The place of standards, quality, and accountability in this process is again emphasized. Evaluation and assessment, both in the process of quality assurance and in the form of student examinations, are briefly reviewed. Th commentary ends by emphasizing once more the realization that in subscribing to a policy of quality assurance and total quality management, an organisation cannot avoid accountability.

Irvine[54] (1997) spells out that the time is ripe for a new agreement between medicine, the state, and society generally. It is our responsibility to see that professional practice is at one with people's expectations and to show that self-regulation is effective. For its part, the state must give doctors the time needed to do a professional

job for patients and to maintain standards of practice using modern methods. The proper resourcing of good medical practice-including medical education-must become an agreed given of good quality health care. With such an approach, we can be confident that our strengthened professionalism will keep the public's respect and trust.

The Academy[1] (1999) supports the principle that doctors should demonstrate that they are keeping themselves up-to-date and that they remain fit to practise in their chosen field..

The methods that can be used to determine if a doctor meets the requirements for revalidation include:

CME credits

Identifying learning needs

Assessment of Performance

Peer Review

Third Party Interviews

Inspection of Medical Records

Targeting those at increased risk of having unsatisfactory levels of competence

The General Medical Council[50] (UK) has four main functions:

- Keeping up-to-date registers of qualified doctors

- Fostering good medical practice

- Promoting high standards of medical education

- Dealing firmly and fairly with doctors whose fitness to practise is in doubt.

And Professional self-regulation must be modernized and strengthened, whereas Under revalidation doctors will demonstrate that they remain fit to practise in their chosen field.

Peck[80] & others (2000) inform us through this paper that the legislated revalidation and recertification of practitioners are driving the profession towards mandatory professional development programmes internationally, covering a spectrum of clinical, professional, and managerial activities. Approaches differ widely around the world, but most rely on professional self-regulation. Even where there is no mandatory system, many doctors are already active participants in the process. Increasingly there are common features between specialties and across borders and recognitions of such between national and international bodies. Whatever system is adopted or legislated, however, every doctor has a personal responsibility to participate in continuing professional development and has a choice of a wide range of accredited educational activities to fulfil that responsibility.

Klein[57] (1998) reports that the case of the three doctors in Bristol represents a landmark in the history of the self regulation of the medical profession in the United Kingdom in terms of its length, its salience in the eyes of the public, and the issues it has raised, which are as follows:

- There seems to be some confusion about how doctors should interpret their responsibility for protecting patients from harm from other doctors

- Doctors seem to need training in communicating with each other

- There may be a need for more explicit and stringent training requirements before surgeons are permitted to operate independently

- There may be a need for more explicit requirements for retraining when results are poor.

**Standing Committee[49] (1999) of European Doctors reports that :**

- Doctors are autonomous and independent with an ethical obligation to practice according to accepted ethical standards which include a continuous strive to develop knowledge, skills and attitudes in response to patients' needs

- The strongest motivating factor for continuous life long learning is the will and desire to maintain professional quality through a process of continuous professional development(CPD) which includes all the activities undertaken to improve areas of competencies (medical, managerial, social, personal) necessary to meet the needs of patients served

- The trust of the public rests on the assumption that the doctors adhere to contemporary standards of professional quality. The profession must be able to apply peer pressure and policing (in co-operation with relevant authorities) for those who fail to meet these standards. Procedures applied should be publicly known and secure a fair process

- A well functioning occupational health services for doctors is an important element in preventing low quality practice

- The professional is fully responsible for his actions irrespective of employment status (employed or self-employed), but cannot be made accountable for system failures, either nationally or locally, beyond his or her control

- The professional must at any time pursue what he or she thinks is in the best interest of the patient. As a consequence, drawing on various types of knowledge and experience, deliberate diversions from guidelines and protocols will occur from time to time, and are part of professional practice

- Doctors are in general capable of identifying their learning needs, but should take advantage of peer-assessments whenever feasible, and methods of self-appraisal.

In the end , it is the privilege and the responsibility of the professional to plan and carry out CPD-activities considered to meet her or his needs

- There is hardly any evidence to support introduction of mandatory measures (e.g. certain amounts of CME) as a means to maintain competence. On the other hand, professionals should share willingly the strategies they apply to keep abreast, and employers have a special responsibility to facilitate the staff's CPD (e.g. proper funding, learning facilities and protected time)

- Doctors have an obligation to engage in learning activities to facilitate enhancement of competence of peers as well as other members of the health care team as part of their leadership. Doctors should seek competence enabling them to lead organisational change and learning and search for new competencies to develop quality of health care.

- Professional should familiarize themselves with methods of continuous quality improvement (CQI); document the standard of their care, unravel areas of needed improvement, define learning needs and run the improvement circle

- Successful implementation of CQI in health care requires the full involvement and leadership of doctors who acknowledge that effective healthcare is based on team building and performance.

## Learning Portfolios

A report[51] by the Chief Medical Officer (1998) (United Kingdom), Department of. Health's principal recommendation is to integrate and improve the educational process through the Practice Professional Development Plan (PPDP) developing the concept of the "whole practice" as a human resource for health care, resembling the health promotion plan in general practice and increasing involvement in the quality development of practices.

"The PPDP would be based on the service development plans of the practice, local and national objectives (e.g. inequalities) and identified educational need. The plan would use practice based and other novel forms of learning and give an indication on how it was to be achieved and measures of success.
The plan would:

- be an annual plan for the professional development of the practice agreed with an appropriate person;

- confirm the professional development needs both for the practice as a whole and for each health professional within it." [51]

"Editorials in BMJ tells us that Individual learning portfolios may bridge gap between learning and accountability because in the United Kingdom continuing professional development schemes are currently based on acquiring credits. The advantages of this system is that time devoted to continuing professional can be measured and recorded.

The undifferentiated pursuit of credits provides a false security blanket that may bear little or no relation to the real outcomes of activities aimed at professional development.

However, the changing political climate and need to be more accountable mean that doctors now have to demonstrate that they are developing professionally and that their activities are educationally and cost effective and improve their practice.

One practical way of achieving this is through individual learning portfolios. Portfolios are not a panacea, but they are useful tool which can be used to plan and record learning and incorporate personal development plans to form the basis of appraisal or peer review.

The portfolio can be subjected to external review and provide documentary evidence to support revalidation and, if necessary, contribute to assessment of performance. The portfolio can also provide a framework for individual doctors to identify both their own personal learning needs and those related to the organisation for which they work." [25]

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# 3

COMPETENCE BUILDING: METHODOLOGY FOLLOWED

**1. Study conducted was of the descriptive type.**

**2. The Questionnaires:**

Five different questionnaires were designed, coded as 001,002,003,004 and 005 for different categories of study population keeping in mind the guidelines suggested by Stone.

Stone[1] had advised that a questionnaire should be :

- **Appropriate:** An appropriate questionnaire is one which is capable of providing answers to the questions being asked.

- **Intelligible:** An intelligible question is one which the respondent can understand.

- **Unambiguous:** An unambiguous question is one which means the same to both the respondent and the inquirer.

- **Unbiased:** A question may appear unbiased until you try to interpret the answers. A less obvious source of bias is the dependence on the memory of the respondent who may remember certain events in a highly selective fashion — so called recall bias.

- **Omnicompetent:** A question should be omnicompetent — capable of coping with all possible responses. In reality that is an impossible expectation of any question since the range of potential answers is limited only by the number of people who might answer the questionnaire. We should try, however, to anticipate most of them by including a category "other' or leaving space for comments. The response most frequently overlooked in designing a multi-option question is "don't know," particularly when a "yes/no" answer is being sought. Human uncertainty and indecisiveness may be an irritating inconvenience but it cannot be ignored.

- **Appropriately coded:** The coding system must be carefully checked for ambiguity and overlap. The rule here is that the categories should be exhaustive but mutually exclusive.

- **Piloted:** A questionnaire should always be piloted before use. This has two purposes: to iron out any design faults which have been missed ( and there

are always a surprising number) and to enable a formal evaluation to be performed.

**Ethical:** A questionnaire should be ethical.

In designing the questionnaires the following supplementary elements[2] were likewise kept in mind:

- Data that needs to be generated for the study, keeping in views the aims of the subject matter.

- Items for inclusion were selected according to the objectives of the study and each and every question was designed correspondingly.

- Layout design was as per the objectives of the study.

## 3A. Study Population, Size of the sample and method of sampling

I.   Trainers, faculty from medical colleges, retired personnel, consultants, faculty from the Jammu as well as Kashmir University, Institute of Management and Public Administration, J&K, and others. All out of this group who had been involved in the trainings under the IPP-VII continuously were administered the instrument coded-002.

II.  Policy makers who included the Health Secretaries/Additional Health Secretaries who had served in the health Department during the last 05 years. Directors of Health (Jammu, Kashmir division) along with their teams in two directorates as well as the Chief Medical Officers. All out of this group were administered the instrument coded-001.

III. Staff IPP VII. All out of this group who had been involved in the trainings under the IPP-VII were administered the instrument coded-004.

## 3B. Selection of Districts for Survey

J&K has two different geographical as well as political divisions as explained clearly in Chapter 5. Jammu is distinctively separated from Kashmir. Out of 6 districts in Jammu division, 3 were randomly named. These districts are Jammu, Kathua, Poonch.Out of the 6 districts of Kashmir Division, the 3 randomly chosen

## JAMMU & KASHMIR STATE
## (STUDY SAMPLE)

### JAMMU DIVISION

| Jammu | Kathua | Udhampur |
| Rajouri | Poonch | Doda |

Total number of Districts (14)

### KASHMIR DIVISION

| Srinagar | Budgam | Baramulla | Kupwara |
| Anantnag | Pulwama | Leh | Kargil |

---

Total number of Sample Districts (8)

| Jammu Total 10 Blocks | Kathua Total 05 Blocks |
| Poonch Total 05 Blocks | Rajouri Total 07 Blocks |

| Anantnag Total 12 Blocks | Baramulla Total 10 Blocks |
| Budgam Total 09 Blocks | Leh Total 05 Blocks |

Total number of Sample Blocks (16) (Total Blocks in J&K 85)

**Sample Blocks**
- 2 Blocks (Ramgarh & Bishnah)
- 2 Blocks (Mandi & Surankote)

**Sample Blocks**
- 2 Blocks (Hiranagar & Billawar)
- 2 Blocks (Sunderbani & Darhal)

**Sample Blocks**
- 2 Blocks (Bijbehara & Qazigund)
- 2 Blocks (Budgam & Chadoora)

**Sample Blocks**
- 2 Blocks (Pattan & Tanmarg)
- 2 Blocks (Leh & Khaltsi)

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| Name of District | Name of Blocks | No. of Doctors* in place | Sample size | Percentage to whom questionnaire was administered |
|---|---|---|---|---|
| 1. Jammu | 1. Ramgarh | 23 | 21 | 91 |
| | 2. Bishnah | 25 | 21 | 84 |
| 2. Kathua | 1. Hiranagar | 30 | 27 | 90 |
| | 2. Billawar | 32 | 29 | 91 |
| 3. Poonch | 1. Mandi | 14 | 13 | 93 |
| | 2. Surankote | 17 | 12 | 71 |
| 4. Rajouri | 1. Sunderbani | 23 | 21 | 91 |
| | 2. Darhal | 22 | 16 | 73 |
| 5. Baramulla | 1. Tangmarg | 27 | 16 | 59 |
| | 2. Pattan | 48 | 18 | 38 |
| 6. Anantnag | 1. Bijbehara | 41 | 20 | 49 |
| | 2. Qazigund | 28 | 19 | 68 |
| 7. Budgam | 1. Chadura | 27 | 16 | 59 |
| | 2. Budgam | 36 | 16 | 44 |
| 8. Leh | 1. Leh | 23 | 10 | 43 |
| | 2. Khalsi | 10 | 8 | 80 |

* Doctors included in the survey were: BMOs, Specialists, Assistant Surgeons and Dental Surgeons.

| Name of District | Name of Blocks | Total No. in place MPHW (Female) | Sample size | Percentage to whom questionnaire was administered |
|---|---|---|---|---|
| 1. Jammu | 1. Ramgarh | 27 | 23 | 85 |
| | 2. Bishnah | 33 | 29 | 88 |
| 2. Kathua | 1. Hiranagar | 50 | 29 | 58 |
| | 2. Billawar | 25 | 17 | 68 |
| 3. Poonch | 1. Mandi | 35 | 31 | 89 |
| | 2. Surankote | 8 | 0 | 0 |
| 4. Rajouri | 1. Sunderbani | 28 | 15 | 54 |
| | 2. Darhal | 23 | 22 | 96 |
| 5. Baramulla | 1. Tangmarg | 19 | 11 | 58 |
| | 2. Pattan | 24 | 11 | 46 |
| 6. Anantnag | 1. Bijbehara | 20 | 10 | 50 |
| | 2. Qazigund | 31 | 19 | 61 |
| 7. Budgam | 1. Chadura | 23 | 15 | 65 |
| | 2. Budgam | 22 | 9 | 41 |
| 8. Leh | 1. Leh | 36 | 11 | 31 |
| | 2. Khalsi | 21 | 10 | 48 |

were, i.e. Baramulla, Badgam and Anantnag. From the Ladakh region of Kashmir division incorporating two districts, Kargil & Leh, Leh was randomly chosen.

From the districts selected the blocks were in the same way unintentionally chosen. The blocks selected were as follows:

| Districts | Blocks |
|---|---|
| Jammu | Ramgarh, Bishnah |
| Kathua | Hiranagar, Billawar |
| Poonch | Surankote, Darhal & Mandi |
| Baramulla | Tangmarg, Pattan |
| Anantnag | Bijbehra, Qazigund |
| Badgam | Chadura, Badgam |
| Leh | Leh, Khalsi |

Doctors meet each and every month in their block headquarters to discuss their problems with the Block Medical Officer. The doctors who attended the meeting were administered the instrument 003.
MPW(F) meet without exception every month at their block headquarters to talk their problems and give monthly reports. The MPHW(F) who attended the meeting were administered the instrument 005.

## 4. Data collection

(a)   Framework of separate questionnaires was written. Zero draft for all the different questionnaires was one by one pre-tested in the field. The desired modifications based on the feedback were incorporated.  Individual ques-tionnaires contained numerous items, the respondents were requested to choose any one of the alternatives. Numerous items had 5 alternatives, certain 4, some 3 and/or 2 (Yes or No) Several items were common to all the different questionnaires.

In addition each questionnaire had open-ended question/s. Reply to these were to be written as a remark/s. A Pilot study of the different questionnaires was conducted, evaluated and found to be appropriate to be administered. A plan for data collection was prepared and a Survey was performed by administering the questionnaire to the different categories as follows:

I.   Questionnaire 001 was designed to determine the opinions of the "Policy Makers". 29 officers from this category, who had served the Health Department, were administered this along with a covering letter explaining to them the importance of this study to the future of J&K Health Services and the importance of their sincere participation, without which the entire work would be futile. The instruments were delivered privately and obtained back in the same way. Information thus gathered was kept as anonymous. 25 out of 29 responded to the request.

II.  Questionnaire 002 was intended to determine the opinions of the "Trainers". This category included the faculty of the two medical colleges in the State, trainers from J&K Health Services, Faculty of Jammu University and Kashmir University, retired professionals and consultants. The instruments were delivered personally and obtained back in the same way. Data thus gathered was kept as anonymous. 44 trainers from this category were administered this questionnaire along with a covering letter explaining them the importance of this study to the future of J&K Health Services and the importance of their sincere participation, without which the entire exercise would be futile. 39 responded to the request

III. Questionnaire 003 meant to determine the opinions of the "Doctors". They were administered this questionnaire along with a covering letter explaining to them the importance of this study to the future of J&K Health Services and the importance of their sincere participation, without which the entire exercise would be futile. The instruments were delivered separately, during the monthly meetings at the block headquarters of the area selected, also obtained back in the same way. Information thus gathered was kept as anonymous. 300 doctors serving in the 16 blocks of 08 districts mentioned above were approached of whom 283 responded. The details are as under:

From Jammu division, the Jammu district-42; Kathua–56; Poonch-25; Rajouri-37.

From Kashmir division, district Baramulla-34; Ananantnag-39; Badgam-32; and 18 from Leh.

IV.  Questionnaire 004 was aimed to determine the opinions of the officers involved with the trainings in the India Population Project in J&K State along with a covering letter explaining them the importance of this study to the future of J&K Health Services and the significance of their sincere participation, without which the entire exercise would be futile. The instruments were delivered individually, likewise obtained back in the same way. Facts thus gathered

were kept as anonymous. Of the 15 approached, all responded to the request.

V.     **Questionnaire 005** was designed to determine the opinions of the Multipurpose Health workers (F) along with a covering letter explaining them the importance of this study to the future of J&K Health Services and the significance of their sincere participation, without which the entire exercise would be futile The instruments were delivered individually during the monthly meetings at the various block head quarters of the study area as well as obtained back in the same way. Data thus gathered was kept as anonymous. 262 from the study area responded to the request.

Replies received to the five questionnaires were fed into the computer using Microsoft Excel software. Coding was done for Districts, Blocks and for the responses to the questions. The primary data thus generated was used to find Mean, Standard Deviation and presented in the requisite format. The results are explained in Part II of the chapter 6. Comparisons between the responses of the following two groups were made and Chi square and t-test was applied to find out statistical differences, if any, between these groups.

I.     Comparisons between Trainers from Jammu and Kashmir Divisions were made.

II.     Comparisons between those who were trained and who were not trained. This was done both for Doctors as well as for Multipurpose Health workers (Female) Results have been discussed in the Chapter 8

The Qualitative data was analyzed separately.

(b)     A proforma, copy of which is annexed at III, was distributed to the Chief Medical Officers of all the 14 Districts of the state along with a covering letter clarifying the significance of their sincere participation, without which the entire exercise would be futile.In this format they were  to fill three coulmns, firstly, Posts sanctioned in their districts against the categories.Second column was, posts filled,and third was the Vacant posts. Despite best efforts as well as repeated requests, data from Jammu Division,Leh and Kargil districts was compiled. The details of the responses are discuused in details in Chapter 4.

## 5. Variables

(i)     Existing training guidelines for in-service training.
(ii)    Physical Infrastructure.
(iii)   Types of training institutions for in-service training.
(iv)    Trainers available/faculty in various Training Institutions.
(v)     Facilities for training available like lecture halls, hostel, teaching/learning aids.

## 6. Review of literature

Review of literature was conducted using the library of Govt. Medical College, Jammu and the National Library, the Library at the National Institute of Health & Family Welfare, WHO Library, all three located in New Delhi. Library catalogues were used to assess the relevant material available in these libraries. Relevant articles,from Journals were searched using periodical indexes.

Bibliography cards were used for gathering and recording the information.

The assistance of the staff in these libraries at the initial stages proved very useful.

The following steps were taken both for searches in these libraries as well as while searching the electronic databases:

**Step one**

After having defined the research problem, background information on the subject was gathered. Key concepts related to the study were studied in detail.

**Step two**

List of related concepts was made and a mental model was made about where to perform research.

## Step three

Conventions of each database were learned, databases were searched. If the results were satisfactory, than the search was carried on otherwise abandoned till remedial solutions were identified.

## Step four

In case the material in the searches was as per the requirement, learned the different options available.

## Step five

If the material obtained was satisfactory, the same was cited as references.

The following steps were used in searching the electronic databases:

The conventions of databases like Medline, ERIC, HELMIS, and others listed as annexure I were mastered.

These days the Internet offers a whole range of new learning experiences and opportunities to researchers. I also used it  a gateway to access traditional as well as modern services which included :

- Electronic textbooks, manuals and journals for example the British Medical Journal at the site http://www.bmj.com/, can be searched conveniently from home/office and all the documents published in it since 1994 are available online and can be downloaded free of cost. Their archives has full documents and the journal can be searched using search terms, or name of the authors or combination of both as well as in their special theme issues. This site was probably the most useful after MEDLINE. The difference being that in the MEDLINE one can get citations and/or abstracts where as from BMJ the full/abstracts of the documents are conveniently available.  The list of the journals searched electronically is annexed as annexure no. II.

**Other databases searched included:**

- The MEDLINE since the search is free of cost for citations/abstracts was used frequntly during the period of the study. Searches were made using statements like, competence or CME etc. But their advance search functions were very useful. In advance search option we can start with one term, say "India", search, we get N numbers of articles, add to this, another term, say, "Health professionals" we get M number of articles. Using different combinations like this many searches were tried to bring focus on the area of study's interest and to get the relevant information. Advanced search at the site was also conducted using different combinations like:

India, and

Health Professionals

Health Care Workers and

India and trainings.

Continuing education and

Dental, nursing, and India etc.
Medline at http://www.ncbi.nlm.nih.gov was also searched using MESH (Medical Subject Heading) using the following, directly applicable to CME: **Education, Continuing.**

Education, Dental, Continuing

Education department, Hospital

Education, Medical

Education, Medical, continuing

Education, medical, graduate

- Web pages of various authors where they have allowed many of their papers to be read/downloaded free of any cost.

- Bibliographic databases, CINAHL (Cumulative Index to Nursing and Allied Health Literature)

- Other databases, e.g. eBNF (Electronic British National Formulary); Toxline; Aidsline; Database

- Search The Abstracts of Cochrane Reviews was conducted using http://www.update-

software.com/abstracts/Default.htm.

## 7. Obtaining materials cited in the Search

All articles which were discovered to be pertinent were acquired by obtaining the photostat copies/print outs from the libraries and/or by letter writing to the authors of the published materials. E-mail was also of a great help and was economical too. All articles got and found to be essential for the subject were cited both as reference as well as bibliography. Any other document/paper mentioned in the material/s obtained were subsequently researched for. Survey of the relevant literature is detailed in Chapter 3.

## 8. Data collection from the records (secondary data)

The records from the following institutes were probed for the last 5 years and the relevant portions photocopied for incorporation in the study.

I.     The Regional Institute of  Health and Family Welfare, Jammu.

II.    The Regional Family Planning Training Centre, Srinagar.

III.   Office of the Project Director, India Population Project J&K, Jammu.

IV.    Directorate of Family Welfare, J&K, Jammu.

V.     Directorate of Health Services, Jammu/Kashmir.

VI.    Records /Reports prepared by National Institute of Health and Family Welfare, New Delhi on J&K State.

VII.   Records of Joint Director Planning, Department of Health, Civil Secretariat, Jammu

VIII.  Document prepared by the Government of India and the National Institute, New Delhi.

## 9. Conclusion

On the basis of the ti tle of the study an extensive exercise was conducted and detailed information gained which when assimilated and filtered, enabled the researcher to comprehend the issues raised in the study and to propose suitable solutions to serve as a model.

The report based on this study has been organized into 8 independent Chapters, and is submitted as a thesis.

# References

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2.    Varkevisser, C.M., Pathmanathan I, Brownlee A. 1991; <u>Health Systems Research Training Series</u>:Volume 2, Part 2, Ottawa, International Development Research Centre-287e.2.

Annexure 3.1

## List of web sites visited

http://www.icbi.hw.ac.uk/tltp Teaching and Learning Technology Programme (TLTP) – UK.

http://www.unimaas.nl/~network/welcome.htm. (Network of Community-Oriented Educational institutions for Health Services.)

http://www.cochrane.org/cochrane/revabstr/mainindex.htm. Cochrane Database of Systematic Reviews This site contains the abstracts of reviews and the titles of reviews in progress. The database can be searched for specific words/phrases or browsed by Collaborative Review Group. Access to the full reviews and protocols is only available subscription.

www.worldbank.org, website of the World Bank.

http://www.prouni.org W.K. Kellogg Foundation Uni Programme.

http://www.unimass.nl/~PBL/ PBL Site Maastricht University.

http://www-fhs.mcmaster.ca/ McMaster University/Canada.

http://www.uottawa.ca/academic/med/ University of Ottawa/Canada.

Annexure 3.2

## List of Journals which were reviewed through their Websites:

01. Academic Medicine.

02. American Journal of Medicine.

03. Annual Conference on Research in Medical Education.

04. British Journal of medical Education.

05.  Bulletin of The Pan American Health Organization.

06.  Bulletin of The World Health Organization.

07.  Case studies in Health Administration.

08.  Compendium of Continuing Education in Dentistry.

09.  Health Education Research.

10.  Health Education.

11.  Health Manpower Literature

12.  Health Manpower Management

13.  Health Manpower Report

14.  Health Planning and Manpower Report.

15.  Health Policy and Education.

16.  Health Service Journal.

17.  Health Services Management Research.

18.  Health Services Management.

19.  Healthcare Human Resources.

20.  Indian Journal of Medical Research.

21.  Indian Medical Journal.

22.  International Journal of Health care Quality Assurance  Incorporating Leadership in Health Services.

23.  Journal – Association for Hospital Medical Education.

24.  Journal of Continuing   Education in The Health Professions.

25.  Journal of Continuing Education in Nursing.

26.  Journal of Continuing Education in the Health Professions.

27.  Journal of Health and Human Resources Administration.

28.  Journal of Human Resources.

29.  Journal of Medical Education.

30.  Leadership in Health Services.

31.  Medical Education.

32.  National Medical Journal of India.

33.  Proceedings of the... Annual Conference on Research in Medical Education.

# Annexure 3.3

| S.NO | Category of staff | Post Sanctioned | In Position | Vacancies |
|------|-------------------|-----------------|-------------|-----------|
| 1 | Chief Medical Officer | | | |
| 2 | Medical Superintendent | | | |
| 3 | A Gr. Specialists | | | |
| 4 | B-Gr. Physician | | | |
| 5 | B-Gr. Surgeon | | | |
| 6 | B-Gr. Gynaecologist | | | |
| 7 | B-Gr. Paediatrician | | | |
| 8 | B-Gr. Anesthetist | | | |
| 9 | B-Gr. Orthopedician | | | |
| 10 | B-Gr. Eye Specialist | | | |
| 11 | B-Gr. E N T Surgeon | | | |
| 12 | B-Gr. Radiologist | | | |
| 13 | B-Gr. Pathalogist | | | |
| 14 | Block Medical Officer | | | |
| 15 | Blood Bank Officer | | | |
| 16 | Assistant Surgeon | | | |
| 17 | Dental Surgeon | | | |
| 18 | Community Health Officer | | | |
| 19 | Jr. Staff Nurse/ Mid-wife | | | |
| 20 | Senior Staff Nurse | | | |
| 21 | Food Inspector | | | |
| 22 | Sanitary Inspector | | | |
| 23 | X-Ray Technician | | | |
| 24 | Lab. Technician | | | |
| 25 | Health Educator | | | |
| 26 | Sr./Jr. Theater Assistant | | | |
| 27 | Lady Health Visitor | | | |
| 28 | MPHW(F)/ ANM | | | |
| 29 | MPHW (M) | | | |
| 30 | Physiotherpist | | | |
| 31 | Jr. Health Inspector | | | |
| 32 | Malaria Inspector( SHI) | | | |
| 33 | Basic Health Worker | | | |

**Name of the District:**                                    **Sig. of C.M.O.**

# 4

# Human Resources For Health in Jammu and Kashmir

## (a) State health System

The Jammu and Kashmir State Health System has developed to its present structure which is catering to projected population of 96.04 lacs (1998 ) residing in a widely scattered mix of 6500 villages and various towns, over an area of 2,22,236 Sq. Kms through the creation of two distinct administrative units.: first, Department of Medical Education and second Department of Health and Family Welfare.

There are independent ministers for both with one Commissioner/Secretary as the administrative head. S/He runs the department for six months from the Civil Secretariat in Srinagar, the summer capital, and during the subsequent six months from Jammu, the winter capital. There are two divisional directors of health, subordinate to the Commissioner Secretary, one for each division. Two Directorates have distinct teams of officers to assist in implementation of the administrative as well as the technical requirements. The Directors control their subordinates through Chief Medical Officers and other district level officers. A Block Medical Officer heads a block as in other parts of the country. Fig. 4 on page No. 2 shows the Organization structure of the Primary Health System in the State.

The District level hospitals are being managed by the Medical Superintendents who are at par with the Chief Medical Officers in seniority. There is an independent Directorate of Family Welfare, headed by a Director. At district level Deputy Chief Medical Officers control the budget and achievements of Family Welfare Programs. They are answerable to both the Chief Medical Officers and the Director Family Welfare. This dual command ends up in cross communication and discord. Furthermore, these officers are transferred by the Director Health Services and not by the Director Family Welfare. Similarly there is separate Director for Indigenous System of Medicines looking after this wing. Two Dy. Directors (ISM) are subordinate to him, one each for Jammu and Kashmir Division. One ADMO in each district looks after the functioning of ISM and is subordinate to Dy. Director. The Food and Drug Control Organization is also functioning independently and is headed by Controller Food and Drug Control Organization. There are two Dy. Controllers, one each for Jammu and Kashmir Division subordinate to him.

Co-ordination of the different functions of these Departmental Heads is of paramount importance in delivery of Primary Health Care Service which is only being done at the level of Commissioner/Secretary Health & Medical Education

**Figure 4 : ORGANISATION STRUCTURE OF THE PRIMARY HEALTH SYSTEM IN JAMMU AND KASHMIR.**



127
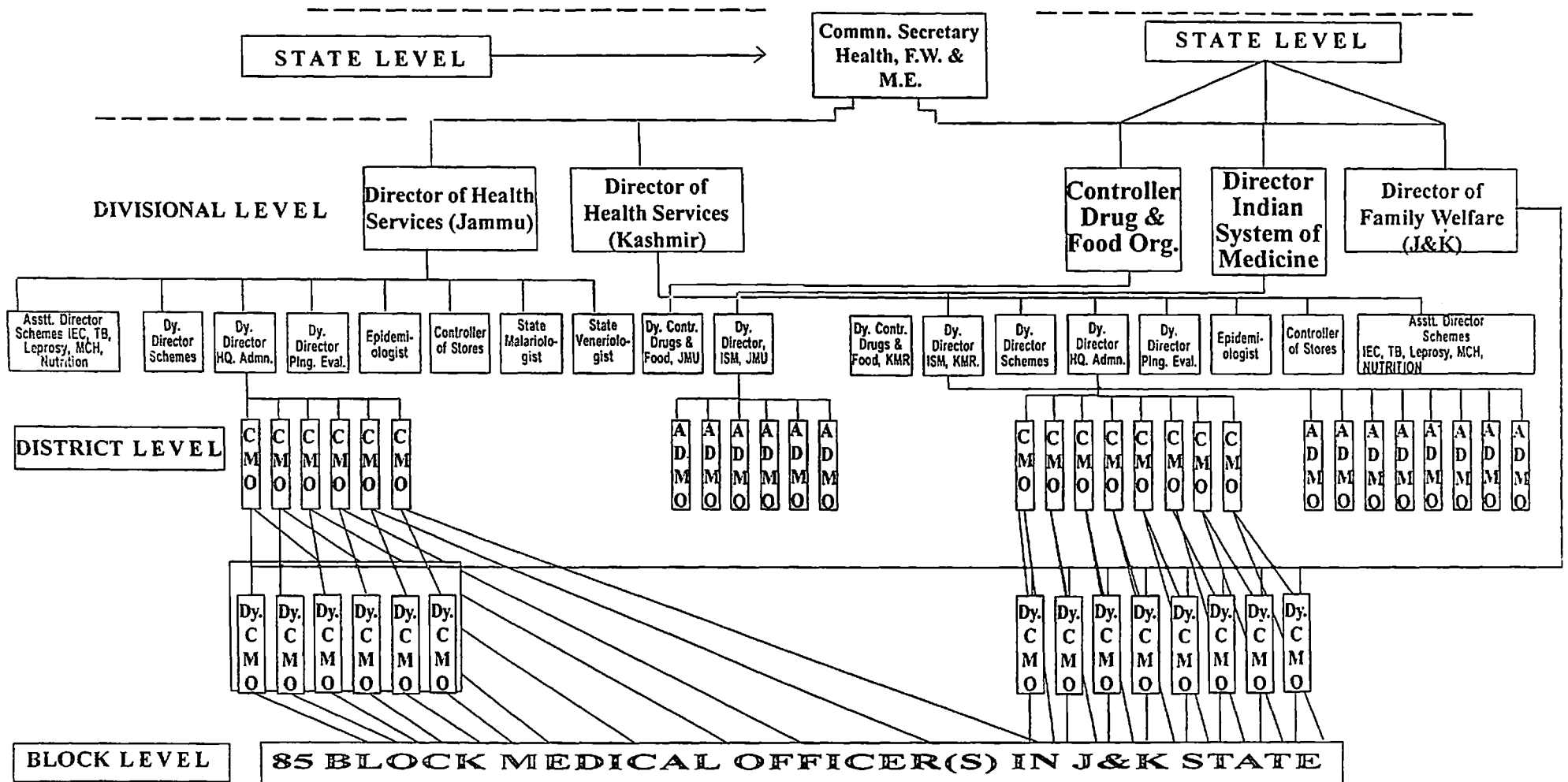
and is apparently not so effective due to manifold responsibility of Commissioner Secretary.

The network of government health facilities include district hospitals, sub-district hospitals, Primary Health Centres, Dispensaries (Allopathic, Ayurvedic, Unani) and Sub-Centres. Doctors, Nurses and Pharmacists are the three most important categories of the workforce. They remain directly in contact with the patients and deliver services directly to them. Sub-Centres provide mostly outdoor health care in addition to providing Family Welfare Service. These are manned by Multipurpose Health Workers, Female and Male, one each, {Medical assistants (Pharmacists), who are exclusively male are posted in many places, instead of Male Multipurpose Health Workers (MHW (M).}

The department of health is responsible for Primary and Secondary health services, in rural as well as urban regions. This system is based on the model established by the Government of India and conforms with the availability of funds with the state, as health is a state subject. However, the central government, under its federal system, retains its discretionary power to initiate and finance schemes and programs on the basis of its own priorities.

According to the national norms, the state's requirement of health institutions for providing primary health care to its population is 111 CHCs, 458 PHCs, and 2857 Sub-Centres, as against which we have 59 CHCs/Sub-district hospitals/Emergency hospitals, 333 PHCs and 1798 SCs at present. Other institutions providing health care in J&K are 250 Allopathic dispensaries and 280 Medical Aid Centres. The requirement as per norms and the existing number of institutions is depicted in the fig 4A(i to ix), which precisely indicate that numerous institutions need to be established as per the government of India model. The authorized strength of all the categories of health personnel in Jammu division (District-wise) and the staff actually working on these posts is given in the format annexed at 4.1. Regarding statistics of health personnel, the details of Jammu division are being provided in fig 4B(i to vi). Since a large part of the Kashmir division is disturbed and limited data so collected lacks accuracy. The gaps between the number of personnel required as per the Government of India norms and the number in position, as well as the gap between the number of posts available and the number of persons serving there upon is illustrated in figure 4B(i to vi) which shows that:

Chart Showing No. of C.H.Cs in Jammu Division

fig 4A(i)



Chart Showing No. of C.H.Cs in Kashmir Division

fig 4A(iv)



Chart Showing No. of P.H.Cs for Jammu Division

fig 4A(ii)



Chart Showing No. of P.H.Cs in Kashmir Division

fig 4A(v)



Chart Showing No. of Subcentres in Jammu Division

fig 4A(iii)



Chart Showing No. of Subcentres in Kashmir Division
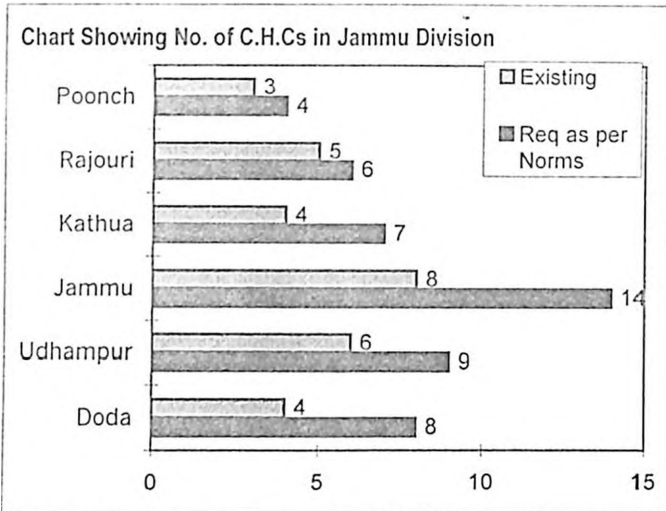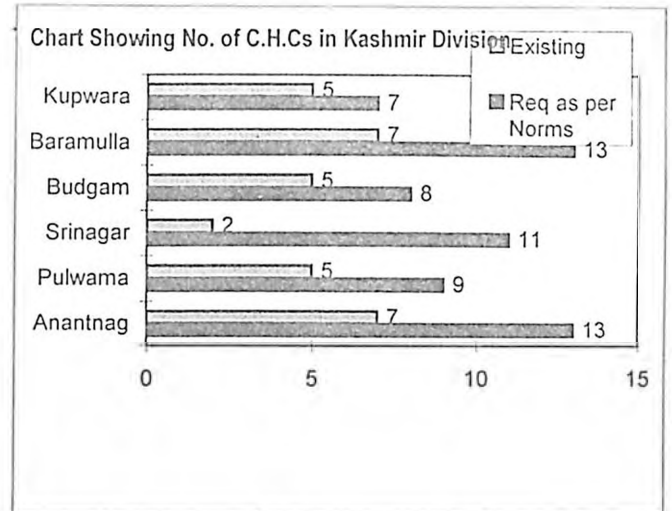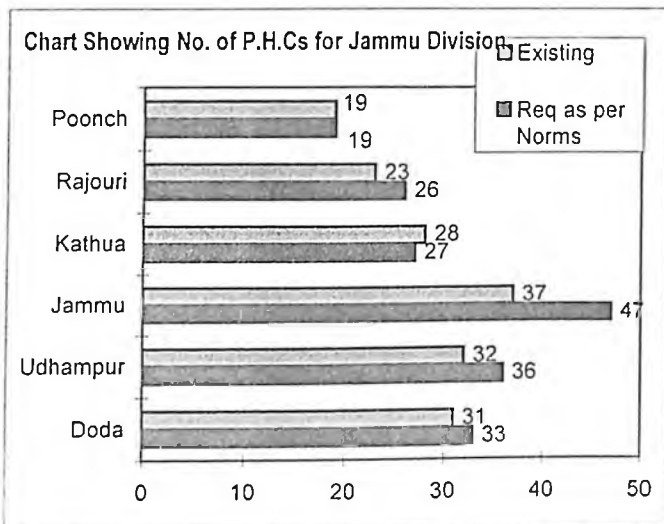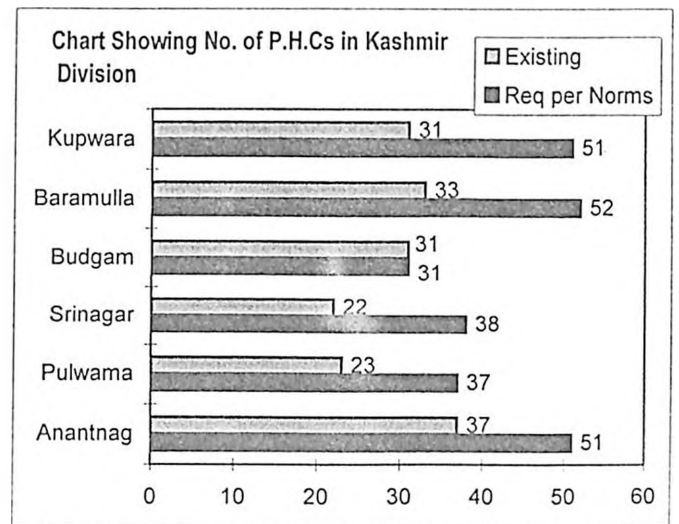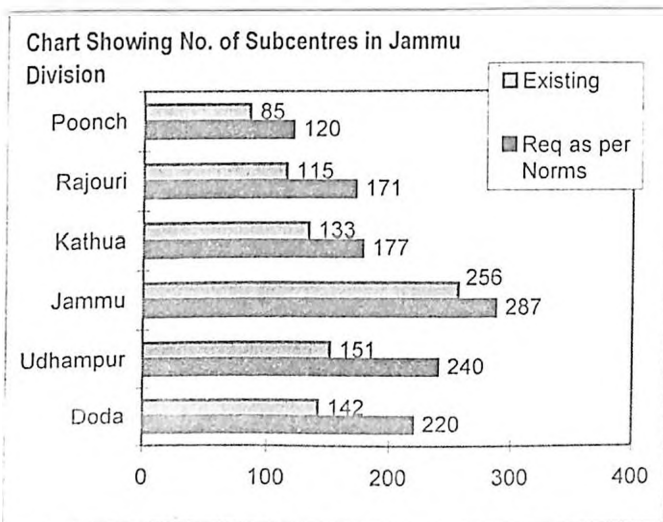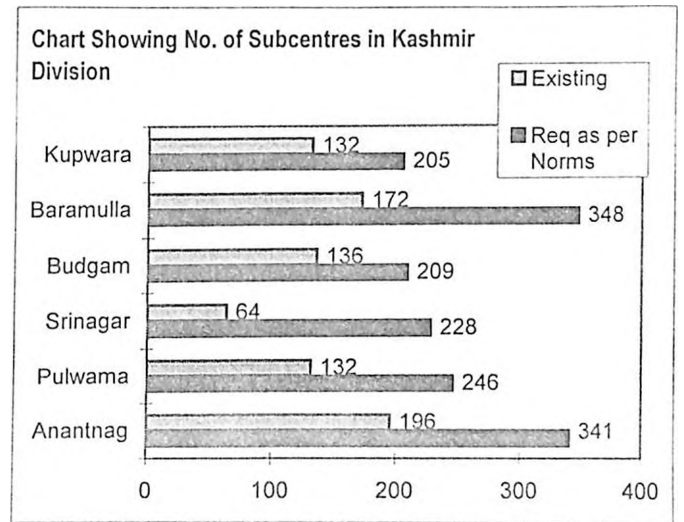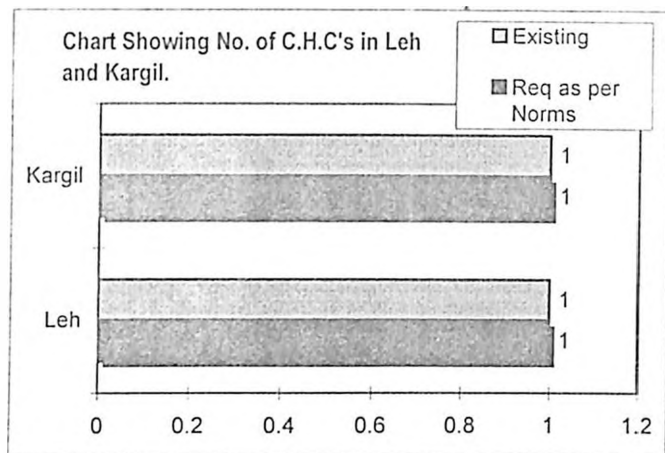
fig 4A(vi)

fig 4A(vii)



fig 4A(viii)



fig 4A(ix)

Chart Showing No. of personnel from Doctor's (General Duty) category

- Person in position
- Existing Posts
- Req as per Norms

Poonch: 46, 103, 103
Rajouri: 84, 130, 147
Kathua: 112, 132, 152
Jammu: 159, 159, 410
Udhampur: 134, 176, 205
Doda: 114, 215, 189

fig 4B(i)

Chart Showing No. of personnel from Junior Staff Nurse category

- Person in position
- Existing Posts
- Req as per Norms

Poonch: 9, 48, 72
Rajouri: 13, 58, 103
Kathua: 36, 62, 106
Jammu: 54, 69, 287
Udhampur: 14, 63, 144
Doda: 38, 59, 132

fig 4B(ii)

Chart Showing No. of personnel from Multipurpose Workers (M) category.

- Person in position
- Existing Posts
- Req as per Norms

Poonch: 4, 6, 120
Rajouri: 9, 24, 171
Kathua: 19, 23, 177
Jammu: 52, 82, 287
Udhampur: 8, 8, 239
Doda: 24, 24, 220

fig 4B(iii)

## Chart Showing No. of Lady Health Visitors

Poonch: 1, 8, 23
Rajouri: 3, 11, 32
Kathua: 8, 10, 34
Jammu: 17, 20, 61
Udhampur: 4, 22, 45
Doda: 4, 21, 41

Legend: Person in position, Existing Posts, Req as per Norms

fig 4B(iv)

## Chart Showing No. of personnel from Multipurpose Workers(F) category

Poonch: 96, 134, 120
Rajouri: 145, 179, 171
Kathua: 135, 185, 177
Jammu: 70, 72, 287
Udhampur: 100, 226, 239
Doda: 201, 243, 221

Legend: Person in position, Existing Posts, Req as per Norms

fig 4B(v)

## Chart Showing No. of personnel from Lab. Technician category

Poonch: 3, 6, 36
Rajouri: 7, 7, 51
Kathua: 26, 38, 53
Jammu: 6, 7, 143
Udhampur: 8, 9, 72
Doda: 39, 52, 66

Legend: Person in position, Existing Posts, Req as per Norms

fig 4B(vi)

i)     915 posts of general duty doctors (Assistant Surgeons) stand sanctioned against the requirement of 1206 Only 649 are actually in position;

ii)    359 posts of Junior Staff Nurses are sanctioned against the requirement of 844 and only 164 are actually in position;

iii)   1039 posts of Multipurpose Health Workers (F) against the requirement of 1215 are sanctioned and only 747 are actually in position;

iv)    167 posts of Multipurpose Health Workers (M) against the requirement of 1215 are sanctioned and only 116 are actually in position. In our state Pharmacists are working on the posts of MPHW (M). The Pharmacists are basically trained in skills different from those of MPHF(M) thereby not fulfilling the job requirements of MPHW (M) which include Mother & Child Health Care, Family Welfare and Immunization services. The Pharmacist when posted to CHC/PHC performs dispensing and assists the doctors in their routine work. Hence skills not matched to tasks.

v)     92 posts of Lady Health Visitors are sanctioned against the requirement of 236 and only 37 are actually in position.

vi)    119 posts of Laboratory Assistants/Technicians are available against the requirement of 421 and only 89 are actually in position.

The above scenario surely reveals that the staff is not matched to workload.

There is a district hospital in each district and there are large hospitals at the divisional headquarters. Most of the divisional hospitals are affiliated with the two Government Medical Colleges of state, one each at Jammu and Srinagar. These colleges are responsible for the training of graduates as well as post-graduates.

The Sher-e-Kashmir Institute of Medical Sciences at Soura in Kashmir is the only tertiary level institute in the state with a recently set up Government Medical College attached to it. These three institutions are under the department of medical education. One new Medical College has come up recently in Jammu in the private sector which is expected to contribute to the pool of trained doctors in the state besides providing tertiary Health Care to the people. The organization

of state health system in general resembles that of the other states with only one variance at the village level; instead of Village Health Guide, we have a trained teacher doing the job. These teachers are called Rehbar-e-Sehat teachers. A brief note on the scheme is also annexed as Annexure 4.2.

## (b) Indian System of Medicine:

In the Indian System of Medicine where a lot of thrust is being laid at the national level and also at the state level, there are no government colleges imparting training in the Ayurveda/Unani system that form a part of the Indian system of medicine. Nevertheless, two colleges in the private sector are being established. These colleges will primarily produce graduates and postgraduates in their respective systems. Being stationed in rural and far flung areas, these doctors as well as other functionaries from the Indian System of Medicine play an notable role in the delivery of Primary Health Care. The comparative strength of doctors from Allopathic and ISM in Jammu division is 917 posts of general duty doctors from Allopathy and 234 posts of Ayurvedic doctors (ISM). Against these posts 649 and 216, respectively, are actually in position.

## (c) Pre-service training:

Human Resource for Health in the state is mainly produced by the government institutions which function independent of health services because of compartmentalization of the department. Curriculum of training is generally unrelated to responsibilities and duty to be discharged. 'The quality of health care, to a large extent, depends upon the quality of training and education of medical graduates[3]'. 'The faculty of medical colleges plays a strategic role in shaping the professional competencies of medical graduates[1]'. 'With their (faculty of medical colleges) teaching skill doubtful[8]' and ... 'students (who) are transformed, within a few months of entering school (medical), into passive unquestioning, authority oriented followers who have abandoned creativity and intuitive to concentrate only on examination success[6]' have to, during government service, manage health teams apart from their professional duties. Ultimately such people heading the health teams, fail as managers.

Mya Tu and Abeykoon in the year 1988 had advised 'that Graduates and Specialists, by the year 2000, will be responsive to the social and societal needs who posses the appropriate ethical, social, technical, scientific and management

abilities so as to enable them to work effectively in the comprehensive health system based on primary health care[5'] thereby suggesting to alter the present program to a new, relevant curriculum to local needs (community-based, population based and health system-oriented) instead of[10] the present hospital oriented training "which depended on an inappropriate foreign system of accreditation of an outdated curriculum, inherited from previous colonial power[2], suggesting finally that teaching capabilities of the faculty of the teaching institutes be enhanced, especially in educational/ training technology.

Initiation of dissimilar, innovative programmes, successfully implemented elsewhere like, interdisciplinary problem based learning (PBL) as principle approach to training of medical graduates[7], are therefore recommended in the state also.

Another revolutionary concept that could also have been examined here is the ladder-type curriculum in which a community health worker can rise to be a doctor of medicine[7].

We seem to have stayed aloof from the global developments in this regard[11].

Finally another change relevant for us is recommended, to improve the efficiency and effectiveness of learning process (self learning and lifelong learning)[10].

Expansion also needs to be done to the basic infrastructure in all the training institutes, including adequate provision of teaching aids since the capacity of intake now is much more than that conceived at the beginning for both the medical colleges as well as paramedical training schools in the state. There have not been any concurrent additions to the above-cited provisions in correlation to the enhanced enrolment.

In spite of recommendations by numerous agencies the induction training program for all categories of health personnel never took off in our state.

## (d) Training Of Nurses and other Paramedics in J&K:

The basic training for Nurses is being imparted in three government schools, one each at the Sher-e-Kashmir Institute, Medical Colleges at Jammu and Srinagar. The two schools attached with the government medical colleges also train para-

medics in addition to general nurses. There is a plan to impart trainings at the district head quarters in addition to the above cited institutes. These training institutions will take students residing in these areas with the hope that the perpetual shortages of trained human resources of distinct categories will be resolved to some extent.

Some voluntary organizations have recently attempted to supplement the endeavors of the government in augmenting basic training to some of the categories of paramedics. The intake capacity of all the institutes in the state is attached as Annexure (4.6).

### (e) Human Resources Management:

In the Health Sector, Human Resources Management model that has been developed identifies nine Human Resources areas:

i. Human Resource Planning

ii. Training & Development

iii. Organisation & Development

iv. Organisation/Job Design

v. Selection & Staffing

vi. Personnel Research and Information Systems

vii.Compensation/Benefits

viii.Employee Assistance

ix.Union/Labour Relations

In our state, out of the nine mentioned areas, not even a single is being treated with seriousness and priority it deserves.

## (f) Human Resource for Health:

The State health system has inappropriate quality of health personnel largely because of irrelevant pre-service training programs, lack of continuing education (despite the knowledge that the half life of valid information gained in medical school is around five years)[6'], especially for paramedics.

'Maldistribution of human resources for health is a worldwide phenomenon and may appear in different dimensions[12].

According to Suwit, there are five kinds of maldistributions :

◆ Inequitable distribution, particularly of high level professionals like doctors, both among countries in the world and within each country.

◆ Maldistribution in the skill mix.

◆ Problem of overspecialization.

◆ Institutional maldistribution.

◆ Gender maldistribution.

And these five forms of maldistribution are interrelated." In J&K, we experience all the above refered maldistributions in varying proportions.

The lone major step taken by the state government in 1988 for correcting the gender maldistribution, was by reserving 50% of admissions to government medical colleges for females.

At no time any review of Human Resources for Health Development Plan

has been undertaken to determine Workforce Supply and Requirement, nor has any long term strategy been proposed by the government to improve the competence of various employees on regular basis.

In his editorial Dr. Suwit Wibulpolprasert, Editor Health Manpower Development Journal has befittingly cited an age-old Chinese saying[12]:,

> "If you want to plan for one year, sow seeds.
> If you want to plan for ten years, plant trees.
> But if you want to plan for life time, develop men"

Since Healthcare is labour intensive, and with the cost of labour accounting for such a high proportion of total operating costs (often 75% or more)[4], it is very essential to welcome extraordinary consideration for this special, priceless, resource. There is no coordination as far as production, planning and management/ utilization of health personnel is concerned which is largely due to the compartmentalization of the State health system. There is no method that has been developed to continuously monitor the supply and demand of different categories of health personnel. In our state, as elsewhere also, as a result of expeditious augmentation in the public and private health infrastructure, a large number of posts of distinct categories, in government health sector, remain abandoned completely due to either non availability of trained persons (like shortage of Male Health Workers and Lady Health Visitors) or their reluctance to serve in remote areas. Other factors like non availability of proper accommodation and other basic facilities in rural and inaccessible areas contribute to the reluctance of health workers to work in the above mentioned areas.

Non availability of good educational institutions for children, in remote areas as compared to the urban, is an additional reason for health professionals, like others in government service, not joining their duties in these areas.

During the year 1996-97 the state government did take a bold initiative by creating 1410 general duty doctors' posts for covering the deficiencies in rural and far-flung areas, but this could not ensure the availability of such workers due to the reluctance of Doctors to work in rural areas due to the above cited factors.

At present a majority of the remote areas are without doctors and at many

places without any trained health personnel, to provide basic services. The occupancy rate of various posts among six important categories of health functionaries of Jammu division have been shown in Fig. 4B (i to vi) which definitely portray an urban bias.

Applicable human resources management and planning can contribute significantly to the improvement of efficiency and equity in the health sector like other sectors. Deployment, transfer, posting, etc. are important issues for human resources management in the health sector also. Therefore low motivation and morale of the functionaries can be improved by adopting scientific approach as suggested above.

In J&K State there is a lack of scientific management information system and adequate database despite the fact that this was one of the priority objectives of the India Population Project VII. Sincere efforts are therefore needed to improve Health Management Information System (HMIS) in the state.

The remuneration in government health system as compared to private practice has made the provision of government health care seriously difficult since gains in private practice are lucrative, which is permitted after the duty hours for the doctors working in government institutions. Many of them, often indulge in private practice while on duty which is contradictory to effective and equitable government health service.

**f) Planning Process :**

Thomas L. Hall, in "Why Plan Human Resources for Health?' identified many reasons for limited success of HRH planning in the past. Some of the applicable explanations are:

◊ Limited support for strategic planning in general, atleast beyond the next 3-5 years.

◊ Lack of sustained support for planning.

◆ Lack of good balance between plan product (the plan document) and plan process(how the plan was prepared).

◆ Lack of planning methods and tools suitable for the kind of systems and problems found in many developing countries.

◆ Use of planning methods unsuitable or too complicated for the country situation.

◆ Weak linkages between planners and decision-makers that result in poor communications, lack of planner responsiveness to decision-maker need and lack of decision maker understanding .

◆ Lack of appropriate and acceptably accurate workforce data, especially so far as relates to workforce supply, annual loss rates, private sector characteristics, service outputs and staff productivity.

The planning process for human resources in the state also suffers in varying proportions from impediments enlisted above.

Right away, no objective criteria/initiative is followed to determine the staffing needs, resulting in shortages or surpluses because no planned effort has been made to examine the present strength nor any attempt has been made to forecast the future necessity.

Exploration of the turnover of the personnel as well as devising job requirements and job descriptions of different categories of personnel has also never been attempted.

## (g) Promotions & Career-Progression:

The system lacks scientific approach. General duty doctors though covered under "Time Bound Promotion Scheme" enabling them to get some financial gains after 10 years and 15 years of service get only two defacto promotions in their professional career. The number of posts at higher level are few and no definite proportion is laid down. Seniority being the only criteria, additional qualification/

s or exemplary work experience is not acknowledged. Similarly, specialists also face stagnation and agree to work in rural areas as a matter of last choice. This promotes an urban bias for doctors. The promotions of doctors, both Assistant Surgeons (General Duty doctors) and Specialists, are made by a Department Promotion Committee in collaboration with Public Service Commission. No specific method has been developed for career progression nor a definite program has been aimed at whereby the promotees are made proficient to do their designated jobs after elevation to the next higher level.

Paramedics are promoted through Department Promotion Committees at the level of Directors of Health services. It is again being done on the basis of seniority and no allowance is prescribed for better qualifications or better performance. The delay in promotions adversely effects their motivation and efficiency.

## (h) Appraisal System:

Appraisal is done by the higher officials annually on the Performa intended for all categories, excluding those government employees working in the civil secretariat. The copy of the Performa used annually is annexed at 4.4. Since this is a superficial appraisal, it cannot be of significant benefit either to the individual or the organization. This Performa also does not encompass the basic prerequisites for appraisals. A major deficiency in the format in vogue is non existence of a column for self appraisal. Achievement of various scientific pursuits, workshops, conferences, training courses, publications during the period under review are also not reflected. The weak areas in the skills of appraisee are not possible to be assessed with the present format used in the system thereby leaving no scope for further interventions for his professional development. A copy of proposed Performa/s which will be useful specifically for health professionals, is annexed at (4.5-a&b). along with a summary requirements for ideal Appraisal system.

## (i) Recruitment Policy:

At present, the policy of filling up of posts of Specialists and Assistant Surgeons is through the Public Service Commission. The posts to be filled are identified by the respective Directors of Health Services and Director Family Welfare and consolidated in the ministry. The ministry after unifying these requirements and giving detailed break-up of the posts by incorporating statutory reservations of distinct categories, submits the requirements to the Commission for recommending

appropriate applicants in conformity with the recruitment rules for sanctioned posts. This procedure, from planning to selection and filling up of the posts, may take six months to over a year.

For nurses and paramedics, there is a centralized system of recruitment through State Service Recruitment Board. This board makes selection and recommends suitable candidates. The posts are identified and processed in the identical manner as mentioned for doctors and specialists. The periodicity of referring the vacancies is usually once or at the most, twice in a year. Some vacant posts are filled through promotion quota. Two Directors have constituted departmental promotion committees for this purpose for their respective divisions. Though the planning section is being headed by an officer of the rank of Deputy Director Planning and Statistics in each directorate yet the planning process, as actually practiced, does not take into account the turnover of employees, especially doctors who migrate to other states, outside the country and even locally to the lucrative private sector. An additional element that is explicit is the migration of employees due to militancy from Kashmir region to Jammu and other parts of the country, consequently widening the disparity between demand and supply within the already strained system. The state government does not have the correct figures of the doctors who have moved outside the state, especially to the middle east countries, in addition to those who have gone away permanently, some with proper authorization and others without sanction. However, attrition rate of ten percent is practiced as a rule of thumb.

## (j) Rehbar-e-Sehat Scheme:

This scheme is a partial variation of the Village Health Guide Scheme and is in practice since 1976. Primary school teachers from the rural and inaccessible areas of the state are trained for a duration of 45 working days in elementary health care, first-aid, family planning and also in awareness of prevailing health problems faced by the public of the region where they serve. On completion of the training, they get a guidebook along with a bag containing medicines. These teachers so trained, are paid Rs.200 per month in addition to the salary during the period of training and a meager amount of Rs. 50/- month as honorarium thereafter. They are also provided medicines worth Rs.50 per month. Rehbar-e-Sehat teachers attend monthly meetings with block medical officer for interaction/ exchange of relevant information.

## (j) Transfer Policy:

On record, there is a transfer policy, but actually on ground there is none. The doctrine that transfer be necessitated in the interest of work/organization and integrating the interests of doctors/health workers is hardly ever practiced. Transfer is put to use regularly as rewards, punishment and never as a mechanism for developing individuals, including teams. Political, social and other considerations mostly play a decisive role. Hardly ever is a transfer being successfully actuated to ensure harmony between boss and subordinate. Transfer as a mechanism in initiating a major change in the outlook of the health teams has not been explored. Absence of appropriate deployment, transfer and posting of employees, has resulted in the deterioration in accomplishments of individuals as well as teams. Also transfers clash with personal interests of individuals. A copy of J&K transfer policy order issued by J&K government is affixed as Annexure (4.7) .

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# Annexure 4.1

| S.NO | Category of staff | Jammu | | | Rajouri | | | Kathua | | | Udhampur | | | Doda | | | Poonch | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Post Sanc. | Post in | Vacancies | Post Sanc. | Post in | Vacancies | Post Sanc. | Post in | Vacancies | Post Sanc. | Post in | Vacancies | Post Sanc. | Post in | Vacancies | Post Sanc. | Post in | Vacancies |
| 1 | Chief Medical Officer | 1 | 1 | --- | 1 | 1 | --- | 1 | 1 | --- | 1 | 1 | --- | 1 | 1 | --- | 1 | 1 | --- |
| 2 | Medical Superintendent | --- | --- | --- | 1 | --- | 1 | 1 | 1 | --- | 1 | 1 | --- | 1 | 1 | --- | 1 | 1 | --- |
| 3 | A Gr. Specialists | --- | --- | --- | 1 | --- | 1 | — | — | --- | --- | --- | --- | 2 | — | 2 | — | --- | -- |
| 4 | B-Gr. Physician | 6 | 5 | 1 | 2 | 2 | — | 6 | 3 | 3 | 7 | 6 | 1 | 7 | 3 | 4 | 5 | 1 | 4 |
| 5 | B-Gr. Surgeon | 6 | 6 | --- | 2 | 2 | — | 6 | 3 | 3 | 7 | 5 | 2 | 7 | 5 | 2 | 5 | 3 | 2 |
| 6 | B-Gr. Gynaecologist | 6 | 6 | --- | 2 | 2 | — | 7 | 4 | 3 | 8 | 6 | 2 | 7 | 2 | 5 | 5 | --- | 5 |
| 7 | B-Gr. Paediatrician | 6 | 6 | --- | 1 | 1 | — | 5 | 4 | 1 | 5 | 4 | 1 | 4 | --- | 4 | 5 | 1 | 4 |
| 8 | B-Gr. Anesthetist | 6 | 5 | 1 | 2 | 1 | 1 | 5 | 1 | 4 | 3 | 2 | 1 | 7 | 3 | 4 | 5 | 1 | 4 |
| 9 | B-Gr. Orthopedician | --- | --- | --- | 1 | 1 | --- | 1 | 1 | --- | 1 | 1 | — | 5 | 1 | 4 | 1 | --- | 1 |
| 10 | B-Gr. Eye Specialist | — | --- | --- | 2 | 2 | — | 1 | 1 | — | 2 | 2 | — | 2 | 1 | 1 | 1 | --- | 1 |
| 11 | B-Gr.    E N T Surgeon | --- | --- | --- | 1 | 1 | --- | 1 | 1 | --- | 1 | 1 | --- | 1 | --- | 1 | 1 | --- | 1 |
| 12 | B-Gr. Radiologist | --- | --- | --- | 1 | --- | 1 | 2 | 1 | 1 | 1 | 1 | --- | 4 | 1 | 3 | 1 | --- | 1 |
| 13 | B-Gr. Pathalogist | --- | --- | --- | 1 | --- | 1 | 1 | 1 | — | 1 | 1 | --- | 1 | --- | 1 | 1 | --- | 1 |
| 14 | Block Medical Officer | 10 | 10 | --- | 4 | 4 | --- | 5 | 5 | --- | 9 | 9 | --- | 10 | 9 | 1 | 3 | 3 | --- |
| 15 | Blood Bank Officer | — | — | --- | 1 | --- | 1 | — | — | --- | 1 | 1 | — | 1 | --- | 1 | 1 | --- | 1 |
| 16 | Assistant Surgeon | 159 | 159 | --- | 130 | 84 | 46 | 132-M | 112-M | 20-M | 176 | 134,101-m,□ 33-f | 42 | 215-M, 2-F | 114-M | 103 | 102 | 46 | 56 |
| 17 | Dental Surgeon | 19 | 19 | --- | 10 | 7 | 3 | 11 | 9 | 2 | 17 | 13 | 4 | 16 | 14 | 2 | 5 | 4 | 1 |
| 18 | Community Health Officer | 32 | 32 | --- | 20 | 10 | 10 | 25 | 21 | 4 | 20 | 18 | 2 | 22 | 8 | 14 | 17 | 8 | 9 |
| 19 | Jr. Staff Nurse/ Mid-wife | 69 | 54 | 15 | 58 | 13 | 45 | 62 | 36 | 26 | 63 | 14 | 49 | 59 | 38 | 21 | 48 | 9 | 39 |
| 20 | Senior Staff Nurse | --- | --- | --- | 3 | 3 | --- | 6 | 6 | --- | 7 | 7 | --- | 8 | 5 | 3 | 2 | 2 | --- |
| 21 | Food Inspector | 1 | 1 | --- | 5 | 3 | 2 | 6 | 5 | 1 | 13 | 6 | 7 | 10 | 5 | 5 | 2 | 1 | 1 |
| 22 | Sanitary Inspector | 6 | 6 | --- | 4 | 4 | --- | 6 | 5 | 1 | 5 | 1 | 4 | 4 | 3 | 1 | 4 | 1 | 3 |
| 23 | X-Ray Technician | 1 | 1 | --- | 2 | 2 | — | 25 | 9 | 16 | 1 | 1 | --- | 23 | 16 | 7 | 3 | 1 | 2 |
| 24 | Lab. Technician | 7 | 6 | 1 | 7 | 7 | --- | 38 | 26 | 12 | 9 | 8 | 1 | 52 | 39 | 13 | 6 | 3 | 3 |
| 25 | Health Educator | 28 | 19 | 9 | 20 | 12 | 8 | 32 | 7 | 25 | 27 | 5 | 22 | 26 | 7 | 19 | 18 | 5 | 13 |
| 26 | Sr./Jr.   Theater Assistant | 26 | 17 | 9 | 3 | 3 | — | 7 | 5 | 2 | 8 | 7 | 1 | 10 | 9 | 1 | 4 | 3 | 1 |
| 27 | Lady Health Visitor | 20 | 17 | 3 | 11 | 3 | 8 | 10 | 8 | 2 | 22 | 4 | 18 | 21 | 4 | 17 | 8 | 1 | 7 |
| 28 | MPHW(F)/ ANM | 72 | 70 | 2 | 179 | 145 | 34 | 185 | 135 | 50 | 226 | 100 | 126 | 243 | 201 | 42 | 134 | 96 | 38 |
| 29 | MPHW (M) | 82 | 52 | 30 | 24 | 9 | 15 | 23 | 19 | 4 | 8 | 8 | --- | 8 | --- | 8 | 6 | 4 | 2 |
| 30 | Physiotherpist | --- | --- | — | 1 | 1 | — | --- | — | --- | — | --- | — | 1 | 1 | --- | --- | --- | --- |
| 31 | Jr. Health Inspector | 26 | 21 | 5 | 12 | 6 | 6 | 17 | 4 | 13 | 9 | 4 | 5 | 17 | 6 | 11 | 9 | 6 | 3 |
| 32 | Malaria Inspector( SHI) | 10 | 9 | 1 | 4 | 1 | 3 | 5 | 4 | 1 | 9 | 7 | 2 | 5 | 4 | 1 | 4 | 3 | 1 |
| 33 | Basic Health Worker | 101 | 93 | 8 | 37 | 29 | 8 | 44 | 41 | 3 | 46 | 45 | 1 | 39 | 33 | 6 | 25 | 23 | 2 |

ALL DISTRICTS, JAMMU DIVISION

Annexure 4.2

# REHBAR-E-SEHAT SCHEME

## Introduction

The Government of Jammu and Kashmir decided to train the school Teachers for this purpose for the following reasons :-

I.     Teachers are available in large numbers and are present in the remotest rural areas:

II.    Their educational background, training and skill befit them to undertake health educational tasks in addition to their own teaching work:

III.   Teachers enjoy status and are influential members of the community with pupils as links, they can develop good contacts with parents and reach the community more effectively:

IV.    Teachers have good contacts with local Government and Voluntary Organizations which enable them to play an effective role in bringing community and health agencies together:

In the initial stage, this scheme was implemented and operated upon the State Government out of their available sources. Since 1976, It had been receiving 50% grants from Government of India on 50:50 share basis under Centre Sponsored Scheme (CSS). From its very inception, the scheme was being implemented through a Steering Committee on Primary Health Care and family Planning. The members of the Steering Committee are as follows:

1. The Secretary to Government, Health and Family Welfare Department:

2. The Secretary to Government, Education Department:

3. The Directors of Education:

4. The Director Health Services:

5. Two programme officers i.e. Assistant Director of Health Services in Jammu & Kashmir Division.

In order to ensure proper implementation, effective supervision and monitoring of the scheme, two posts of Assistant Director, Health services, Rehbar-I-Sehat have been created, one each for the regions of Jammu and Kashmir.

At the district level, the Chief Medical Officer is expected to supervise and monitor the progress of the scheme and develop effective liaison with the District Education Officer, so as to ensure speedy redressal of the operational problems in the field. He or his representative is supposed to attend the monthly meetings of Rehbar-I-Sehat at Block Level, similarly, District Education Officer is also required to be represented in such meetings.

At block level, the Block Medical Officer is the most important link with Rehbar-I-Sehat teachers. He is to provide regular supervision and guidance by keeping regular contacts with Rehbars-I-Sehat.

The following criteria are laid down for the nomination of teachers as per the minutes of the "Steering Committee" meeting held in October 1984:-

i.      The Teacher should be of the age  group of 20-40 years.

ii.     They should preferably be Primary  School teachers.

iii.    They should be willing workers and preferably  local teachers.

iv.     They should have read, preferably, science, hygiene and physiology.

v.      They should be selected , preferably from a school which have more than one teacher.

vi.     Their performance  and receptiability to new ideas should be taken  into account while recommending;

vii.    They should preferably be female;

viii.   The sarpanch should also be actively associated while making  selection of teachers;

ix.     The selected teachers should not  be transferred  to other place  for atleast three years;

The selection  is made by the committee consisting  of the following:

I.      Asstt. Director Health Services, Rehbar-I-Sehat:

II.     Chief Medical Officer of the District;

III.    Principal, Regional Health & FW Training  Centre (not available in Jammu region).

IV.    Block Medical Officer:

V.    District and Tehsil Education Officer:

VI.    Sarpanch of the area

**Training**

Previously the duration of the training was of 3 months but now it has been reduced to seven weeks. The training is conducted during the vacations of teachers and two batches can be trained during this period. (Summer and winter)

In Kashmir region, the training is imparted by the Principal, Regional Training Centre for Health and Family Welfare, Srinagar, whereas in Jammu region , there is no such Regional Training Centre. The training is imparted by the Asstt. Director Health Services, rehbar-I-Sehat by internal arrangement of staff and resources of the Directorate.

There is no sanctioned teaching staff and funds as in case of Regional Health and Family Welfare Training Centre Srinagar. The following is sanctioned staff with the Rehbar-I-Sehat organization Jammu:-

1.    Assitant Director Health Services Jammu:        One

2.    Field Supervisor:        One

3.    Junior steno:        One

4.    Accounts Assistant:        One

5.    Orderly:        One

6.    Chowkidar:        One

## Supervision and monitoring

A.    4-tier supervision has been provided:

i.    Root level represented by the Zonal Medical  Officer of the dispensary:

ii.    Block Medical Officer at Primary Health Centre level which  is over all responsible for the activities of Rehbar-I-Sehat in the block:

iii.    Chief Medical Officer of his representative at District level:

iv.    The Co-ordination between Health and Education  department  is in the same manner:

| i. Block Education Officer | Block level |
| ii. District Education Officer | District Level |
| iii. Director Education | Regional Level |

The Rehbar-I-Sehat Teachers submit information and reports they are supposed to maintain , operational problems of Rehbar-I-Sehat are discussed, Information is provided regarding management of seasonal sickness and other similar information. Honorarium is paid to the Rehbar-I-Sehat Teacher and supply of medicine is replenished.

## Direct Inputs

i.    One time stipend @ Rs. 200/- per month per head during the training **Plus**

ii.    Kit and manual worth Rs. 300/- and 12/- each respectively,

iii.   Subsequently Drugs worth Rs. 50/- and honorarium @ Rs. 50/- are given to Rehbar-I-Sehat teachers per month.

In addition to above, the Primary Health Centre receive the following additional grants per annum:-

| | | |
|---|---|---|
| i. | Medicines | Rs. 0.06 lacs |
| ii. | Office expenditure | Rs. 0.02 lacs |
| iii. | Traveling Expense | Rs. 0.02 lacs |
| iv. | Equipment/Laboratory/Furniture/ etc. | Rs. 0.04 lacs |

**Indirect Inputs**

In addition there is indirect expenditure involved on the training of Rehbar-I-Sehat by arranging the teaching staff and their accommodation which has not been worked out.

**Upto date coverage of the Scheme In Jammu Division**

| | | |
|---|---|---|
| 1. | Total districts covered | 6 |
| 2. | Total NEs Blocks covered | 58 |
| 3. | Batches of Rehbar-I-Sehat trained | 36 |
| 4. | Teachers trained as on ending 8/98 | 2358 |

Males                         1914

Females                    444

| S.No. | Name of the District | Teachers trained so far | | |
|-------|---------------------|------|--------|-------|
|       |                     | Male | Female | Total |
| 1.    | Jammu               | 344  | 113    | 457   |
| 2.    | Kathua              | 235  | 67     | 302   |
| 3.    | Udhampur            | 373  | 86     | 459   |
| 4.    | Doda                | 516  | 98     | 614   |
| 5.    | Rajouri             | 259  | 51     | 307   |
| 6.    | Poonch              | 191  | 28     | 219   |

ANNEXURE 4.3

# FORM OF PERFORMANCE REPORT OF OFFICERS OTHER THAN THOSE BELONGING TO CIVIL SECRETARIAT AND DISTRICT LEVEL OFFICERS.

Department/officer _____

Report for the year/period ending _____

### PART I PERSONAL DATE (to be filled by the deptt. office)

1. Name of the Officer _____
2. Date of birth _____
3. Present post and date of appointment _____
4. Period of absence from duty on leave, training etc. during the year _____

### PART II (Assessment of the initiating officer)

| 1. General Assesment | Excellent | Good | Satisfactory | Below Job requirement |
|---|---|---|---|---|
| i) Knowledge of work | | | | |
| ii) Power of acquiring general information | | | | |
| iii) Attention of details | | | | |
| iv) Industry & conscience | | | | |
| v) Judgement | | | | |
| vi) Speed of disposal | | | | |
| (vii) Control over subordinates | | | | |
| viii) Relations with Public | | | | |
| ix) Integrity | | | | |

(x) If the office has done any notable work, brief mention thereof may be made similarly, if the officer has been raprimanded for in-different work briefly mention thereof should be made.

2. Any other remarks (give special comments on officer's aptitude for special work. _____

Dated :-

Signature of Initiating Office
Designation_____

## PART III

3. Remarks of Reviewing Authority

Dated :-

Signature of Reviewing Authority
Designation_____

## PART IV

4. Remarks of Accepting Authority

Dated :-

Signature of Accepting Authority
Designation_____

## Annexure 4.4

## Objective of an appraisal system

(a) Strengthening the organisation.

(b) Appraising present performance matched with **agreed objectives.**

c) Developing people to meet future organisational needs.

d) Helping each person to develop potential.

e) Responding to two questions which everyone has:-

"How well am I performing?"

"Where can I go from here?"

In many cases the objectives of appraisal needs to be redefined.

- It is a control mechanism to secure sustained output.

- It is a process for individual development.

- It is designed to **coach** and **encourage** apparaisee.

**Optimum size of Appraisal**

(a) Factors being considered for appraisal.

(b) Number of appraisee involved.

1. Acceptance and procedure of the appraisal

- To meet the objectives.

- **Briefing** to concern people is required

2. **Pre-requisites for a Appraisal system**

- Objective oriented

- **User friendly**

- **Fairness**

- Flexible

- Condusive atmosphere within the organization.

3. Elements in the appraisal system

- Present performance

- Assessments against targets

- Identification of strengths and weakness

4. Evaluation of **initiative, dependability, stability, preservence, imagination, originality** as traits should form a part of a good appraisal system.

- **Measurement-** Number of job evaluation and actual performance and two tier Appraisal system

5. Personal circumstances have no importance. Where as interest and aptitude is a must.

6. **(i) Involvement in Appraisal Procedure**

- Self and two tier on the vertical level

**(ii) Review Committee**

- Random verification only. In case of descripency revaluation is required. Retrain to the appraiser is required

7. **Frequency of formal appraisal**

- **Bi-annual**

8. (a) **Linkage with Rewards and Promotions**

There should be an opportunity to demonstrate the potential through the performance potential through the performance of deligated tasks, leading small projects, deputising for a senior.

(b) Recommendations made more relevant, realistic and action oriented by special efforts such as recognization of strengths and counselling for weaknesses.

9. Training for Appraisal Procedure is required to understand similar way by every concerned.

## 10. Usages of Appraisal System

- Basic information about employees are collected while appraising. The same can be used effectively for manpower planning, career planning, training and promotion policies.

11/12 Feedback of appraisal to appraisee should be done by boss only in an **informal** and **confidential** way during the course of appraisal.

## 13. Follow up Mechanism

(a) Boss ⇒ Appraisee ⇒ HRD Department should be involved.

(b) As frequently as possible in informal way.

## 14. Review of Appraisal system

It is a dynamic system, it requires to be reviewed when any change in the organization takes place.

Annexure 4.5 (a)

DEPARTMENT OF HEALTH & FAMILY WELFARE, J&K GOVT.

MODEL PERFORMANCE APPRAISAL FORM*

FOR SUPERVISORS AND OTHER SENIOR STAFF

Name and Address of the Hospital _____

Report for the year/period ending _____

# A.

## PERSONAL DATA (to be filled by the Deptt. office)

1. Name of the Officer _____

2. Date of birth _____

3. Office _____

4. Date of first appointment _____

5. Present post and date when posted to this Post _____

6. Period of absence from duty on leave, training etc. during the year _____

# B.

## (to be filled by the Initiating Officer)

1.    *Job knowledge*

      Has S/he got knowledge of all aspects of his/her own job or does S/he still need much help and advice ?

A.    Has exceptional knowledge

B.    Has sound knowledge of his work

C.    Has got knowledge but needs help occasionally

D.    Has fair knowledge

E.    Has a lot to learn about his job

2. *Drive and application*

Is S/he keen and energetic in applying himself to job ? Does S/he work diligently and effectively?

A.    Exceptionally keen and energetic, always works hard

B.    A good industrious worker

C.    Usually works diligently but could apply himself better

D.    Works but does not pay enough attention

E.    Wastes time

3. *Organizing ability*

Does S/he organize the work in his/her department/section well ?

A.    An extremely organizer

B.    Good organizing ability, can plan ahead

C.    Efficient in normal circumstances

D.    Not a good organizer on the whole

E.    Sometimes gets in a muddle

4. *Leadership*

Has S/he good working relationships with his/her staff ? Can S/he maintain discipline ?

A.    Well-liked and respected. Relationship excellent with seniors and subordinates

B.    Usually respected. Gets on well with subordinates

C.    Satisfactory in his relationships

D.    Does not inspire a great deal of respect

E.    Not respected

5. *Constructive imagination*

Does S/he possess the ability to produce new ideas and the skills of constructive criticism?

A.    S/he finds new ways of solving problems and initiates new ideas

B.    S/he has an open and progressive mind

E. S/he gives wrong and late decisions

10. *Personal contacts*

Can S/he be relied upon for outside work ? If not, why ?

A. Always successful in his/her outside work

B. Actively stimulates goodwill

C. Performs outside work well

D. Sometimes not successful in outside work

E. Poor contacts and no success in outside work

11. *Targets*

What is your opinion about his/her achievement in the current year ?

A. S/he generally overshoots his/her target

B. S/he achieves his/her target easily

C. S/he always needs help to achieve his/her tareget

D. S/he never touches his/her target

E. S/he absolutely fails to reach his/her target

12. *Training*

What is your opinion about his/her training ? Does S/he need training for (a) higher posts, (b) present post, and (c) training others.

A. S/he possesses excellent training

B. S/he can train others too

C. S/he has adequate training

D. S/he willneed training some time

E. S/he needs training urgently

13. *How much formal formal training S/he has provided to his/her colleagues and subordinates*

A. More than 20 hours

B. More than 50 hours

C. In between 20-50 hours

D. Less than 20 hours

14. *Does S/he involves service users and carers*

15. Does S/he encourage professions to· learn with, from, and about one another

16. How much time S/he devotes in improving the quality of services being provided by him/her at his/her institute

17. *Does she work to reduce wastagein the organization ?*

18. *Does she works to reduce the cost of treatment to the patient ?*

19. *Remarks* (if any)

_____

_____

Recommended for promotion/special increase/training. Explain.

_____

(Signature of Initiating officer)

# C.

**(to be filled by concerned employee)**

A.    Please give your comments about your performance for the current year.

_____

_____

B.  Do you have any suggestion to improve the functioning of your department/ the hospital?

_____

_____

C.  Any other information

_____

_____

D.  You are a member of the following organizations (Professional & Social)

(Signature of concerned employee)

## D.

**(to be filled jointly by Revewing officer & concerned employee)**

We agree with each other. We differ slightly with each other. We do not agree at all.

Plan for next year _____

_____

_____

(Signature of the concerned employee)          (Signature of the Reviewing offcer)

# E.

## (to be filled by Accepting authority)

_____

_____

_____

(Signature of the Accepting authority)

* _Modified from Handbook of Hospital Personnel Management by R.C. Goyal, Prentice Hall of India Pvt. Ltd., New Delhi, 1993, 152-54._

Annexure 4.5 (i)

DEPARTMENT OF HEALTH & FAMILY WELFARE, J&K GOVT.

MODEL PERFORMANCE APPRAISAL FORMAT*
FOR DIRECTOR/ DY. DIRECTOR/ASST. DIRECTOR/CMO

Report for the year/period ending _____

# A.
### PERSONAL DATA (to be filled by the Deptt. office)

1. Name of the Officer _____

2. Date of birth _____

3. Office _____

4. Date of first appointment _____

5. Present post and date when posted to this Post _____

6. Period of absence from duty on leave, training etc. during the year _____

# B.
### (To be filled by concerned officer) (APPRAISEE)

| | | |
|---|---|---|
| 1. | Please give your comments about your performance for the current year. | |
| 2. | Feedback about your performance from a peer/senior of your choice | |
| 3. | Develop a learning plan based on results of your self assessment. | |
| 4. | Evaluate impact of your performance from previous year's learning. | |
| 5. | List special achievements within your job specifications. | |
| 6. | List special achievements outside your job specifications. | |
| 7. | Any other special experience/ achievement you would like to record. | |

(Signature of the concerned officer)

# DEPARTMENT OF HEALTH & FAMILY WELFARE, J&K GOVT.

## MODEL PERFORMANCE APPRAISAL FORMAT
### FOR DIRECTOR/ DY. DIRECTOR/ASST. DIRECTOR/CMO

## C.

| S.NO. | Parameter | Weightage To Each Quality | Appraisal's Officer's Score |
|---|---|---|---|
| 01. | Knowledge of job | 7 | . |
| 02. | Efficiency | 7 | |
| 03. | Organising ability | 7 | |
| 04. | Leadership quality | 13 | |
| 05. | Expression<br>  - Oral<br>  - Written | <br>2<br>2 | |
| 06. | Integrity | 7 | |
| 07. | Efforts towards self improvement | 4 | |
| 08. | Discipline | 4 | |
| 09. | Ability to work with others | 7 | |
| 10. | Ability to resolve conflict | 7 | |
| 11. | Training skills<br>  - Professional<br>  - Communication<br>  - Managerial | <br>2<br>2<br>4 | |
| 12. | Ability to take additional responsibility | 7 | |
| 13. | Capacity to achieve pre-set goals/objectives | 10 | |
| 14. | Public relations | 8 | |
| 15. | **Total** | **100** | |

*Score >75=Excellent, Between 50-75=O.K., <50 shows concern.*

(Signature of Appraising Officer)

DEPARTMENT OF HEALTH & FAMILY WELFARE, J&K GOVT.

## MODEL PERFORMANCE APPRAISAL FORMAT
### FOR DIRECTOR/ DY. DIRECTOR/ASST. DIRECTOR/CMO

## D.
### Comments of the Authority doing the appraisal

Date:-                                              (Signature of the authority doing appraisal)

## E.
### Comments of the Revewing Authority

Date:-                                              (Signature of the Reviewing Authority)

## F.
### Comments of the Accepting Authority

Date:-                                              (Signature of the Accepting Authority)

* *Modified from a format discussed at Training Course for Human Resources Management attended at Adminstrative Staff College of India, Hyderabad in 1996.*

**Annexure 4.5 (ii)**

**DEPARTMENT OF HEALTH & FAMILY WELFARE, J&K GOVT.**
**MODEL PERFORMANCE APPRAISAL FORMAT**
**FOR Dy. CMO/BMO/DIO/DHO/ADMO**

Report for the year/period ending _____

# A.
### PERSONAL DATA (to be filled by the Deptt. office)

1. Name of the Officer _____

2. Date of birth _____

3. Office _____

4. Date of first appointment _____

5. Present post and date when posted to this Post _____

6. Period of absence from duty on leave, training etc. during the year _____

# B.
### (To be filled by concerned officer) (APPRAISEE)

| | | |
|---|---|---|
| 1. | Please give your comments about your performance for the current year. | |
| 2. | Feedback about your performance from a peer/senior of your choice | |
| 3. | Develop a learning plan based on results of your self assessment. | |
| 4. | Evaluate impact of your performance from previous year's learning. | |
| 5. | List special achievements within your job specifications. | |
| 6. | List special achievements outside your job specifications. | |
| 7. | Any other special experience/ achievement you would like to record. | |

(Signature of the concerned officer)

## MODEL PERFORMANCE APPRAISAL FORMAT
### FOR Dy. CMO/BMO/DIO/DHO/ADMO

## D.
### Comments of the Authority doing the appraisal

Date:-                                                    (Signature of the authority doing appraisal)

## E.
### Comments of the Revewing Authority

Date:-                                                    (Signature of the Reviewing Authority)

## F.
### Comments of the Accepting Authority

Date:-                                                    (Signature of the Accepting Authority)

---

* *Modified from a format discussed at Training Course for Human Resources Management attended at Adminstrative Staff College of India. Hyderabad in 1996.*

DEPARTMENT OF HEALTH & FAMILY WELFARE, J&K GOVT.

## MODEL PERFORMANCE APPRAISAL FORMAT
### FOR Dy. CMO/BMO/DIO/DHO/ADMO

| S.NO. | Parameter | Weightage To Each Quality | Appraisal's Officer's Score |
|---|---|---|---|
| 01. | Knowledge of job | 10 | |
| 02. | Efficiency | 7 | |
| 03. | Organising ability | 7 | |
| 04. | Leadership quality | 8 | |
| 05. | Expression<br>   - Oral<br>   - Written | 2<br>2 | |
| 06. | Integrity | 7 | |
| 07. | Efforts towards self improvement | 4 | |
| 08. | Discipline | 4 | |
| 09. | Ability to work with others | 6 | |
| 10. | Ability to resolve conflict | 7 | |
| 11. | Training skills<br>   - Professional<br>   - Communication<br>   - Managerial | 3<br>2<br>3 | |
| 12. | Ability to take additional responsibility | 10 | |
| 13. | Capacity to achieve pre-set goals/objectives | 12 | |
| 14. | Public relations | 6 | |
| 15. | **Total** | **100** | |

*Score >75=Excellent, Between 50-75=O.K., <50 shows concern.*

(Signature of Appraising Officer)

ANNEXURE 4.5 (iii)

DEPARTMENT OF HEALTH & FAMILY WELFARE, J&K GOVT.

MODEL PERFORMANCE APPRAISAL FORMAT*
FOR ASSTT. SURGEON/AYURVEDIC/UNANI MEDICAL OFFICER

Report for the year/period ending _____

## A.
### PERSONAL DATA (to be filled by the Deptt. office)

1. Name of the Officer _____

2. Date of birth _____

3. Office _____

4. Date of first appointment _____

5. Present post and date when posted to this Post _____

6. Period of absence from duty on leave, training etc. during the year _____

## B.
### (To be filled by concerned officer) (APPRAISEE)

| | | |
|---|---|---|
| 1. | Please give your comments about your performance for the current year. | |
| 2. | Feedback about your performance from a peer/senior of your choice | |
| 3. | Develop a learning plan based on results of your self assessment. | |
| 4. | Evaluate impact of your performance from previous year's learning. | |
| 5. | List special achievements within your job specifications. | |
| 6. | List special achievements outside your job specifications. | |
| 7. | Any other special experience/ achievement you would like to record. | |

(Signature of the concerned officer)

**DEPARTMENT OF HEALTH & FAMILY WELFARE, J&K GOVT.**

**MODEL PERFORMANCE APPRAISAL FORMAT**
**FOR ASSTT. SURGEON/AYURVEDIC/UNANI MEDICAL OFFICER**

## C.

| S.NO. | Parameter | Weightage To Each Quality | Appraisal's Officer's Score |
|---|---|---|---|
| 01. | Knowledge of job | 7 | |
| 02. | Efficiency | 7 | |
| 03. | Organising ability | 7 | |
| 04. | Leadership quality | 13 | |
| 05. | Expression<br>- Oral<br>- Written | 2<br>2 | |
| 06. | Integrity | 7 | |
| 07. | Efforts towards self improvement | 4 | |
| 08. | Discipline | 4 | |
| 09. | Ability to work with others | 7 | |
| 10. | Ability to resolve conflict | 7 | |
| 11. | Training skills<br>- Professional<br>- Communication<br>- Managerial | 2<br>2<br>4 | |
| 12. | Ability to take additional responsibility | 7 | |
| 13. | Capacity to achieve pre-set goals/objectives | 10 | |
| 14. | Public relations | 4 | |
| 15. | **Total** | **100** | |

*Score >75=Excellent, Between 50-75=O.K., <50 shows concern.*

**(Signature of Appraising Officer)**

DEPARTMENT OF HEALTH & FAMILY WELFARE, J&K GOVT.

MODEL PERFORMANCE APPRAISAL FORMAT
FOR ASSTT. SURGEON/AYURVEDIC/UNANI MEDICAL OFFICER

## D.

### Comments of the Authority doing the appraisal

Date:-                        (Signature of the authority doing appraisal)

## E.

### Comments of the Renewing Authority

Date:-                        (Signature of the Reviewing Authority)

## F.

### Comments of the Accepting Authority

Date:-                        (Signature of the Accepting Authority)

* *Modified from a format discussed at Training Course for Human Resources Management attended at Adminstrative Staff College of India, Hyderabad in 1996.*

Name and Address of the Hospital (INSTITUTION)
MODEL PERFORMANCE APPRAISAL FORM
For Employees (Below the Rank of Supervisor)

PART I (To be filled up by personnel department)

Name _____     Present designation_____

Department /office_____     Date of employment _____

Date of promotion to the present post, if any _____

PART II (To be filled up by the department head)

| | | | | |
|---|---|---|---|---|
| 1.  *Quality of work* (Consider neatness and accuracy of work regardless of volume | Careless, requires maximum supervision, work needs careful inspection | Usually accurate and thorough, needs minimum supervision | Dependable, rarely makes errors | Exceptional worker |
| 2.  *Quantity of work* (Consider volume of work produces | Very slow, never achieves target | Produces to reach target | Produces sufficiently | Fast worker, produces beyond target |
| 3.  *Job knowledge* (Consider all the requirements of the job including knowledge of the job, tools, methods, etc.) | Very little Knowledge of what the job requires | Knows only the routine job | Has good working knowledge of job | Thorough grasp of job |
| 4.  *Ability to learn* (Consider mental ability to learn new job) | Learns slowly. Requires repeated instructions | Grasps new duties slowly but retains them | Learns fairly fast | Learns rapidly |
| 5.  *Co-operation* (Consider attitude toward work and fellow workers) | Shows reluctance to co-operate | Usually a good team worker worker | Always a good team | Goes out of the way to co-operate |

6. *Initiative*
   (Finds new ways of doing jobs and thinks of new ideas)

| Never takes initiative | Takes initiative sometimes | Generally takes initiative | Always takes initiative |
| --- | --- | --- | --- |

7. *Dependability*
   (Consider the manner in which he applies himself to his job, regularity of attendance)

| Cannot be relied upon. Needs constant supervision | Fairly reliable Average supervision required | Applies himself well. Supervision not required | Completely dependable on the job |
| --- | --- | --- | --- |

Should additional training be given _____

If yes, type of training required for the present job. _____

Does this employee possess special skills that could be used in another position to better advantage ? _____

If recommended for promotion, does he need training before promotion/after promotion _____

Name that skill _____

Appraisal shown to employee on _____ and contents of discussion in brief are given below :

_____

_____

*Remarks*

Recommended for promotion/special increase/training.

Explain : _____

_____

(Signature of the Employee)                                                    (Signature of the  Head of office)

PART II (To be filled up by Head of the Institution)

_____

_____

_____

(Signature of the Reviewing authority)

(Signature of the Accepting Authority)

## ANMT Schools w.c.f. 1999-2000
## (These have been non functional in the State for various reasons)

| S.No | ANMT School | MPHW (F) | Lab Assistant | Dental Assistant | X-Ray Technician | Medical Assistant |
|---|---|---|---|---|---|---|
| 1 | Jammu | 30 | 5 | 5 | 5 | 5 |
| 2 | Kathua | 30 | 5 | 5 | 5 | 5 |
| 3 | Udhampur | 40 | 5 | 5 | 5 | 5 |
| 4 | Doda | 30 | 5 | 5 | 5 | 5 |
| 5 | Rajouri | 30 | 5 | 5 | 5 | 5 |
| 6 | Poonch | 30 | 5 | 5 | 5 | 5 |
| 7 | Kupwara | 30 | 5 | 5 | 5 | 5 |
| 8 | Baramulla | 30 | 5 | 5 | 5 | 5 |
| 9 | Anantnag | 30 | 5 | 5 | 5 | 5 |
| | Total | 280 | 45 | 45 | 45 | 45 |

| Training \Courses being run by AMT Schools | | | | | | |
|---|---|---|---|---|---|---|
| S.No. | Name of Training Course | Duration | In-take Capacity Jammu | In-take capacity Srinagar | In-take capacity of St. Jospeh-Baramulla. | In-take capacity of John Bishop Anantnag. |
| 1 | General Nursing Midwifery | 3 1/2 yrs | | | | |
| | (i) Direct Entry | | 100 | 100 | 30 | 30 |
| | (ii ) Departmental | | 100 | 100 | --- | --- |
| 2 | Female Multipurpose Worker | 1 1/2 yrs | | | | |
| 3 | Lady Health Worker | 6 months Promotional | | | | |
| 4 | Lab. Assistant | | | | | |
| 5 | Dental Assistant | | | | | |
| 6 | X-Ray Technician | | | | | |
| 7 | Medical Assistant | | | | | |
| 8 | Sanitary Inspector | | | | | |
| 9 | Opthalamic Assistant | | | | | |

*Source: Joint Director Planning, Deptt. of Health, Civil Secretariat, Jammu.*

Annexure 4.7

## Copy of J&K Govt. Policy for transfer of Doctors.

### Government of Jammu and Kashmir
### Health and Medical Education Department

**Subject :- Policy for transfer of doctors.**

Reference :- Adm. Council Decision No. 120 dated 11.12.1990.

Order No.:- 858 - GR(HME) of 1990
Dated:- 26-12-1990

Whereas no hard and fast rules have been followed in the Health and Medical Education Deptt. in the matter of transfers and posting of doctors;

Whereas there has been no well defined and clear policy governing these transfers resulting in distortions in this important public service of the Department;

Whereas under the existing position there have been a number of instances in which cancellation of transfers have become possible to the determinent of public service;

Whereas in absence of sound and effective guidelines, postings to the principal cities of Srinagar and Jammu have been managed persistently by interested persons causing resentment among these doctors who have constantly been serving in rural and other far-flung areas;

Whereas the Govt. have reveiewed and examined the position and have come to the conclusion that it is important to lay down specific norms and procedures under a well defined policy, so as to ensure that the doctors get an equal treatment in the matter of postings and transfers;

Now, therefore, it is ordered that the J&K State for purposes of postings and transfers of doctors shall be divided into the following four parts (areas) namely:-

a. District Towns other than Jammu and Srinagar;

b. Primary Health Centres and other Centres which are easily approachable by roads;

c. Remote areas;

d. Principal cities of Jammu and Srinagar.

The following guidelines/norms shall henceforth be followed in making postings and transfers of doctors in Health and Medical Education Department:-

i.    A newly appointed Assistant Surgeon will be posted by rotation for two years in the category of (a), (b) and (c) respectively after which only can they be posted in category (d). The rotation shall be in a straight line manner;

ii.    Female doctors will similarly be posted in category (a), (b) and (c) provided their stay in category (c) will be restricted to one year unless a female doctor happens to be married to a doctor who is also posted in the same area, in that case their stay will be of two years. The rotation in the case of female doctors will also be rounded up by their postings in the category (d) area. In the case of couples, the postings of the lady doctors will be governed by postings of their husbands;

iii.    The Medical students who obtain admission on the basis of backward certificate/ Line of Actual Control in pursuance of SRO 272 of 1982 dated 3.7.1982 and are subsequantly appointed as Assistant Surgeons will be posted in a way that they spend atleast three years in the area from which they hail i.e. category (c) area and after which they can be rotated to category (a), (b) and ultimately to category (d) for a period of two years each after which they follow the same pattern as is applicable to other doctors;

iv.    The transfers shall be ordinarily made in the month of April/May in view of Academic Session;

v.    While transfers to Ladakh/Kargil shall conrinue to be covered by separate policy in force, transfers out of Ladakh/Kargil shall become part of the new rotation policy mentioned above. A doctor posted in Leh/Kargil Districts after completion of tenure will ordinarily qualify for posting at a station of his

choice, after which his further postings will be processed according to the prescribed rotation; ·

By order of the Governor

Sd/-

Commissioner/Secretary to Govt.

Health and Medical Education Department

Dated:- 26-12-1990                              No.:- MDG/208/90

Copy for information and immediate necessary action forwarded to the:-

1. Commissioner/Secretary to Government _____.

2. Secretary to Government _____.

3. Principal Medical College Jammu/Srinagar.

4. Director Health Services Jammu/Kashmir.

5. Director Information.

6. All Chief Medical Officers.

7. Manager Government Press Jammu for favour of publication in Govt. Gazzette.

8. Pvt. Secretary to Advisor (Q)

9. All Officers of Health and Medical Education Deptt.

10. All Sections of Health and Medical Education Deptt.

11. Government order file.

(Hamid-Ullah)

Dy. Secretary to Government

Health and Medical Education Deptt.

# 5

COMPETENCE BUILDING IN J&K STATE: THE CURRENT STATUS

The Govt. Health care delivery system is based on team approach. The members of the team vary from highly qualified Doctors, Public Health Administrators and other categories of workers such as Nurses, Lady Health Visitors, Health Educators, Pharmacists, Male and Female Multi Purpose Workers to other front line workers.

In this approach, knowledge, skills and attitudes of every team member have to be improved regularly so as to enable him to play his/her role towards achievement of the organisation's objectives. Ever changing technology, introduction of new approaches (like RCH Program) and emergence of new diseases such as AIDS, Hepatitis B and other non-communicable diseases, further necessitate continuing the training of all Health Workers to keep their knowledge up-to-date.

This could only be achieved by their Continuing Professional Development (C.P.D.).

While there is a general agreement that continuing medical education is keeping up-to-date, some organizations include management skills, teaching skills, appraisal skills, communication skills, information management and technology skills etc. apart from medical knowledge. In our study, CPD will include all these.

Although trainings are being organised at National and State level from time to time for health workers working for J&K Health Services, but this has not resulted in the Competence Building of workers to the desired level. There are many gaps and overlapping in such isolated trainings both in the form of repitition of the same issues and exposure of the same officers to such trainings again and again. Some health workers, for different reasons, are not exposed to such trainings at all.

The training situation in the Health Sector of J&K is also similar. Although isolated efforts have been made in the past, but the coverage and quality of training

of Health Workers has been far from satisfactory. This has been clearly analysed by ''Training Need Assessment Survey'' conducted by Ministry of Health & Family Welfare, Govt. of India through Vimarsh Consultants in the year 1990-91 in J&K state.

The study emphasised on programme variables/parameters which were within the powers of health administrators to easily change or manipulate so as to improve the performance of Health Workers and was confined to only seven categories of Health Workers, namely:-

1. Medical officers

2. Health Assistants (Male)

3. Health Assistants (Female)

4. Health Workers (Male)

5. Health Workers (Female)

6. Village Health Guides (Rehbar-i-Sehat Teachers)

7. TBAs

The report highlighted that the induction training to these categories of Health Workers though conceptual and definitional in nature was imparted to all. The in-service training was, however, generally lacking. It was also revealed in the study that the majority of Health Workers were not supported in self learning by providing learning material. It was in view of these findings that a definite need to strengthen the training infrastructure both in terms of number and quality was felt. The trainers were required to be trained both inside and outside the country and once trained, these trainers could organize entire training programmes more effectively. The Survey report suggested that all workers in Health & Family Welfare be given regular in-service training of a few days on specified task areas and also be provided self-learning materials by Training Institutions, who would also improve the training programmes further.

The task areas where large gaps in knowledge and skills were noted during the training need assessment survey were identified as Family Planning (spacing methods); Medical Termination of Pregnancy (MTP), Mother & Child Health (MCH) Services particularly care of high risk infants, pre-natal, natal and post-natal care to pregnant mothers & babies, Managerial aspects & Oral Hydration Therapy and management of diarrohea cases. These areas were recommended for additional and focused training support.

Review of basic/induction training curriculum of all categories of Health Workers was also recommended in view of the deficiencies revealed and also with a view to enrich and supplement the contents and reschedule the allocation of training time suitably.

In short, the Training Need Assessment Report indicated the need for the strenghthening re-organisation training programme for improving knowledge and skills of Health Workers, including Technical, Managerial and Communication Skills with special emphasis on hands-on training wherever required and practically feasible.

The summary of this report is annexed at Annexure-5.1

According to the Macro Strategy report we "should proceed towards achievement of National Goals of HFA and NRR of unity by 2000 A.D., the emphasis inevitably shifts towards delivery of primary health care. This, thus envisages orientation of entire health manpower in the states from policy level to grassroot level functionaries, towards the National goals, program requirements as also to provide for newer developments in health technology." This document further states that "this has necessitated to relook at the existing training function and structures operating within the health sector providing continuing education for its relevance and re-organization so that it provides more cost effective and viable but useful, appropriate and suitable continuing education system well knit with the health care delivery

system. '' Relevant portion of Macro Strategy for In-Service Training, prepared by the National Institute of Health and Family Welfare, New Delhi is annexed at Annexure-5.2 for reference.

It was in view of the above mentioned findings and recommendations that the India Population Project-VII, a World Bank funded Project was conceived, since the financial constraints of J&K state did not permit the creation of such infrastructure and enable adequate investment in **Thrust** areas of training.

India Population Project (IPP-VII), J&K was approved with the following overall objectives:

1. To provide the functionaries of Health & Family Welfare System of the State of J&K with necessary attitudes, knowledge & skills to enable them to reach the services to the target population more effectively, on time, in full measure and of high quality.

2. To provide for a training infrastructure which will **support** and **sustain** such a massive programme.

Other objectives besides training, such as upgradation of rural infrastructure for improving the quality and outreach of services, encouragement of innovative approaches and major thrust in IEC, monitoring, evaluation and management services were also laid down in the project and provided for financially.

Specific objectives of India Population Project (IPP-VII_ in so far as these relate to Human Resource Development in Health & Family Welfae in J&K State

include:-

◊ the development of a system of Induction Training, In-Service Training for all the personnel of the Health and Family Welfare System such that it would be internalized by the State's Health and Family Welfare delivery system.

◊ the strengthening of primary health care and family welfare services delivery by upgrading the physical infrastructure in the nine selected districts to increase coverage.

◊ To provide for an upgradation of the capabilities of the system for planning and developing its human resources.

◊ to fund studies or innovative program implementation which would analyze in depth, alternative aspects of health care and family welfare and their required inputs; which hold potential for wider replicability.

To summarise, Training Project IPP-VII started in J&K state in the year 1990, as also in other states such as Punjab, Haryana, Bihar and Gujarat, aimed at estabilishing/improving the in-service training system of Health care workers of various categories. The objectives of providing 'Health for all by 2000' through primary health care approach and net reproduction rate of unity. This can only be achieved by improving Health Personnel Competence through in-service trainings (Technical, Managerial and Communication skills and Interpersonnel Relationships). These trainings would also equip these workers with necessary skills to appreciate their own role vis-a-vis the role of others towards achievement of a common objective of Health Care Delivery System in J&K.

Creation of a competent cadre of trainers for providing in-service training and development of suitable learning material was also aimed at and suitably supported

financially under the Project.

Out of many options available with us for competence buildimg, providing in-service training was considered as priority number one.

Prior to launching of IPP-VII, a training workshop was conducted in the Government Medical College, Jammu in December, 1991 which was attended by the faculty of Department of Preventive and Social Medicine in the College, Principal AMT School Jammu, Director Health Services Jammu and Chief/Dy. Chief Medical Officers of Jammu Division. The training modules prepared by MOHFW and NIHFW were discussed and suitable modifications incorporated for structuring the trainings under the project in the State.

In the Training Advisory Committee meeting held on 1.5.92, it was decided that the proposed training should be participatory. The evaluation of the training should be taken up before the start of the training and immediately after the course. This should form the basis for revising the training curriculum and methodology from time to time. A trainers' workshop would also be organized before the start of a new training programme. The composition and functions of Training Advisory Committee is annexed at Annexure 5.7.

Under the patronage of the National Institute of Health and Family Welfare, New Delhi, training program/s have been regularly modified but the basic inputs were received from their training (macro-strategy) report, and the Training Needs Assessment report by Vimarsh Consultants, New Delhi & CNA Study Report prepared by CFDRT, Madras. The curriculum for various categories was shaped on the basis of findings thereof. The training function focuses on in-services trainings including on-the-job trainings as well as through lectures and field visits. For Multipurpose Health Workers nearly 50% of the training period was devoted to their skill development in hospitals and rest was a mixture of lectures,demonstrations, role-

plays and field visits. For other categories, especially training of Medical Officers, 90% time was devoted for lectures, role plays, demonstrations etc. Only 10% of the training time was spent on field visit etc.

Two Regional Institutes of Health & Family Welfare Training, one each at Srinagar and Jammu were conceived and established at regional level keeping in view the geographical, cultural and administrative variables for ensuring easy accessibility of in-service training to Health CareWorkers in Jammu Division and Kashmir Valley, including Ladakh.

RIHFW was set up at Jammu in the building of Training Center for providing trainings to Rehber-i-Sehat Teachers in 1992 with one Medical Officer Incharge Trainings deputed from the Health Department. He was assisted by a tutor and an IEC officer borrowed from the AMT School, Jammu. Later on, two additional Medical Officers were deputed to assist the Incharge Trainings so as to increase the numbers of trainees being trained and to improve the quality of the training.

RIHFW, Jammu also organized 10-day Training Course for Medical Officers of Leh/Kargil districts at Leh from August 16, 1994 and 23 Medical Officers of Leh/Kargil·districts were trained. Faculty members from NIHFW, New Delhi, Medical College Jammu, UNICEF etc. served as resource persons. Three courses for MPW (F) of Kargil and Leh districts were also conducted at Leh from August 16 to September 5, 1994 in which 75 MPW (F) participated. In addition to this, the RIHFW Jammu organized training programs at Jammu, Kathua, Katra, Ramgarh etc.

For co-ordinating trainings for ISM functionaries, one Medical Officer, ISM was deputed. Other ministerial staff was provided by appointing them on stop-gap arrangement or by deputation from the Project office. Under IPP-VII, the State has pioneered in conducting in-service training program of ISM functionaries and

traditional practitioners whose out reach to the remote areas is well known. A unique orientation training·program for private practitioners of ISM was conducted. They were exposed to the new trends of health care and their important role in successful implementation of National Programs . All the trainees were provided with adequate reading material for self-learning. Ramgarh PHC was designated as Field Practice Area (FPA) for field visits under the RIHFW, Jammu.

The Regional Family Planning Training Center at Srinagar, set up by the Government of India which had received a set back due to on-going militancy, was gradually revived, renovated and upgraded as a temporary RIHFW to cater to the needs of Kashmir province till a new RIHFW building complex came up. All training programs under the Project were organized at this institute from 1996-97. The faculty of RFPTC alongwith guest faculty imparted trainings. One training officer was also appointed during this period. Since there was no permanent faculty at the two Regional Institutes, guest faculty comprising representatives of NIHFW, Dept. Of SPM, Medical Colleges Jammu/Srinagar, Jammu University, Program Officers, of Health Department were associated in trainings. Deptt. of Rural Sanitation, Deptt. of Nutrition and ICDS experts were also involved. The guest faculty were paid TA/DA/honorarium as per the Institute of Management and Public Administration, J&K norms.

Both the make shift institutes were provided with the equipment like VCR, TV, OHP, transparency projector as well as other audiovisual aids. The training provided by these institutes never suffered for want of these inputs.

Since the Regional Institute at Jammu functioned throughout the project's life, the details training activities are shown in table (1) as well as depicted through a graph 1A. Yearwise breakup of Health personnel trained, re-oriented under IPP by both the training Regional Institutes of Health is also shown in Table 2. A suitable calendar of activity was prepared every year by the team consisting of

a Training Officer, two Course Directors, and other resource personnel from Deptt. Of Health & Family Welfare were also invited for the finalization of the curriculum. The local resource faculty was identified and their approval for sparing their time for training sought. The curriculum was being regularly modified as per the feed back from the trainees. Further additions/modifications to the curriculum were incorporated by the trainers/course directors who were trained at different training institutes outside the state/country during the period 1992-98 A total of 31 trainers were provided trainings outside the state and country. The list of training courses attended by them have been listed as Annexure 5.3.

**Table 1 showing yearwise detailed training activities of RIHFW, Jammu depicting number of hours devoted for trainings, categorywise.**

| 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 |
|---------|---------|---------|---------|---------|---------|
| 60      | 30      | 100     | 30      | 80      | 180     |
| 180     | 295     | 400     | 340     | 260     | 150     |
| 235     | 120     | 35      | 55      | 60      | 230     |
| 475     | 445     | 535     | 425     | 400     | 560     |
|         |         |         |         |         |         |
|         |         |         |         |         |         |
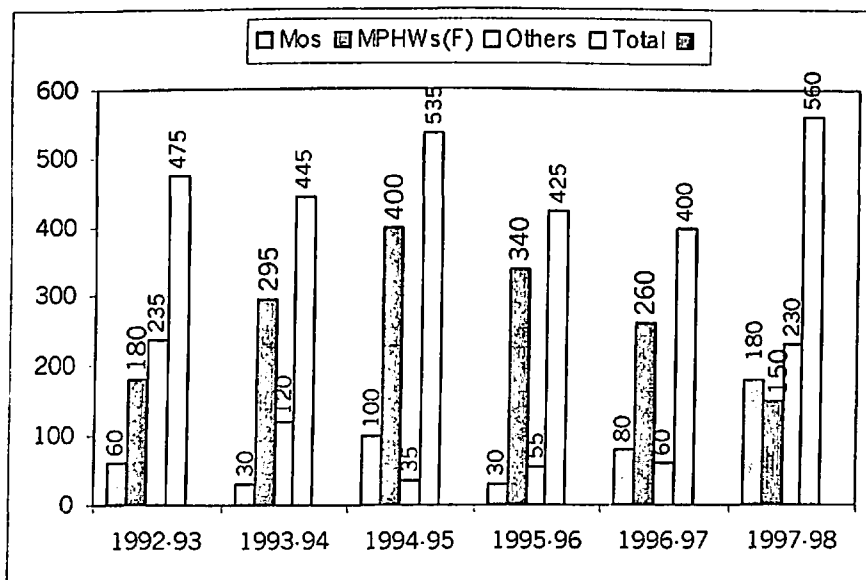


**Graph 1A showing yearwise detailed training activities of RIHFW, Jammu depicting number of hours devoted for trainings, categorywise.**

Table 2 Yearwise breakup of health personnel trained/re-oriented under IPP-VII by RI(S)HFW, Jammu & Srinagar.

Source: Endline survey IPP_VII conducted by NIHFW (1998).

| S.No. | **RIHFW | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | Total trained |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Jammu | 239 | 400 | 374 | 403 | 831 | 1253 | 59 | 3559 |
| 2 | Srinagar | 0 | 0 | 0 | 0 | 98 | 527 | 14 | 639 |
| Total | 2 RIHFWs | 239 | 400 | 374 | 403 | 929 | 1780 | 73 | 4198 |

Evaluation of trainees during training courses was done through a pre & post evaluation questionnaires. Feedback from trainees about each lecture was also taken to find out their views regarding the lectures they received. The proforma used for obtaining feedback from trainees is annexed at 5.4.

A conceptual plan of the training system that was to be supposed to have been adopted under the Project is shown in figure on subsequent page. The procedure adopted for trainings at RIHFW, Jammu under IPP VII is annexed at 5.8.

Nine District Training Teams comprising of a Medical Officer; a Public Health Nurse/Lady Health Visitor & an Extension Educator/Social Sciences Instructor were envisaged under the Project. These teams were supposed to be mobile teams providing PHC specific training to train and retrain the staff. The following teams fully equipped and made functional during the year 1992 were from Jammu, Rajouri, Poonch, Budgam, Baramulla, Leh and Kargil. DTT Kathua was raised later during 1993-94. Throughout the life of the Project DTTs functioned in 8 out of the 9 districts covered under the Project. The teams were provided with a vehicle to augument their mobility.

All the District Training Officers would submit their training plan for the year to the Project Director's office where they were discussed with the other District Training Officers. These revised training plans were then submitted to the Training Advisory Committee where the plans were again reviewed, discussed, finalized and approved. This was done regularly every year as long as the TAC meeting

Figure showing Methodology as projected for
# IN-SERVICE TRAININGS
in the
Department of Health & Family Welfare in
J&K State under the India Population Project-VII.

Inputs from the **Macrostrategy for In-Service Training for Health & Family Welfare** personnel prepared by NIHFW, New Delhi.

Training Needs Assessment Study Report submitted by Vimarsh Consultancy, New Delhi.

**Curriculum Designed** by Training Team comprising Project Officers, Course Directors and Training Officers keeping in view the local needs.

Training calender for next year discussed, modified and approved in the meeting chaired by **Commissioner Secretary** to the Govt., Deptt. of Health & Family Welfare.

Proposed Curriculum sent for approval by the Training Advisory Committee.

**Training courses conducted at RIHFWs & by District Training Teams during the year.**

Training courses for the next year planned by Training Officers RIHFW, and District Training Officers.

Training Advisory Committee meets, discusses, modifies and approves curriculum for different categories of Health personnel.

Inputs from trainers who were provided trainings at different instts. outside the state.

Inputs from formal and informal discussions with trainees.

# CURRICULUM MODIFIED

Training started for different categories at Regional Institute of Health and Family Welfare, Jammu and by District Training Teams.

Inputs from Managers/Supervisors in the field.

were held.  However, from 1996 onwards, no TAC meetings was held.

**Table 3:- Yearwise performance of District Training Teams (No. Of Health Workers trained)**

| S. No. | Name of the DTTs | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | Total |
|---|---|---|---|---|---|---|---|---|
| 1 | JAMMU | 166 | 218 | 286 | 337 | 273 | | 1280 |
| 2 | KATHUA | _ | 186 | 276 | 49 | _ | 127 | 638 |
| 3 | RAJOURI | 123 | 738 | 202 | _ | 120 | _ | 1183 |
| 4 | POONCH | 519 | 771 | 1098 | 324 | 380 | _ | 3092 |
| 5 | LEH | 158 | 186 | 265 | 217 | 380 | 80 | 1286 |
| 6 | KARGIL | 94 | 88 | 112 | 669 | _ | _ | 963 |
| 7 | BUDGAM | _ | _ | _ | _ | _ | _ | 0 |
| 8 | BARAMULLA | 63 | 120 | 80 | _ | _ | 145 | 408 |
| 9 | KUPWARA | _ | _ | _ | _ | _ | _ | 0 |
| | **TOTAL** | **1123** | **2307** | **2319** | **1596** | **1153** | **352** | **8850** |

(Source: Status Report presented to World Bank Mission on 15-16 June, 1998 at Srinagar by IPP-VII-J&K.)

(III)   4 ANM Training Schools one each at Baramulla and Budgam in Kashmir Division and at Kathua and Rajouri in Jammu Division were established. The fifth school originally conceived for Leh, could not be established for administrative reasons. The existing training center for basic training of ANMs have also been provided with inputs to strengthen their capacity and improve quality of the trainings imparted by them.

(IV)   Training Annexes. Construction of training annexes in 10 PHCs field training for ANMs were envisaged under the Project. Six have been constructed in Jammu Division and 4 in Kashmir Division. This was an additional input in the training system in the non-district training teams districts.

The functionaries covered under the Project include, the following categories;

## A. DISTRICT LEVEL MANAGERS

Chief Medical Officers

Dy. Chief Medical Officers

Public Health Nurses/other Nursing staff

District Immunization Officers

District Family Welfare Officers

District level Mass Media Officers

District Health Officers

## B. OTHER FUNCTIONARIES

Medical Officers of block level/referral hospitals

Medical Officers of other hospitals/dispensaries

Functionaries of the ISM

Para-Medical workers and non-medical workers of district hospitals, referral hospitals and dispensaries.

## C. CHC/PHC LEVEL MANAGERS

Medical Officers of CHCs/SDHs

Medical Officers incharge PHCs

Nurse-Midwives in CHCs/PHCs

Block Extension Educators

Community Health Officers of PHCs

Other para-medical and non-medical functionaries of CHCs and PHCs

## D. SUPERVISORY LEVEL

Health Supervisors (male)

Health Supervisors (Female)

E. <u>**SUB-CENTRE LEVEL**</u>

Health Workers/Multipurpose health Workers (male)

Health Workers/ANM's/Multipurpose Health Workers (Female)

F. <u>**VILLAGE LEVEL**</u>

Rehbar-i-Sehat

Dais

Panchayat functionaries

School Teachers

ISM Private Practitioners

Mahila Mandal Functionaries

NGO functionaries

DWCRA members

Anganwari workers

Opinion leaders at village level

Overall picture of trainings under IPP-VII during the period 1992-98 is summarized at Table 4.

| S.no. | Category | Estimated latest Training load | No. Trained under IPP-VII (including Re-Orientation | %age | Backlog |
|---|---|---|---|---|---|
| 1 | BMOs/Mos | 1396 | 1221 | 85.5 | 172 |
| 2 | BEEs/Hes/MIEOs | 132 | 71 | 56.8 | 61 |
| 3 | LHV | 110 | 105 | 95.5 | 5 |
| 4 | BHW & Allied | 776 | 376 | 48.5 | 400 |
| 5 | MPHW (M/F) | 2482 | 3719 | 150 | NA |
| 6 | TBA | 6477 | 177 | 2.4 | 6323 |
| 7 | RIS (Teachers) | 3324 | 783 | 23.8 | 2531 |
| 8 | AWW | 3654 | 2508 | 68.6 | 1146 |
| 9 | Amchi | 54 | 98 | 181.5 | NA |
| 10 | Others | 0 | 1793 | 0 | 0 |
| 11 | ISM Mos | 418 | 191 | 45.69 | 227 |
| 12 | ISM Vaids | 169 | 236 | 139 | NA |
| 13 | ISM Dawasaaz | 382 | 386 | 101 | NA |
| 14 | ISM Pvt. Prct. | 2000 | 374 | 18.7 | 1626 |

**Total Health Personnel Trained = 12411**

Source:- Endline Survey IPP-VII Jammu and Kashmir by National Institute of Health & Family Welfare, in 1998.

List of institutions identified for in-service training outside the state are annexed at Annexure 5.5 for information. In these institutions, health employees of the State services are sent for upgrading their competency.

**Evaluation of Trainings:**

During the Project, mid-term evaluation of the trainings was conducted by CERPA(Center for Research, Planning and Action), New Delhi. This agency was appointed by the National Institute of Health & Family Welfare and conducted the evaluation which included the evaluation of trainers, trainees (Health Care Workers in the field) and the beneficiaries.

This report was sent to the Administrative Department for approval. The fate of this report is not known.

Finally, an End-line survey was conducted by the National Institute of Health in 1998 during the period when the Project was being wound up with similar objectives as mentioned for mid-term evaluation. The important recommendations of this have been highlighted later in this chapter. However, no evaluation was conducted by the two Regional Institutes. Relevant portion of End-line survey is annexed at Annexure 5.6 for reference.

**Conclusion:**

The Project wound up in August 1999, so did the training programs. The scenario after the closure is very painful. Two Regional Institutes were constructed as per the designs approved by the World Bank. They are still not worthy to be used, either due to the lack of water supply, electricity or other amenities. Moreover, these buildings have still not been handed over to the two Directors of Health Services who would be the real users. All the deputed staff, who had been trained as trainers at a great cost, have been reverted to their parent departments.

Table 5 shows the posts proposed, sanctioned, pay scales (as per State Govt. scales) and in-position at the two Regional Institutes and 9 District Training Teams as on 30th Sept. 1999.

Table 5:

| Category | Posts Proposed | Posts Sanctioned | Pay Scale | No. In position |
|---|---|---|---|---|
| **RIHFW** | | | | |
| Principal | 2 | 2 | 10,000-15,000 | -Nil- |
| Professor | 8 | Nil | | -Nil- |
| Associate Prof. | 8 | Nil | -Nil- | |
| Lecturer | 8 | 8 | 8,000-13,500 | -Nil- |
| Tutor | 0 | 2 | 4,000-6,000 | -Nil- |
| Steno | 2 | 2 | 6,500-10,500 | -Nil- |
| Computer Asstt. | 2 | Nil | -Nil- | |
| AV Aids Operator | 2 | Nil | | -Nil- |
| Driver | 4 | 2 | 3,050-4,500 | -Nil- |
| Jr. Sts. Asstt. | 2 | Nil | | -Nil- |
| Librarian | 2 | 2 | 4,000-6,000 | -Nil- |
| Typist/Clerk | 2 | 2 | 3,050-4,500 | -Nil- |
| Sr. Asstt. | 0 | 2 | 4,000-6,000 | -Nil- |
| Attendant | 10 | 6 | 2,550-3,200 | -Nil- |
| **DTTs** | | | | |
| Medical Officers | 0 | 6 | 7,500-12,000 | -Nil- |
| Drivers | 0 | 6 | 3,050-4,500 | -Nil- |

Source: Endline Survey Report of IPP-VII in J&K by NIHFW in 1999.

The training annexes in the districts are either closed or have been occupied by those not connected with providing trainings. Equipment, books and other related materials are lying packed in the stores. The concerned authorities show no enthusiasm to enable the training infrastructure constructed and equipped at a huge cost to be utilized as envisaged under the Project.

It would not be out of place to mention here that the State Govt. is bound through a Memorandum of Understanding (MoU) signed by the representatives of

the World Bank, Govt. Of India and J&K Govt. to utilize the infrastructure created as agreed upon. Most of the trainers developed under the Project are not associated with the in-service trainings. The Training Advisory Committee was constituted with the following functions:-

(i)     to co-ordinate with various agencies involved in training to develop and finalize the training modules, instructional methods, logics and the detailed training plans.

(ii)    To work out and finalize the detailed functions of the training institutions to be created at regional and district levels.

(iii)   To closely monitor the implementation of the training activities and to evaluate the impact of the training programmes.

That the Committee met only five times, depicts the low priority which was accorded to its objectives. The consequent lack of leadership and direction left it rudderless and doomed to failure. The borrowed financial assets which should have been utilised productively, have due to bureaucratic ineptitude, turned into a gross outstanding liability.

In Chapter-VIII of the Endline Survey, the report summarizes findings as follows:-

I.      That RIHFW Jammu has adequate number of faculty and other supportive staff position sanctioned. This is not true and is very clearly shown in the table above. The same holds true for RIHFW, Srinagar.

II.     No District Training Team is functioning which is also clearly depicted in the table above.

III.    No training Model was developed under the Project .

IV.    Project Administration, Training and Human Resources Development Cell was to be created (ATHRDC) in order to facilitate proper implementation of the training strategy as also to ensure the timely provision of necessary infrastructural facilities. Other relevant co-ordination and management services are not operational as per the project outline.

**Competency building through training programmes under Reproductive and Child Health Programme:**

All doctors, paramedics, the health administrators, officers in realted sectors are involved in Reproductice and Child Health programme launched in J&K in Feb. '99 which is basically a population stabilization programme will be required to increase their competence through inservice trainings. Different types of training courses have been envisaged under the project. Till date number of officers/officials from the state who have been trained in the institutions is shown below table 6.

Health Care Workers trained under RCH Programme outside the state as on 14-03-2000

## Table 6

### At NIHFW, New Delhi

| Name of course | Jammu | Kashmir | Total |
|---|---|---|---|
| Orientation training course on RCH Programme Management | 20 | 10 | 30 |
| Training course for State Level Statisticians, Demographers & Programme Officers in Monitoring & Evaluation | 01 | Nil | 01 |

### At SIHFW, Panchkula

| Name of course | Jammu | Kashmir | Total |
|---|---|---|---|
| Training course of District Key Trainers | 27 | 18 | 45 |

Source: Directorate of RCH Programme, J&K, Jammu.

The following training courses are being conducted for supporting the efforts of RCH programme a success. The training programmes under the project essentially will be of two types:

## 1. Awareness Training Courses

Awareness training courses (ATC) will have the common objective of increasing awareness about RCH and population indicators and for increasing awareness

and knowledge about management issues involved in RCH programme. The courses will be for category "A"·will include doctors, Sub-divisional officers of allied departments, NGO functionaries and Zila Parishad Members in District Training Bureau or Health and Family Welfare Training Centres. For "B","C","D" categories the trainees will include a composite group of ANMs, PHC paramedics, Anganwadi workers, Panchyat members, school teachers, etc. in ANM/LHV training school or District Training Bureau.

## 2. Skill-Based Training Courses

Initially, the training courses will include training of PHC/CHC doctors on Medical Termination of Pregnancy, Foundation skills courses both for doctors and para medics. The doctors will also be trained in no scalpel vasectomy and laproscopic surgery.

## 3. Management training for doctors under the RCH programme

**Competency building through training programmes under AIDS Control programme**

Trainings under National Aids Control Programme have yet to start in our state. Under the project, Doctors and all other categories of Health Care Workers will be trained .

The following training courses will be conducted at the divisional level i.e. at Govt. Medical Colleges and Regional Institutes at Jammu / Srinagar.

Medical Termination of Pregnancy, Foundation skills course for doctors and no scalpel vasectomy and laproscopic surgery.

All the other training courses will be conducted at the District level. The skill based training courses will be conducted by the key trainers in district hospitals. The AGT courses will be conducted throughout the district also by the trainers.

## Competency building under Leprosy control programme

Key trainers for this programme were trained at Regional Institute of Health and Family Welfare Panchkula, Haryana. They have provided training to the doctors and paramedics in the state. The trainings for the doctors was of three days and for the para medics/ anganwadi workers/R-I-S teachers was for two days.

No attempt ever has been made to include action research, problem solving, micro planning etc. as part of competence building for Health Care Workers in the State.

The views of the trainers, the trainees and the policy makers including the project managers involved in trainings are detailed in part 2 of this chapter.

Every programme, as mentioned earlier is being conducted by the programme managers based on the guidelines issued by Govt. of India. No initiative, what so ever is taken by them to conduct the specific training needs on the specific topic for which the competence they are planning to develop. A very limited view of training is currently used, mainly confined to classroom training wherein the experts/trainers deliver lectures. Increasing their competence and committment level of medical, para medical and other personnel through in-service trainings in achieving the programmes results is still dream. The concept of the trainings should be wider to include planning, socialization (induction, movement, exit), motivation, placement and job rotation, role analysis, competency analysis, critical attributes

analysis designing work planning and appraisal system, reward system, culture building, training, organization development, action research on development. Human Resource Development is concerned with development of individuals, teams and the total organization.

# Refernces

1.  Banerjee, A, Gupta, JP, & Bhatnagar, S. Macrostrategy for in-service training of health and family welfare personnel, National Institute of Health and Family Welfare, New Delhi.

2.  Govt. of India, End-line survey report submitted by NIHFW, New Delhi. Endline survey IPP-VII, Department of Family Welfare, Ministry of Health & Family Welfare. P; 26-27.

3.  Govt. of India, 1996; In-service training under Family Welfare Programme, Guidelines for developing in-service training plan at district level, Department of Family Welfare, Ministry of Health & Family Welfare.

4.  Mejia, FR, Abbatt. 1988; Continuing the education of health workers, A workshop manual, WHO, Geneva.

Annexure 5.1

Summary findings and recommendations of training needs assessment survey for Jammu & Kashmir state conducted by MOHFW, Govt. of India through Vimarsh Consultants in 1990-91.

**Objectives of the study**

The survey study of PHC health workers, including Dais and Village Health Guides, was made to assess their training needs. For this their knowledge and skills relating to crucial job functions were studied because training is supposed to provide necessary knowledge and skills to the workers for performing their expected jobs or tasks. The emphasis on the study was on programme variables/parameters which are within the powers of health administrators to easily change or manupulate so as to improve the performance of health workers.

These 15 important programmatic parameters of interest to the study were:-

- Expected critical job or task (6-10 parameters depending upon category of workers).

- Induction training.

- In-service training.

- Self learning continuing training.

- Knowledge of job function.

- Skills relating to job functions.

- Management including planning, supervision and monitoring.

- Interpersonnel contacts and communication with the community.

These parameters were studied wherever relevant in relation to the following category of workers :-

-       Medical officers

-       Health Assistants (M)

-       Health Assistants (F)

-       Health Workers (M)

-       Health Workers (F)

-       Village Health Guides

-       TBAs

**Important findings & recommendations**

**Findings**

It is heartening to note that basic/induction training was given to all the above 7 categories of workers. This is one shot training given before any exposure to field situation and experience in the context of expected jobs/tasks. Necessarily it remained largely conceptual and definitional in nature.

It is the in-service training, provided continuously, which provides the appropriate action/task context to the conceptual understanding developed during induction training of the workers. The study revealed that in-service training was generally lacking in case of all the seven categories of workers. It was completely missing in so far as TBAs and VHGs were concerned. Some in-service training was received by a majority of MOs, Health Assistants (F), and by Health Workers (M), while very few Health Assistants (M) and Health Workers (F) reported receiving any in-service training.

A large majority of all these seven categories of workers reported lack of self learning materials (manual etc. relating to their specific jobs or tasks).

## Recommendations

In view of the above three findings, there is a definite need to strengthen the training infrastructure both in terms of number and quality. The trainers need to be trained both inside and outside the country so that they can organise better the entire training programme. It is suggested that all workers may be given regular in-service training of a few days on specified task areas. This in-service training can be further improved and strengthened by maintaining a supply of self learning materials to be produced by Training Centres.

## Findings

The task areas where large knowledge and training gaps were noticed in course of the study, in case of almost all the categories of workers, are given below in order of the extent of deficiency.

- Family planning - particularly spacing methods.

- MTP.

- Care of infants (MCH) - particularly high risk approach.

- Care of pregnant women (MCH) - prenatal, natal and postnatal care including "at risk" and high risk approach.

- Management aspects

- ORS - particularly management of cases.

## Recommendations

The above areas need additional and focused training support. It is suggested to hold crash in-service training programmes in these areas. Improved knowledge and skills will motivate workers to perform expected task, by getting more confidence in them. This, in turn, will equip the workers better to convince and motivate the traget population for accepting improved health practices and recommended health interventions.

It is also suggested to review the basic/induction training curriculum of all categories of workers keeping in view the deficient areas revealed by the study with a view to enrich and supplement the contents in these deficient areas and devote appropriate time by rescheduling the allocation of training time suitably. The above mentioned six deficient areas be shared with field supervisors so that they make it a point to support the workers in these areas in course of their monitoring and supervisory visits and thus provide on-the-job training and support. Supervisors can develop check-lists on these areas to use in their supervisory visits. These check-lists must be worked and problem specific.

A package of self learning materials be developed, these six deficient areas, for each category of worker, and provided to workers for ready reference and study. This activity can be a continuing function of the Training Centres.

**Findings**

The study revealed presence of severe knowledge/training gaps in case of VHGs and Dais indicating almost on-the-job or in-service training to them. These workers, frontline workers facing the community, and therefore their training and retraining seems to be critical for the success of health workers and health programmes.

**Recommendations**

It is strongly recommended to organise a retraining programme in MCH - mother and child care - and for family planning for the Dais on urgent basis.

Similarly, a retraining programme of VHGs is recommended in the areas of family planning, immunisation and first aid for common diseases.

**Findings**

Apart from assessing the knowledge of different category of workers the study also attempted to probe the degree of their skills in carrying out service activities. A separate schedule was developed for this purpose which included questions relating to diagnostic, treatment and management of skills.

The meaning of the twoseir diagnostic skills of different diseases and health problems were concerned. They were, however, found to be some what deficient in the skills relating to the proper handling of cases, particularly the preventive aspects. For example, a good number of them were not aware of important steps to be taken during the prenatal and postnatal checkups, situations under which

a case of diarrhoea needs to be referred to PHC, the schedule of immunisation and maintenance of cold chain, what to do for reducing chances of malnutrition and how accepting of spacing methods can pro-health of mother and child.

## Recommendations

Adequate supervised practice, as a part of basic and in-service training for developing these skills, is strongly recommended. This calls for highly skilled and experienced trainers. It is therefore suggested that the trainers must be trained within and outside the country in the technique of skill and eevelopment.

## Findings

Skills of knowing the community and understanding health problems are as much important rendering actual service. For this various skills of interacting with individuals, groups and leaders is required. Skills of conducting surveys and using mass media also help in providing understanding of communities and their problems. The health workers, in general, were found lacking in these skills.

## Recommendations

It is suggested to strengthen the existing training curriculum by providing practial communication lab-session as a part of their training.

It is also suggested to organise supervised practice in the field, for which adequate time be given in the training schedule of all categories of workers.

## Findings

The study revealed that the supervisory staff (MOs and health assistants) needs greatest training support in the broad areas of management which includes microplanning at PHC level, developing work plans, time bound implementation supply logistics, monitoring and supervision.

The study also revealed a great need for additional training support in the area of skills of administration and leadership. This was particularly true of skills in accounting and budgeting, preparing records and reports, promoting team support, evaluating workers and their work, ensuring accountability and using records and reports as feed back for initiating immediate correctives.

## Recommendations

These skills can be best learnt by exposing the MOs to serve better managed and administered projects, in official and private sectors, both inside and outside the country. It is therefore suggested to sponsor such group visits of MOs under the leadership of senior/experienced administrators and trainers of the state. Such observations and study visits to selected cases (projects) would present them better alternative skills and techniques under realistic comparative situation in areas of management and administration.

Annexure 5.2

RELEVANT PORTION OF MACROSTRATEGY FOR INSERVICE TRAINING OF HEALTH & FAMILY WELFARE PERSONNEL PREPARED BY NIHFW, NEW DELHI

## Macro Strategy for In-Service Training

### Aim

The aim of the proposed training strategy is to enhance the effectiveness of health care services by providing a plan of need-based in-service training and orientation towards national goals and primary health care, so as to improve practical and managerial competence and an attitude for team work in all categories of health functionaries, voluntary grass-root workers and community members of a District. This plan will help the states to develop a system of Human Resource development by continuing training in health & family welfare.

### Objectives:

a) To develop a systematic plan for in-service training where each functionary gets a chance to be inducted in the specific job, receives a periodic update, and on job reinforcement of knowledge and skills.

b) To strengthen existing training capacity and expand it to meet the proposed training requirement.

c) Suggest mechanisms to promote health team building and quality of services particularly by linking supervision with training.

### The Training Strategy

For development of the functionaries following type of need based training courses, for various categories have been proposed.

1) Induction training of all new entrants of service (orientation towards roles and responsibility of the job).

2) Promotional Training (responsibility orientation to the higher position).

3) Continuing Education which is

    i)    Fixed periodicity Institutional based – refresher training of 2 weeks for all workers once every four years.

    ii)    Minimum Periodicity – on the job training once every 3 months for health workers and once in 1-3 months for village level workers.

    iii)    Dissemination of health information such as Handouts, News letter, Bulletins etc. to be sent out once in 3 months up to SC level personnel.

4) Special training – Special training of 2 weeks in surgical skills for Medical Officers at the PPC and for the HW(F) in midwifery at the CHCs.

5) Advanced training – for higher learning, in educational technology management at NIHFW and IIMS. For specific higher training, Lab Technician etc. may be deputed to Medical College and Public health laboratory.

**Details of Components of Macrostrategy:**

**Basic Considerations**

Training alone is not a penacea for removing ills of health system. However it is assumed that repeated training will improve effectiveness of services. Alongwith the development of a training strategy, it is necessary to lay down a training policy for training related to cadre building & promotion. The training contents suggested are based on a problem solving approach, team building and vertical and horizontal integration. The training contents are comprehensive with focus on MCH, primary health care and population control and management. The description of a core capsule which covers above mentioned priority areas is given in the subsequently. The frequency of Institution based in service training is envisaged once in four years while on the job training is visualized once in 3 months.

A responsibility oriented promotional training is proposed before assuming higher positions. On the job training is linked with supervision and will be imparted by the District Training Teams and the Block Training Teams. It is strongly felt that a single District Training Team cannot cover on the job training of all functionaries upto village level. Hence a Block Training Team is visualized which will have an integrated function of on job training and supervision of peripheral workers. Training for Key trainers is proposed who will also conduct periodic training need

assessment.

## Core Capsule for Training

In order to make the training more realistic and job oriented towards the National Goals, a "core capsule" containing the following important National Programs, priorities and problems is incorporated in all the induction training courses in the modified form depending on the need of the category. The contents of the "core capsule" are:

i)      HFA Goals and Primary Health Care
ii)     Population Dimensions and Family Welfare
iii)    Health Infrastructures
iv)     National Health Programs
v)      MCH & FW, UIP, ARI, DDC Management
vi)     Material Management
vii)    Communication skills
viii)   Supervision and Monitoring
ix)     Epidemic Management
x)      MIES, Reporting and Surveillance
xi)     Educational Technology.

It is envisaged that all categories required to have an induction training should be trained in above areas for a week, so that all functionaries receive a common orientation toward national goals and program requirement. It would be ideal if members from different categories are mixed for this core programmes. However, if feasibility does not permit, the same course can be imparted in a package/modular form in all Induction Training programs at respective institutions/ locations.

While the job responsibilities for all levels and types of staff have been carefully specified, these had not been well disseminated to staff, nor linked to pre-and in-service training activities and in most cases, field workers have a far greater task load which they can reasonably be expected to handle. No formal work study was ever conducted to really find the real workload of different categories of health personals working in the department.

The overall objectives of the National Training Project were:

1.  To provide the functionaries of the Health and Family Welfare System of the State of Jammu and Kashmir with the necessary attitudes, knowledge and skills to enable them to reach the services to the target population more effectively, n time, in full measure and of a high qual

2.  To provide for a training infrastructure which will support and sustain such a massive program.

3.  To upgrade the rural infrastructure to support the effort of qualitatively improved delivery of health and family welfare services.

4.  To encourage innovation to sustain and support the qualitatively improved delivery system.

5.  To provide for other services like a more dynamic and relevant IEC effort. Monitoring, MIS and Evaluation.

## The specific objectives

To achieve the overall objectives as mentioned above, the following specific objectives will be relevant to this Project:-

(a) The development of a system of Induction Training In-Service Training for all the personnel of the Health and Family Welfare System such that it would be internalized by the State's Health and Family Welfare delivery system.

(b) The strengthening of primary health care and family welfare services delivery by upgrading the physical infrastructure in the nine selected districts to increase coverage.

(c) The implementation of selected activities on a State wide basis, such as IEC, Community involvement and participation, innovative programs and MIS.

(d) To provide for an upgradation of the capabilities of the system for planning and developing its human resources.

(e) To fund studies or innovative program implementation which would analyze in depth, alternative aspects of health care and family welfare and their required

inputs; which hold potential for wider replicability.

Annexure-5.3

List of training courses attended by trainers from J&K under India Population Project-VII, J&K w.e.f. May 1993 to 1998.

A. At National Institute of Health & Family Welfare, New Delhi.

1. Training Course on Educational Technology.

2. Staff College Course.

3. Advanced Course on Training Skills Development.

4. Training Course on Evaluation of Training Programmes.

5. Epidemiological Approaches to Health Management and Research.

6. Integrated Trainng Course on Health & Family Welfare for Trainers of Medical Officers.

7. Integrated Training Course on Health & Family Welfare for Trainers of Peripheral Health functionaries.

8. Training Course in Electronic Media.

9. Training Course in Health & Family Welfare Management.

10. Integrated Course in Education Technology & Contraceptive Technology.

11. Formulation of Innovative Schemes in Family Welfare.

12. Workshop on preparing Action Plan and Implementation Strategy to Link Training of Trainers in NIHFW with State Training Strategy.

13. Workshop for Reorientation of Local Resource Persons for Management Communication and MCH.

14. Integrated Training Course in Information Education and Communication.

15. Orientation Training Course for District Hospital Specialists.

16. Training Course in Hospital Management.

17. Training Course on District Health Planning &

18. Training Course in Management for Senior Nursing Administrator IPP-VII.

19. Training Course on District Health Planning & Management for CMOs of J&K and Bihar at NIHFW.

**B. Training courses attended by trainers at various institutes outside the state other than NIHFW, New Delhi.**

1. Programme on Human Resource & Personnel Management (Hyderabad).

2. Development of Health Care Systems & action Plan (Bangalore).

3. Development of Management of Skills for Improvement of Health Care Delivery System. (Bombay).

**C. Names of training courses attended by trainers from J&K at various institutes outside the country.**

1. Course in Educational Sciences for Trainers at University of Kebangsaan, Malaysia.

2. Educational Management Course in University of New Southwales, Sydney, Australia.

3. Course in Educational Sciences in Jakarta, Indonesia.

Names of trainers from J&K who attended various training courses under India Population Project-VII.

## A. STAFF COLLEGE COURSE FOR FACULTY OF SIHFW (IPP-VII) MAY 3-28, 1993.

(i) Dr. Khurshid Ahmed Salman
DTO
Baramulla, J&K.

(ii) Dr. Prem Chaudhary
Co-ordinator ISM, IPP-VII
Jammu & Kashmir.

## B. STAFF COLLEGE COURSE FOR FACULTY OF SIHFW (IPP-VII) AUG. 2-27, 1993.

(i) Dr. Sudesh Sharma
Training Officer

## C. TRAINING COURSE ON DEVELOPMENT OF CURRICULUM IN THE AREA OF HEALTH & FAMILY WELFARE MANAGEMENT. FEB. 7-19, 1994

(i) Dr. Khurshid Ahmed Salman
DTO, Baramulla

(ii) Dr. Yangchan Dolma
DTO, Leh

## D. ADVANCED COURSE FOR TRAINERS IN TRAINING SKILLS AND DEVELOPMENT. MAY 16 TO JUNE 3, 1994.

(i) Dr. S.C. Raina
DTO
C/o Chief Medical Officer
Poonch - J&K

(ii) Ms. Gurdeep Rishma
Programme Officer (IED)
RIHFW, Jammu - J&K

(iii) Dr. Rafique Firdoosy
Principal
RHFPTC, Bhagat Barzulla,
Srinagar - J&K

(iv) Dr. Prem Choudhary
Coordinator (ISMO IPP-VII)

## E. TRAINERS IN TRAINING SKILLS DEVELOPMENT IPP-VI-VII STATES. AUG. 8-26, 1994)

(i) Sh. Sudhama Lal Sharma
PHN Tutor, RIHFW.

(ii) Dr. Khurshid Ahmed Salman
Distt. Training Officer

(iii) Sh. Harmohinder Singh
Health Education Ext. Officer,
Regional Health & Family Welfare Training Centre,
Srinagar, Kashmir.

## F. TRAINING COURSE IN HEALTH AND FAMILY WELFARE MANAGEMENT FOR DISTRICT LEVEL MEDICAL OFFICERS. 5-23 DECEMBER, 1994.

(i) Muzafar Ahmed
Medical Suptd.
Chitranjan Services Hospital,
Govt. Medical College, Srinagar

(ii) Dr. H.L. Dhar
Chief Medical Officer, Jammu.

(iii) Dr. Manzoor Hussain
CMO
Budgam

(iv) Mrs. Arora
Principal AMT School,
Jammu.

## G. TRAINING COURSE ON EVALUATION AND TRAINING PROGRAMMES. 27-31 MARCH, 1995.

(i) Dr. Prem Choudhary
Coordinator-ISM
IPP-VI

(ii) Dr. Yogesh Gupta
Medical Officer
Training & OR,
RIHFW, Jammu.

## H. TRAINING COURSE ON EPIDEMIOLOGICAL APPROACHES IN HEALTH MANAGEMENT AND RESEARCH IPP-VI & VII. JULY 24 TO AUG. 11, 1995.

(i) Mr. Sudhama Sharma
Training Co-Ordinator
Regional Institute of Health & Family Welfare,
Jammu.


(ii) Dr. Yogeshwar Gupta
Medical Officer
Training & OR, RIHFW, Jammu.


## I. INTEGRATED TRAINING COURSE IN HEALTH & FAMILY WELFARE FOR TRAINERS OF PERIPHERAL HEALTH FUNCTIONARIES (IPP-VII). 5-24 FEB., 1996.

(i) Ms. Gurdeep Rishma
IFC Prog. Officer RIHFW, Jammu (IPP-VII),
Jammu.


(ii) Dr. Yangchan Dolma
District Training Officer
C/o Chief Medical Officer
Leh (Ladakh).


(iii) Dr. V.K. Gupta
District Training Officer
C/o Chief Medical Officer
Jammu.


(iv) Mr. Sudhama Sharma
Training Coordinator
Regional Institute of H&FW
Jammu.

**J. ORIENTATION TRAINING COURSE FOR DISTRICT HOSPITAL SPECIALISTS. 16-20 SEPTEMBER, 1996.**

(i) Dr. B.A. Khan
Chief Medical Officer
Kargil (J&K).

(ii) Dr. M. Nissa
Gynaecologist
Distt. Hospital
Kargil (J&K).

(iii) Dr. Soman Wangchuk
Paediatrician
SNM Hospital,
Leh, Ladakh (J&K).

(iv) Mrs. Ranjit Kaur
Principal AMT School, Medical College, Srinagar.

**/K. INTEGRATED TRAINING COURSE IN HEALTH & FAMILY WELFARE FOR TRAINERS OF MEDICAL OFFICERS (IPP-V AND VI). 20-31 JANUARY, 1997.**

(i) Dr. D.S. Jamwal
lecturer
Deptt. of Comunity Medicine
Govt. Medical College, Jammu.

**L. INTEGRATED TRAINING COURSE IN HEALTH & FAMILY WELFARE FOR TRAINERS OF PERIPHERAL HEALTH FUNCTIONARIES. 10-21 FEBRUARY, 1997.**

(i) Dr. Shafat Ah]mad
Medical Officer
P.H.C. Langate, Kupwara (Kashmir).

(ii) Mr. G. Mustafa
Health Educator
C/o Blocks Medical Officer
SDH Sopore (Kashmir).

(iii) Mr. Dinesh Kumar Gupta
Audio Visual Officer
Health Education Bureau
Directorate of Health Services, Jammu.

(iv) Mr. Surjit Singh
A.E.E.
Department of Community Management
Govt. Medical College, Jammu.

**M. INTEGRATED TRAINING COURSE IN INFORMATION EDUCATION AND COMMUNICATION FOR IPP-VI & VII STATES. FEBRUARY 10-21, 1997.**

(i) Sh. Ravi Kant Gupta
Distt. Mass Education Officer
Distt. Family Welfare Bureau
Kathua.

(ii) Dr. Shafi A. Wani
Coordinator, IPP
Srinagar.

(iii) Sh. Nazir Ahmed
Distt. Mass Education & Information Officer
Directorate of Health Services
Srinagar.

(iv) Sh. Mufti Bashir Ahmed
District Media Education & Information Officer
Directorate of Health Services, Srinagar.

## N. INTEGRATED TRAINING COURSE FOR DISTRICT HOSPITAL SPECIALISTS FROM 24-28 FEBRUARY, 1997 FOR IPP-VI STATES.

(i) Dr. S.P. Sharma
Paediatrician
SDH Sohanjana
Jammu.

(ii) Dr. Krishna Kumari
Gynaecologist
SDH Samba, Jammu.

(iii) Mrs. Shakila Akhtar
Sr. Sister Tutor
AMT School, Srinagar.

## O. TRAINING COURSE IN HOSPITAL ADMINISTRATION FOR IPP-VI & VII STATES. 3-7 MARCH, 1997.

(i) Dr. H.L. Sharma
Dy. Med. Suptd.
S.M.G.s. Hospital
Medical College, Jammu.

(ii) Dr. Rattan Pal
Dy. Medical Superintendent
Medical College Hospital
Jammu.

(iii) Dr. Vipan Kumar
Asstt. Surgeon
S.M.G.S. Hospital
Medical College, Jammu.

(iv) Dr. A.Q. Faktoo
Assistant Director
ADFWMCH
Srinagar.


(v) Dr. Halima Bano
Dy. C.M.O.
Budgam, Kashmir.


## P. INTEGRATED TRAINING COURSE IN INFORMATION EDUCATION AND COMMUNICATION FOR IPP-VI & VII STATES. FROM 10-21 MARCH, 1997.

(i) Ms. Gurdeep Rishma
IFC Prog. Officer RIHFW, Jammu (IPP-VII),
Jammu.


(ii) Dr. Tasnim Syed
Medical Oficer
Indian Red Cross
J&K State Branch, Srinagar.


## Q. INTEGRATED TRAINING COURSE IN INFORMATION EDUCATION AND COMMUNICATION FOR IPP-VI & VII STATES. APRIL 7-18, 1997.

(i) Mr. Aman Ullah
DMEIO
C/o CMO, Leh.


(ii) Mohd. Nayeem
DMEIO
C/o CMO, Leh.


(iii) Dr. V.K. Gupta
District Training Officer,
IPP-VII, Jammu.

# R. TRAINING COURSE IN DISTRICT HEALTH PLANNING & MANAGEMENT FOR CHIEF MEDICAL OFFICERS OF JAMMU & KASHMIR AND BIHAR. 21-25 JULY, 1997.

(i) Dr. P.M. Dhar
Assistant Director
Directorate of Health Services, Jammu.

(ii) Dr. G.R. Pala
Assistant Director (HEB)
Directorate of Health Services, Kashmir.

(iii) Dr. A.R. Zargar
Chief Medical Officer
Distt. Doda. (J&K).

(iv) Dr. G.M. Ganai
Divisional Nutrition Officer,
C/o Director Health Services, Kashmir.

(v) Dr. A.A. Rather
Assistant Director
Directorate of Health Services
Srinagar.

(vi) Dr. V.S. Gupta
Chief Medical Officer, Udhampur.

(vii) Dr. S.K. Gupta
Chief Medical Officer, Kathua.

(viii) Dr. Farooq A. Qayoom
Assistant Director (FW)
MCH and Immunization
Old Secretariat, Srinagar.

## S. TRAINING COURSE IN MANAGEMENT FOR SENIOR NURSING ADMINISTRATOR (IPP-VII). 15-26 SEPTEMBER, 1997.

(i) Mr. Sudhama Lal Sharma
Programme Coordinator
RIHFW, Jammu.

(ii) Mr. Bikram Singh
PHN Tutor
Anciallary Medical Training School,
Bakshi Nagar, Jammu.

(iii) Mrs. Nighat Dilshad
Nursing Supervisor, JLNM Hospital,
Srinagar.

(iv) Mrs. Kulwant Kaur
Sister Tutor
ANMT School, Srinagar.

## T. TRAINING COURSE IN DISTRICT HEALTH PLANNING AND MANAGEMENT FOR CMOs OF J&K AND BIHAR AT NIHFW. 20-24 OCTOBER, 1997.

(i) Dr. Muzaffar Ali
Chief Medical Officer,
Srinagar.

(ii) Dr. Purnima Vaishnavi Bhan
Chief Medical Officer
Udhampur.

(iii) Dr. R.S. Wazir
Block Medical Officer
Billawar.

(iv) Dr. Ram Rattan Hitaishi
Block Medical Officer
S.D.H., Samba.

(v) Dr. M. Hussain
Chief Medical Officer
Anantnag, Kashmir.

(vi) Dr. Amin Ahmed Sofi
Chief Medical Officer
Budgam, Kashmir.

(vii) Dr. Faruq Ahmad Rathore
Chief Medical Officer
Pulwama, Kashmir.

(viii) Dr. S.S. Khajuria
Chief Medical Officer
Distt. Hospital, Poonch.

## U. ORIENTATION TRAINING COURSE FOR SPECIALISTS IN DISTRICT HOSPITAL & TRAINERS OF PERIPHERAL HEALTH PERSONNEL FROM 24-28 NOV., 1997 AT NIHFW, NEW DELHI.

(i) Dr. K.D. Sharma
Gynaecologist
Post Partum Centre
S.M.G.S. Hospital,
Jammu.

(ii) Dr. Shafat Ahmed Shah
I/C Medical Officer
D.T.T. Baramulla, Kashmir.

(iii) Mr. Sudhama Lal Sharma
Training-Coordinator
Regional Institute of Health and Family Welfare
Medical College Complex, Jammu.

(iv) Dr. Shafakat Rasol
Medical Officer
S.D.H. Pattan
Baramulla, Kashmir.

(v) Dr. Rajeshwar Sharma
Registrar C.D. Hospital
Jammu.

## Performa for obtaining feedback from trainees

| Name of the Session | For your work | | | | Content | | | Presentation | | | Duration | | | Reading Material | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Very useful | Useful | Not useful | | Too much | Adequate | Too little | Good | Average | Poor | Too little | Too much | Adequate | Too much | Adequate | Too little | No material given |
| Facilitator: | | | | | | | | | | | | | | | | | |

| Date: | | |
|---|---|---|
| | **Strengths of the sessions** | **Weaknesses of the sessions** |

**Any other critical comments:**

Annexure-5.5

## List of Institutions identified for In-Service training outside J&K State

| S.No. | Name of Institution | Category of Training | Category Deputed |
|---|---|---|---|
| 1. | Director National tuberculosis Institutes, Bangalore | Tuberculosis Control Programme | Asstt. Surgeon & Para Medical Staff |
| 2. | National Malaria Eradication Programme, Delhi | Course in Malariology under NMEP | Malaria Staff |
| 3. | National Institute of Communicable Diseases, Delhi | National training Course in field Epidemeology | Gazetted Staff |
| 4. | Directorate of Health Education Bureau, New Delhi | Certificate Course in Health Education for Medical Officers & Media Personal | Gazetted & Para Medical Staff |
| 5. | Rajinder Prasad Centre for Opthamology, AIIMS, New Delhi | Workshop for Eye Surgeons | Eye Surgeon |
| 6. | All India Institute of Medical Sciences, New Delhi | Masters in Hospital Management | Asstt. Surgeon |
| 7. | National Institute of Health & Family Welfare New Delhi-1100067 | Training Course on Hospital/Health Administration | -do- |
| 8. | All India Institute of Hygiene & Public Health, 110 Chetron You Avenue, Calcutta-73 | DPH Course | -do- |

| S.No. | Name of Institution | Category of Training | Category Deputed |
|-------|---------------------|----------------------|------------------|
| 9. | Central Bureau of Health Intelligence (Directorate General of Health Services), New Delhi | Training Programme for Medical Records | Ministerial Staff |
| 10. | Central Bureau of Health Intelligence New Delhi | Certificate Course in Health Statistics | Statistical Staff |
| 11. | Schceffelin Instt. of Leprosy Research & Training, Karegire, T.N. | Orientation Trg. Course of Physiotherapy & Leprosy Rehabilitation | Asstt. Surgeon & Para Medical Staff |
| 12. | Central Instt. for Leprosy (Indian Council of Medical Research, Agra | Orientation Course in Multi-Drug therapy & Medical Officer's Training Course in Leprosy | Asstt. Surgeon & Para Medical Staff |

**Annexure 5.6**

**Relevant portion of Endline Survey conducted by NIHFW, New Delhi 1998-99.**

"It is evident that Training Advisory Committee met only five times during the life of Project IPP VII.

During its first few meetings, the Committee did not discuss anything pertaining to trainings. In the subsequent meetings, the Committee discussed:

- Training curriculum

- Provisions of faculty for training courses.

Various options for provisions of Trainers were discussed which included Employing permanent faculty or arranging Guest faculty from outside the state. But finally only faculty members from Medical Colleges Jammu and Srinagar; Universities of Jammu and Kashmir and IMPA could be arranged during the whole life of the project.

In this context, lack of discussion taking for appointing permanent faculty for the two RIHFWs and DTTs is evident from the following facts:

- 141 posts were proposed to be created out of which only 61 were agreed upon by Govt. Of India. But during the term of the Project or even thereafter, both RIHFWs are without faculty and same is the case with DTTs. Out of nine DTTs created under the Project, only one DTT is having permanent Full Time Medical Officer. In the other 8 DTTs, Dy. CMOs/ DHOs are handling these, in addition to their own duties. These officers are very busy in discharging the functions of their primary offices and hardly got any time to devote towards trainings by the DTTS.

In the above mentioned circumstances, it can be concluded that DTTs could only organize trainings half heartedly and at the times when the officers handling them could find time from the functioning of their own offices.

Same was the case with RI(s)HFW. Before organizing any training(s), the

concurrence of the Stop Gap Trainers (from Medical College(s), University(ies), IMPA) had to be obtained. This situation led to changing of dates of training(s) and thus causing delays which could have otherwise been avoided, had the institutes been provided permanent faculty.

This delay is further evidences by the long intervals between arranging the two training courses. A summary of major findings regarding training institutes in this end-line survey is listed below:

## Strengths

1.  Regional Institutes of Health Jammu has been strengthened under IPP-VII by providing adequate number of teaching learning aids, equipments, material and books for the library for conducting ·training activities effectively at regional level.

2.  The institute has adequate number of faculty and other supportive staff positions sanctioned.

3.  Physical facilities planned in the new building under construction are adequate for conducting training program.

4.  Most of the training target has been achieved by imparting training to various categories of Health personnel.

## Weaknesses

1.  Some of the faculty positions are lying vacant.

2.  The Institute has not developed any training resource material of its own for distribution to the trainees.

3.  No follow-up evaluation of trainees has been conducted by RIHFW so far.

4.  It was found that research studies were not given due importance.

Regional Institute of Health and Family Welfare, Srinagar

The newly established RIHFW at Kashmir is functioning in the existing Rural Health & Family Welfare Training Center. Due to political unrest and disturbances the institute started training courses very late.

**Strength**

1.  Physical facilities planned in the new building under construction are adequate for conducting training programs.

2.  Separate faculty positions have been sanctioned for RIHFW, Srinagar.

**Weaknesses**

1.  All the faculty positions sanctioned of lectures only. No senior faculty position has been sanctioned.

2.  It will difficult for the institute to acquire high status for conducting training programs for senior level administrator.

**District Training Teams**

**Strengths**

1.  All the DTCs in J&K were adequately furnished and provided with teaching learning aids such as TV, VCP, OHP, type writers etc. for conducting training activities.

2.  Most of the DTTs have been provided with vehicle to conduct field training effectively and regularly.

**Weaknesses**

1.  Besides the DTO, the other members are not posted in regular basis. The core team members viz. Communication officer and PHN were posted on deputation basis that too for part time.

2. As the post of driver was not created for DTT, a driver had been assigned on deputation basis from the Health Department. Due to room availability of the driver, the DTTs could not conduct on the job training activities on regular basis.

3. Lack of co-ordination between the CMO and DTT was evident for training courses.

4. Emphasis on development of clinical skill was not given in training courses.

5. At times, they faced problems in releasing fund for training DTTs.

Annexure 5.7

**Training Advisory Committee**

    The Government of Jammu and Kashmir, Health and Medical Education Department with reference to the Administrative Council decision No. 9, dated 6-6-90, vide order No. 397GR HME of 1990 dated 12-6-90, issued the sanction of the creation of the Training Advisory Committee under the IPP-VII.

    The composition of the training Advisory was:

| | | |
|---|---|---|
| 01. | Commissioner/Secretary, Health and Medical Education | Chairman |
| 02. | Principal Medical College, Srinagar | Member |
| 03. | Principal Medical College, Jammu | Member |
| 04. | Director Health Services, Jammu | Member |
| 05. | Director Health Services, Kashmir | Member |
| 06. | Director FW, Immunization & MCH | Member |
| 07. | Select Principals of AMT/ANM Schools, Two by rotation | Member |
| 08. | Principal RIHFW, Jammu | Member |
| 09. | Principal RIHFW | Member |
| 10. | GOI Representative | Member |
| 11. | Project Director NTP | Member Secy. |

The functions of the Training Advisory Committee are:

(i)   To co-ordinate with the various agencies involved in training to develop and finalize the training modules, instructional methods, logics and the detailed training plans.

(ii)  To work out and finalize the detailed functions of the training institutions to be created at regional and district levels.

(iii) To closely monitor the implementation of the training activities and to evaluate the impact of the training programmes.

## Annexure 5.8

Procedures adopted for trainings at Regional Institute of Health & Family Welfare,
Jammu under IPP-VII, J&K.

| INPUT | PROCESS | OUTCOME |
| --- | --- | --- |
| ⊘ Curriculum designed as per guidelines in Macro Strategy report by NIHFW, Ministry of Health & Family Welfare, Govt. of India and TNA report of Vimarsh. Further modified onthe basis of feedback from trainees, managers in the field and the Course Directors. The training courses were relevant to the needs of the community and service providers.<br>⊘ Trainers in the form of guest faculty were from Govt. Medical College, Jammu, IMPA, University of Jammu, ICDS, consultants, and retired Health experts.<br>⊘ 31 trainers were trained during the period 1992-98 from various institutes.<br>⊘ Trainees were never more than 25 in number.<br>⊘ Background materials were given to the trainees.<br>⊘ Since Library facilities were not available throughout the Project life, in 1997-98, books were purchased for the library, but, in the absence of a librarian, the books could not be used.<br>⊘ Hostel accommodation was available in the makeshift institute at R.I.S. Building in the form of 3 halls having capacity of 10 beds each with common bath & toilets. No catering service was available.<br>⊘ Teaching with sitting arrangement oval in shape having conferencing audio system, well lit and comfortable and were satisfactory.<br>⊘ Hospital facilities available for trainees were minimal.<br>⊘ Training course materials for hands-on trainings published by Govt. of India was used. The Project did not go for publishing any material locally as conceived (especially in Urdu).<br>⊘ Funds for trainings were available with the Project but the problem of getting TA/DA released from treasury in time was a difficult job and acted as a disincentive for the organizers as well as participants. | ⊘ Teaching, learning was in the form of lectures, role plays, demonstrations, on-the-job trainnig and through field visits.<br>⊘ Use of audio, visual aids was appropriate.<br>⊕ Participatory learning, teaching was seldom encouraged.<br>⊘ Trainers assisted in hands on training for a few trainees only. | ⊘ Knowledge of trainees during training assessed through learning index in the form of pre & post evaluation.<br>⊘ No post-training evaluation was done at their workplace by the institute which could have provided feed back regarding areas of thrust.<br>⊘ No evaluation was conducted for their (trainee's) ability to train next lower functionary by the Institute.<br>⊘ No evaluation was conducted to find out the impact of trainings on patient care by the Institute.<br>⊘ Mid term evaluation was conducted by CERPA, New Delhi and report submitted to Govt. of J&K in 1996 for necessary action as no revised guidelines were communicated on to the training system.<br>⊘ Endline evaluation conducted by NIHFW, NewDelhi and report submitted to Government in 1998 for necessary action. |

# 6

## Towards A Model Of Competency Building And Proposed Model For J&K State

*"To study the phenomenon of disease*
*without books*
*is to sail an uncharted sea,*
*while to study books without*
*patients is not to go sea at all."*

*Osler W. 1945*[77]

## Introduction

"Education should be fun. This sadly is a foreign notion to many doctors, ... because of the medicine's tradition of education by humiliation. In the Old World you were expected to know what you should know, learning was thought to be complete at the end of training, and uncertainty was discouraged and ignorance avoided. In the New World the most important thing to know is what you don't know. And you should feel good about not knowing. "I don't know. Pencheon plays a game with medical students. He asks them increasingly difficult questions,which they usually keep trying to answer,guessing as they go. Eventually a student will say, "I don't know" Pencheon awards that student a tube of Smarties." "Those three words," [Prof. David Pencheon,a doctor/teacher/researcher from Cambridge tells us], "are the most important words in education." Learning is now lifelong, and ignorance and uncertainty are OK. Learning is about knowing how to find out what you don't know.."[32]

Before we advance "Towards a Model of Competence Building", it would be rewarding to think about the theory related to this subject. The components to be understood would include the following:

## 1. What is learning?

"Real learning gets to the heart of what it means to be human. Through learning we re-create ourselves. Through learning we become able to do something we never were able to do. Through learning we extend our capacity to create, to be part of the generative process of life."[94] There is within each of us a deep hunger for this type of learning and the "Learning" from the experience refers to the characteristics of learning that are not based on teaching but on practicing medicine. Learning from experience in the clinical setting is a way of both solving a clinical dilemma and generating a means for altering practices in similar situations. It is self-teaching with the clinical encounter as a learning resource and reflection on practices as a primary method. It is also a skill that can be developed more fully."[35]

# Prof. David Pencheon's full list of contrasts [54]

## Paradigms in Learning

| OLD | NEW |
| --- | --- |
| ○ Knowing what you *should* know | • Knowing what you *don't* know, (not feeling bad about it) and knowing *how* to find out (or help others to...) |
| ○ Much learning "complete" at the end of formal training | |
| ○ Uncertainty discouraged and ignorance avoided | • Learning from cradle to grave (life long learner) |
| ○ Learning by humiliation; name shame and blame | • Legitimising uncertainty, learning by questioning |
| ○ Sole methods; apprenticeship, learning from accepted wisdom | • Able to question received wisdom |
| | • Turning problems into questions, and to find, appraise, store, and act on experience and evidence to solve them |
| ○ Finite amount of knowledge to be absorbed | |
| ○ Intuition very powerful | |
| ○ Dominated by knowledge from experience | • Complementing experience with knowledge from research |
| ○ Fact and **content** based learning | • Problem and **process** based learning |
| ○ Professionals on top *(on top means telling others what to do)* | • Professionals on tap *(on tap means listening to what others want)* |

"Learning that occurs in the context of the daily workplace is far more likely to be relevant and reinforced, leading to better practice."[29] thereupon a model for continuous learning, inservice needs to be designed.

## How one learns?

Studies in the process of learning and memory showed that the following mechanisms could enhance understanding and recall of the data:[1]

• The generation effect – "Generation refers to the fact that when an individual generates an item, it is better recalled than when it is merely read"[1] and "the empirical finding of the generation effect is not in question."[53]

• The spreading activation model – "This model assumes that stored knowledge is best thought of as network of multiple interconnected and related data wherein processing of an item leads to activation of other related items."[1] Activation process tends to spread in all directions to activate the related information. An activated item is recalled, retrieved, recognized, judged, and evaluated better than inactivated one."[25]

• The use of pictures – "Research in the field of memory and learning has also indicated that the use of pictorial images can aid the learning process better than verbal description can. Memorization of the images can be further enhanced by presenting the data in a single visual image and by using high imagery-value items (easy to imagine)"[1]

Senge opines that real learning is not restricted to understanding what is necessary to merely survive, **"adaptive learning"** but also includes **"generative learning."** This he defines as learning that expands a human being's capacity to create the results he or she truly desires."[95]

## Problem based learning

Problem-based learning in medical education began with faculty of medicine at McMaster University in Canada in the mid 1960's. Soon after, three other medical schools – the University of Limburg at Maastrich in the Netherlands, the University of Newcastle in Australia, and the University of New Mexico in the United States –adopted and adapted the McMaster model of PBL.

"PBL can demonstrate that that theory and practice should not be seen as separate activities which need to be joined but as arising from a single source,

each complementing and informing the other. A variety of process terms appear in the literature to describe the activity of Problem-Based Learning. Theses include, contract learning,self-managed learning,student-centred learning and experiential learning.The focus is on the student or self and the emphasis on learning. It is the strength of PBL method that it creates a learning environment that promotes the development of such a skill and practice."[105]

"The learning that results from the process of working towards the understanding or resolution of a problem.The problem is encountered first in the learning process and serves as a stimulus for applying problem-solving /reasoning skills,as well as search for information needed to understand the mechanism responsible for the problem and how it can be solved".[7]

"The PBL approach differs from the traditional subject based,teacher-centred instruction that involves real or simulated problems as the initial stimulus to learning. Problem based learning has been described as one of the most significance developments in professional developments in professional education."[15]

"It has been endorsed by bodies such as the World Health Organization and is increasingly proposed as a solution to both the ills of medical education and new challenges such as clinical governance".[91]

"A better term for the approach might be 'problem first learning."[69]

"Problem based learning is usually focussed on small groups with atutor and follows a particular sequence such as the Maastrict "seven jump" – named after a Dutch children's song. These steps enable learners to identify their needs in understanding a problem and, once these are identified, to pursue their goals – usually independently – and finally to join forces once more to synthesise their findings.Maastricht "seven jump" sequence for problem based learning are as follows".[8,92]

i. Clarify and agree working definitions and unclear terms and concepts
ii. Define the problems; agree which phenomena need explanation
iii. Analyse the problem (brainstorm)
iv. Arrange possible explanations and working hypotheses
v. Generate and prioritize learning objectives
vi. Research the learning objectives
vii. Report back, synthesise explanations, and apply newly acquired in formation to the problem

## Reading and learning

- "The important role of reading in doctors'· learning is well documented in data collected from the Canadian MOCOMP system. The most frequent stimulus for learning for learning is reading the medical literature, followed by management of a current patient or problem."[18]

- "Practicing medicine without reading is unthinkable, and reading is extensively used in searching for information to solve clinical problems."[71]

- "Lack of time for reading is often perceived as a threat to professional practice and has a negative impact on perceived level of coping."[76]

- Reading as a required activity was introduced as late as 1990 and is defined as reading "authoritative" medical literature-that is, peer reviewed journals or textbooks. Self selected reading is a creditable activity only for the standard certificate. Reading is not a creditable activity for the certificate with commendation, though it presupposes that the candidate reads for at least two hours a week. For the past two years, however, doctors have been able to earn category 1 credits for reading articles specially designated for doctors' continuing medical eduaction, structured as a learning experience and following specific rules:[87]

## The principles of effective learning[24]

"Colin Coles has summarized that "people learn best when they are helped to define their own problems, acknowledge and accept their strengths and weaknesses, decide on a course of action, and evaluate the consequence of their decisions. The teacher's role in this process is to facilitate, that is to arrange educational experiences, and to create a constructive and supportive environment so that elaboration will occur."[24]

The author Colin Coles proposed a model for promoting effective learning shown in Fig. 1. It emphasizes three features of any educational situation:

(a) the context, (b) information, and (c) opportunities for elaboration.

| Learner's Context | Information | Opportunities for elaboration |

Fig. 1 Contextual learning model[24]

## The learner's context

It is not just the environment in which learning takes place, important though it is to see that the physical, emotional, and social setting is conducive. In this discussion the learner's context will mean what is going on in the learner's mind. Learners must have the motivation to learn.

**Highest**

Actual experience

Simulated experience

Role play

Demonstration

Video recording

Audio recording

Paper-and-pencil case

Reported case

Diagrams

Concepts

**Lowest**
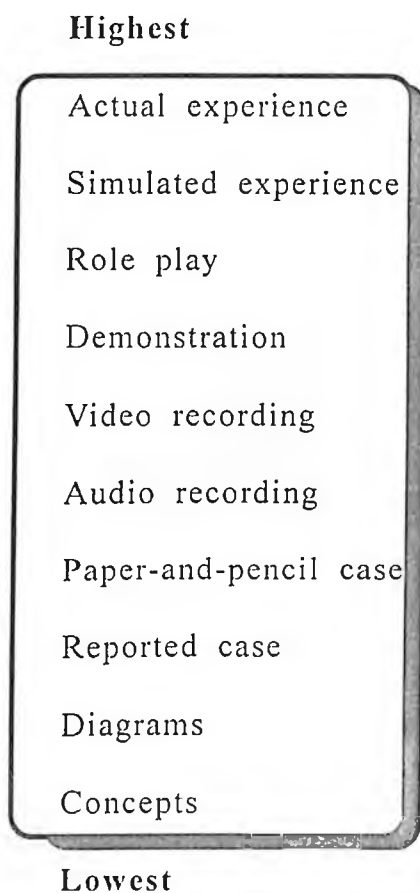
**Fig. 2 Levels of concreteness of examples and illustrations[24]**

"The model can also be used for individual educational events. As already suggested, lectures could be gently improved, perhaps by starting with a presentation of clinical examples and illustrations, and by clearly establishing the lecture's objectives. Then information, presented should be relevant to the objectives and examples posed, and opportunities for elaboration need to occur during and after the lecture to ensure that active learning takes place."[24]

"At the individual level, learners too can use the model as a basis for their own private work."[24]

*Zone of Mastery*

Knowing in action

Surprise

*Zone of indeterminancy*

Reflection on action

Reflection in action

Experiment
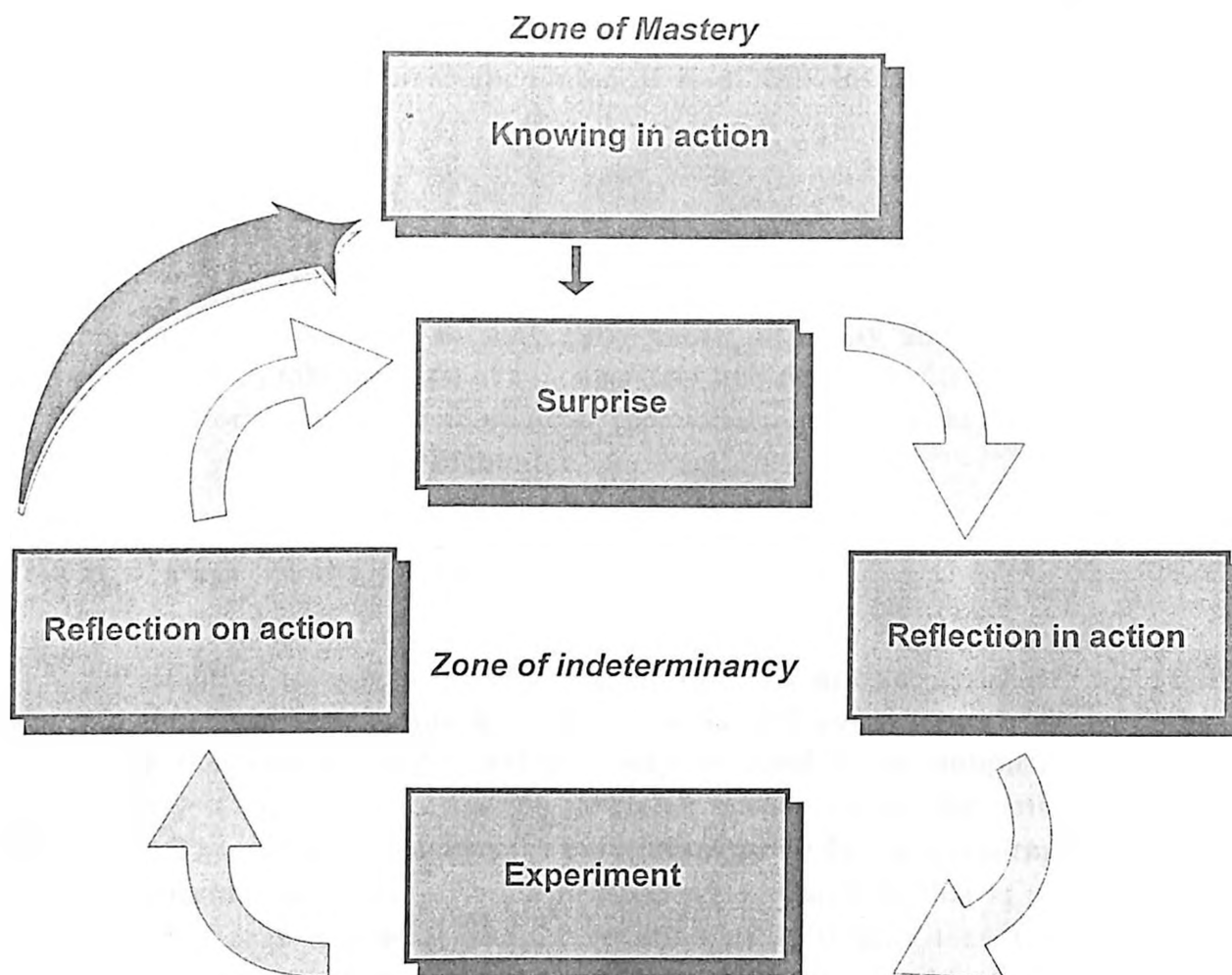
Fig[38] 3.

## How do Doctors learn?

Schon's model describes five stages in a model he terms "reflective practice."[93]

## A) The first stage of Schon's model

Learning from experience is what he refers to as "knowing-in-action." Which incorporates the automatic and deeply planted knowledge and skill that make up most of the practices of physicians. Schon forms the assumption that consultants cannot practice actually if they do not have this fundamental, action-oriented knowledge. In consequence, knowing-in-action represents those practices that are regular and involuntary, so profoundly learned that they demand limited active reflection or endeavour. Recognition of the diagnosis within a commonly seen presentation of symptoms or signs is one example. The use of a set dosage of a particular medication when treating a specific condition may be another. The physician can recall the explanations and find the studies that justify these actions if necessary, but that

Fig 3. Knowledge has become embedded in his or her actions rather than actively reflected upon in the clinical encounter. It is at this level that practice is based on fact and science.

## B) Second stage of Schon's model

Uniqueness, conflict, or ambiguity come into play and present physicians with Surprises may take the form of a inconsistent findings in the history or examination, an odd laboratory finding, or some other inconsistency with what one should expect to find in a given patient encounter.

## C) Third stage of the model

Reflection-in-action occurs when physicians are surprised during patient care and must reconstruct the knowledge skills and events that brought them to understand the surprise and develop a way to resolve the uniqueness, conflict, or ambiguity it indicates. Reflection-in-action occurs during the patient-physician interaction. The physician reviews the practices, knowledge, and information gleaned from the patient in an attempt to delineate exactly what it is that is different about this particular case and what should be done next. It may take the form of an unusual answer to a usual question, followed by a reconstruction of facts and information related to that patient in light of the knowledge and skill of the physician. The objective of reflection-in-action is to develop a response that may be appropriate during the patient encounter.

## D) The fourth stage of Schon's model is the "experiment."

Experiment plainly refer to that dilemma when a doctor in the face of surprise and based upon their reflection-in-action, they endeavor something in an effort to gain more information or resolve some clinical difficulty. Experiments can be as simple as the rephrasing of a question or as complicated as the changing of medication dosages, surgical procedures, or therapeutic regimens. These experiments are ad hoc in nature. They reflect the ability of the physician to reconstruct the information, knowledge, and skills needed to accommodate the unusual features of the case.

E) The fifth stage of Schon's model occurs after the patient encounter is completed. The physician reflects back on what occurred in the patient-care episode. The purpose is to make sense of the surprise, the way he or she thought about that surprise (reflection-in-action), and the experimental attempt to resolve it. "Reflections-on-actions" have an impact on knowledge-in-action. In effect, reflection-on-action is

Experience

Abstract plan

Learning needs

New
Knowledge
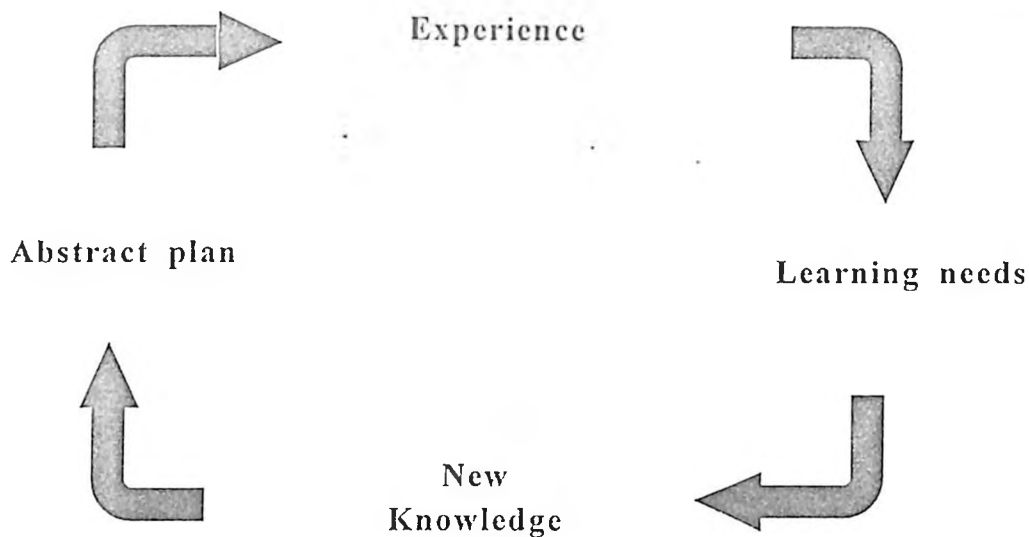
Fig[86] 4

the loop that brings learning from recent experience to bear on general procedures, and develops new frames of reference for future cases.

## Kolb's experimental learning model

The figure is a schematic representation of the adaptation of Kolb's experimental learning model. The process represented in this model can start at either the experimental level or the new knowledge level. The former is typical of learning initiated by the practice situation while the latter is typical of learning occurring as a result of exposure to new knowledge, e.g. in reading a journal article or attending a traditional CME event.[62]

## The experimental learning model (adapted from Kolb)

**H) Protocol for reflecting on practice**[24]

"Rather than teachers spending their time telling learners what they should know or do, they should help them sort out their learning objectives, and then let them get on with achieving them.

a.    Observe the learner's practice
b.    What went well? (learner first)
c.    What didn't go well? (learner first)
d.    What would the learner want to do differently?
e.    What does the teacher think the learner needs to do differently?

f.      Negotiate the learner's 'wants' and 'needs'
g.      Agree the educational objectives
h.      Meet these objectives
i.      Articulate the educational outcomes (learner first)
j.      Set new educational task as a result

## Adult learning theory

The gist of this theory is that the adult learner should not be treated as a child. Both learner and instructor should decide what should be learned. Only then the adult shall like to learn otherwise majority of learners shall take it as binding on them and shall not learn as good as envisaged by the organizers. Adult learner should be emotionally motivated to become committed learner. Teaching by humiliation is undesirable.[59,99]

The learners' emotional needs are important. If the learners' emotional state is impaired, learning is unlikely to take place. Only for this reason teaching by humiliation is a hindrance in learning. Then his social needs are met. These help to develop in his mind sense of belonging to a social group/organisations. When all these needs are met, only then higher order needs such as learning and problem solving begin to be addressed.

## Shift from the traditional teacher centered approach

The pedagogic shift from the traditional teacher centered approach, in which the emphasis is on teachers and what they teach, to a student centered approach, in which they learn, requires a fundamental change in the role of the educator from that of a didactic teacher to that of a facilitator of learning.[50]

## Self-directed Learning

"In self directed learning the focus is on the individual, but doctors also learn from their work with patients, on teams with other healthcare professionals, and in consultation with colleagues. Within the cultures of health care, each setting from primary care to tertiary referral units represents a unique organization with a personality shaped by beliefs, norms, and ways of thinking, learning, and adjusting behaviour to changes in the environment. Learners need to understand how they learn and how their learning strategies may improve in order to become more efficient and effective. Educators need to understand the natural patterns of doctors' learning so that they can design learning programmes and experiences that complement self directed curriculums in a profession where change and learning are routine and

necessary."[37]

## Self directed and deep learning:

"Self directed learning is an active process. It encourages the adoption of the deep approach to learning first described in the mid 1970s."[100] Deep learning, as opposed to surface learning, is an active search for understanding. Surface learning merely encourages students to repriduce what has been learnt."[24]

"Research has identified the student's approach to learning - surface or deep - as crucial factor in determining the quality of learning outcomes."[89]

"A surface approach is common in courses that have a heavy workload, an excessive amount of course material, little appotunity to pursue subjects indepth, little choice over study topics, and an assessment system that provokes anxiety and mainly rewards reproduction of factual information. Courses that foster deep learning, however, commonly provide a context in which students are motivated by the need to know, active learning and exploratory work in small groups, and well structured knowledge base."[100]

"A process in which learners take the initiative... for increasing self and social awareness; critically analysing and reflecting on their work... defining their learning needs ... formulating goals... identifying human and material resources for learning... choosing appropriate learning strategies... and reflecting on and evaluating their learning."[50]

"Self-directed learning is suggested as the most efficacious approach for the continuum of medical education, particularly when learning is based on experience, and new knowledge and understanding can be integrated into the personal and professional context of the individualSelf-directed learning is learning for which the individual learner takes the initiative and the responsibility (with or without help) to assess educational needs, set goals, and objectives, plan and identify appropriate educational activities, implement those activities, and evaluate the outcomes."[20]

Knox[60] has identified three additional assumptions

1.  The self-directed learner performs most mentor roles that are normally performed by an effective teacher of adults.

2.  The basis of successful self-directed education is the use of effective strategies for alternating between action problems and knowledge resources.

3.  Self-directed education will continue throughout a professional's career because the resulting improved professional performance is adequate to maintain interest in selecting future professional developmental activities.

## A. Conceptual Approach to Motivation and Self-directed Learning

*"Social[4] learning theory,* described by Bandura in 1977 who subsequently relabelled it *social cognitive theory[5]*

Its relevance lies on the concept of reciprocal dynamic interaction, and in its fundamental tenets. Reciprocal determinism is described by Bandura[4] "As the continuing, reciprocal, dynamic interaction among three elements: the individual, behavior, and the environment. The attributes, attitudes, and values of the individual continually interact with the individual's behavior. Similar interactions occur between the individual's behavior and the environment and the individual and the environment."[4,5]

**Figure 5[66]**

**Interactions in social learning theory**
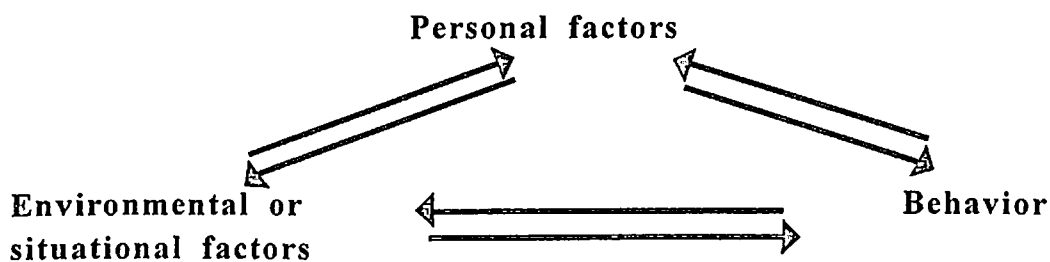
"Social learning theory attributes several abilities to individuals. These include: symbolic (ability to store information and events in the memory), vicarious (ability to learn through the observation of others), self-reflective and self-regulatory capabilities, and the potential for forethought. As a result of the capability to be inherently self-regulating, individuals are able to visualize desired goals and outcomes in the future, to set goals for themselves, to monitor progress toward those goals, and to reward themselves accordingly when they are achieved. The capacity to self-evaluate (to reflect on one's own behavior and make evaluative judgments accordingly) is critical to self-assessment. The ability to set goals makes self-directed learning a natural or inherent process."[66]

## Factors Within the individual for SDL[66]

The following are the factors residing within the individual that support or are associated with motivation to participate in self-directed learning.

### Forethought capability

Forethought capability is the capacity to hold events symbolically in the future, where they can act as an incentive or a desired outcome.

### Goal-setting capability

Related to the ability to visualize future outcomes is the individual's inherent aptitude to set personal goals.

### Perception of a gap or need

A third element within the individual is the ability to perceive a gap between desired performance and perceived current performance.

### Self-efficacy

Defined as the individual's view of his or her ability to execute a specific task.[4]

## Previous success with self-directed learning

As experience is the most effective enhancer of self-efficacy, previous successful experience with self-directed learning is likely to lead to higher perceived self-efficacy, which in turn will result in higher motivation for further involvement in self-directed learning experiences.

## Locus of control

Persons with an internal locus of control believe their actions to have an effect on the world around them; those with an external locus-of-control may be linked to the perception of self-efficacy. Individuals with a high degree of self-efficacy towards a particular task (eg, counseling regarding smoking) may nevertheless fail to be motivated if they also perceive that, even if the task is successfully executed, it will have no effect on final outcomes.

## Achievement

Desire to achieve is motivation by itself.

## Curiosity

Curiosity motivates individuals to participate in learning for the interest the subject holds, for the purpose of gaining a broader understanding , and for the purpose of continually learning.

## Professionalism

"Professionalism was identified by Fox et al as an important factor in learning and change."[40]

## Factors Within the Environment

Patients are an important factor in the physician's practice environment and they have a potent effect on physician behavior.

### Availability of information systems

Information systems, either in print or an electronic medium, are necessary to assist the physician in asking questions and seeking solutions.
The question of availability then also includes accessibility as a function of physician skills.

### Attitudes toward and readiness for self-directed learning[19]

"Candy has compiled a composite list of more than 100 competencies, grouped together based on qualitative similarities, which have been linked with successful independent learning. The general categories included are that the learner (1) is methodical and disciplined; (2) is logical and analytical; (3) is reflective and self-aware; (4) demonstrates curiosity, openness, and motivation; (5) is flexible; (6) is interdependently and interpersonally competent; (7) is responsible; (8) is venture-some and creative; (9) shows confidence and has a positive self-concept; (10) is independent and self-sufficient; (11) has information-seeking and retrieval skills; and (12 ) has knowledge and skill about learning processes and can develop and use criteria for evaluation."

Wilkerson[111] provides a list of factors that can encourage self-directed study:

o   Defining self-directed study as a goal.

o   Modeling an attitude of active inquiry and continuous learning.

o   Providing access to resources such as journals, tests, and computer-based bibliographic search systems.

o   Asking residents to pursue questions that remain unanswered after cases have been discussed.

o   Following up on unanswered questions at later sessions.

o     Encouraging active participation in didactic sessions.

o     Encouraging peer teaching by residents.   .

**The learner takes the initiative for**[58]
  o Diagnosing learning needs
  o Formulating goals
  o Identifying resources
  o Implementing appropriate activities
  • Evaluating outcomes

**Adults are motivated by learning that**[88]
  o Is perceived as relevant
  • Is based on, and builds on, their previous experiences
  • Is participatory and actively involves them
  • Is focused on problems
  • Is designed so that they can take responsibility for their own learning
  • Can be immediately applied in practice
  o Involves cycles of action and reflection
  • Is based on mutual trust and respect

**Self directed curriculum**[12, 39]

**Self directed curriculum,consists of three stages**
  o Stage 1 – learning is directed toward understanding and estimating personal levels of need to learn in order to adopt a change in practice

  o Stage 2 – energies are applied to learning the new competencies needed to practise   differently

  o Stage 3 – learning is organised around the problems of using new skills, altering the practice environment, or adapting the new way of practice to increase the goodness of fit.

"In each of the three stages, the learner identifies and utilises resources drawn from three broad categories: human resources, especially colleagues and coworkers; material resources, especially journals and other sources of information; and formal continuing education programmes, such as national specialty society programmes. Because the selection and use of resources is under the control of the learner, the "curriculum" is self directed – it is developed and managed by the learner. Learners need to understand how they learn  and how their learning

strategies may improve in order to become more efficient and effective. Educators need to understand the natural patterns of doctors' learning so that they can design learning programmes and experiences that·complement self directed curriculums in a profession where change and learning are routine and necessary."[37]

## Principles of Adult Learning[99]

"... it is clear that clinical problems are central to learning for medical students, residents, and practicing clinicians. What differs across the groups is the body of experiences individuals bring to learning situations; what remains the same is that learning new problem solutions allows them to better address their physiological needs. Simply put, these considerations lead to the following principles:

1.  **Learners seek solutions to problems they recognize they have**[99]. It is through students' successfully applying problem solutions they have learned that they can address the basic needs that motivate their behaviors. This is problematic for beginning medical students because they are not aware of the problems physicians encounter in practice.

2.  **Learners want to be involved in their own learning**[99]. It is through using and reflecting on what is taught that adults see how the skills and knowledge taught apply to them and their situations. ( The next section of this paper shows that active participation allows adults to more readily incorporate the new materials into their repertoires.) Further, because language does not communicate completely either the nature of the problem or its solutions, simple descriptions of the problem and its solution may keep learners from gaining the insight that come from reflection based on real-life interactions with the problem and its solution. This limitation is overcome by having the learners actively involved in using the skills and knowledge they are to learn in solving actual problems. The resulting hands-on act of reflecting-in-action and reflecting-on-action enrich the students' bodies experience.

3.  **Adult learners have many demands on their time**[99]. This point has been made repeatedly in adult education[61] (e.g., Knowles[58] points out that adult learners are also spouses, parents, adult children, employees. Employers, and so on). Within the logic of this paper, the assertion means that adults often have several problems to address at any given time. For physicians, this might include caring for patients' needs of children and aging parents, etc. If the learning they receive is inadequate, given the time and energy it requires, then resources are used up while other demands remain unmet – a poor exchange, indeed. Thus the assertion that adults have many demands on their time raises two issues: Instruction must (1) present a quantity of

information appropriate to the time available to teach it, and (2) show the range of ways problems can be solved using the new skill and knowledge.

## Use of Computers, Tele-education for CPD

"Doctors are basically information processors. Computers have the capacity to simulate the physician's problem-solving process. Constructed intelligently, computer programs can reduce the time necessary to achieve a given level of mastery of subject material. Used effectively, they can alter physician and student behavior to the benefit of patient care. Computers can, as well, do something that physicians cannot do. They can memorize (store) huge amounts of information that may then be made available to the physician when as it is needed."[83]

"Levinson[65] tells us that physician is an information manager who acquires, processes, stores, retrives and applies information related to:

- individual patients history and clinical course
- diagnosis and therapeutic protocols
- diseases patterns in patient populations,
- functioning of health care system and
- the vast store of published knowledge"

"Little occurs in the clinical encounter that is not in some way related to obtaining, processing, or applying information. Optimal performance of clinical informational tasks has for years exceeded the cogntive capability of human mind."[109]

"Computer-assisted instructions (CAIs) are gaining increasing acceptance as a supplement to the existing teaching methodologies. Artificial intelligence (AI) and CAI collectively have now provided the concept of intelligent computer-aided instruction (ICAI) or intelligent tutor systems (ITSs)."[14]

"Virtual reality (VR), expert systems, multimedia (MM) and video-on-demand (VoD) make computers much more versatile, flexible and need-oriented than ever before. Visual information is desirable for imparting training in many fields of medicine, e.g. anatomy and surgery. A visual image is, in some situation, easier to understand than a long textual description. Voice-related data can be created for abnormal heart sounds, breath sounds and audio/speech therapy. A schematic diagram of a contracting heart, with opening and closing of valves, changes in the volume and corresponding variations in ventricular, artrial and arotic pressures can also be easily shown by computer animation. Low-cost multimedia kits can be used ti integrate audio to explain animations as well as create special effects. Multimedia (MM) a combination of audio, video images, graphics and data on

the computer-is opening up new avenues for learning and training in functional skills. Operative procedures can now be simulated. These can be used for planning operations and for patient education. Static and real-time images can also be stored and lead to "filmless' departments".[73]

"Virtual reality is a step further than MM, whereby human senses and response to human action are simulated. It can even create a hospital on a computer screen and provide some facilities available in hospitals."[101]

"In India CAI could be effectively used in training medical personnel. Strandarized modules distributed to different locations could provide similar training to a large number. These modules can be prepared in the form of a shell where local data or examples can be incorporated. A self-assessment process can be built into the system so that the trainees can evaluate their learning. Local languages are important in all aspects of health informatics. While some word-processing packages are available for Indian languages there is a need to encourage development of more packages in different Indian languages."[21]

Some textbooks of health sciences are available on CD-ROMs. These include Nelson's textbook of pediatrics, Cecil's textbook of medicine, Harrison's principles of internal medicine, Goodman and Gilman's the pharmacological basis of therapeutics, Oxford textbook of medicine and Oxford textbook of surgery. There are many other medical titles on CD-ROM.

**Electronic learning resources: an overview** [72]

The Internet offers a whole range of new learning experiences and opportunities to medical students, it would be parochial to view the Net in isolation from the other learning resources. In planning how to integrate Internet resources into the curriculum, educationalists need to think in terms of a continuum of learning resources. This studyscape consists of all the traditional resources (books, journals, patients, tutors), as well as old technologies (videos, slides, audiocassettes), and finally, electronic resources. This latter category includes:

o    Computer-assisted learning packages (CAL) e.g. tutorials, simulations.

o    Computerized assessment packages, e.g., Question Mark.

o    Electronic textbooks, manuals and atlases, e.g. Textbook of Dermatology on CD-ROM; Pathology Text Stacks.

o   Standard software tools, e.g. word processing, graphics, spreadsheets, databases, presentation packages, statistical packages.

o   Bibliographic databases, e.g. Medline and CINAHL (Cumulative Index to Nursing and Allied Health Literature).

o   Other databases, e.g. eBNF (Electronic British National Formulary); Toxline; Aidsline; the Cochrane Database.

o   Image banks e.g. The National Slide Bank of Medicine.

o.  Decision support systems, e.g. Iliad, Dxplain, Quick Medical Reference (QMR).

•   Electronic patient records.

•   Computer conferencing, telemedicine.

•   The Internet, e.g. e-mail, news groups, telnet file transfer protocols, the world wide web.

**Table: Summarises information resources and learning oppurtunities[72]**

| On the job methods | Off the job methods |
|---|---|
| o  Health care audits | Distance Learning/ *(Modular Approach)* |
| o  Job rotations | Academic studies |
| o  In-service training | Training courses |
| o  On-site supervision and guidance | Self-study/*Independent Studies* |
| o  Journal article review club | Guided study |
| o  Team assignment and projects | Seminars and workshops/ *Case Studies* |
| o  Review of patients records, monthly reports Conferences | |
| o  Meeting with colleagues | Meetings of professional organization |
| o  Telephone conferencing | Meetings of scientific societies |
| o  Staff meetings and conferences | Interactive learning opportunities on the Internet |
| o  Information sources on the Internet | |

Information technology makes it possible to provide better-quality learning in the following ways:

o  Materials on-line can be richer than that provided through the combination of lectures and libraries. Multimedia systems make it easy to provide high-quality images (rather than slides at lectures), audio(rather than tape-based language laboratories), and video (rather than classroom television). Even \more importantly, it is easy to show the connections between material, and this may be as important as the material itself. Furthermore material can be interacted with repeatedly, rather than the single opportunity of a lecture.

•  Material can be more consistent. The use of multimedia shifts the balance in favour of capturing the best practice in each area of teaching – the best teacher's lecture, or the best explanation of how to solve a problem can be recorded, and made available to all current and future students, not just those who were physically present at the time. There is always an incentive to capture high-quality teaching events once and 'replay' them, rather than to produce mediocre ones repeatedly.

o  Materials can provide alternate paths for learning, responding to varying student learning styles. For example, some students are comfortable with symbolic thinking , and for them textual presentations are appropriate. Others prefer to learn by doing-they can experiment within simulations. Others prefer to learn visually, and they can be provided with images and video. It is also possible to pace the presentation of the material to the rate at which students are absorbing it, evaluating students as they go, and dropping back to simpler explanations for concepts with which they are having difficulty.

o  On-line courseware can teach the skills for finding appropriate information in large systems. For example, the World Wide Web already contains more information than the largest libraries. On-line course material can act as a fitter, pointing to good sources of information, and providing access to it in a seamless way. Health care professionals can keep up to date through access to the latest information in their fields contained in medical data bases.

Internet can be used to improve the quality of healthcare, increase availability of healthcare in remote areas, disseminate healthcare information for general public and the continued education of healthcare professions. Classical techniques for education require provision of educational materials. Internet is an ideal tool for dispensing such material quickly and cost effectively. These materials can include text information* with images, and video information that can be on-line or off-

line. Internet also provides options for introducing more advanced tools for education that include shared documents, simulations, and interactive environments similar to video games that will put the students in real-life like situations.

"The medical knowledge self assessment program of the American College of Physicians is available on interactive case based CD ROMs.[79]
"The Royal College of Obstetricians and Gynecologists has two paper based distance learning resources, PACE (personal assessment in continuing education) and LOGIC (learning in obstetrics and gynecology for in-service clinicians) which provide up to date reviews written by experts and self assessment tests".

"The Royal College of Pathologists offers similar exercise and allows participants to compare their performance(anonymously) with that of their peers in the same specialty."[36]

## Telehealth

". . . telemedicine may enhance the exchange of clinical knowledge compared with conventional continuing medical education."[114]

"Telehealth has many applications, including the education and training of health professionals. Using technology to educate family nurse practitioners in rural communities has resulted in a greater percentage of graduates (approximately 67% of 258 graduates) going to work in rural undeserved communities. In addition to learning the course content, students learn to use technology as a tool to access telehealth information and services Knowing how to use these technologies provides greater opportunities to rural health care providers, as well as the recipients of health care".[25]

Telemedicine is "the use of electronic information and communication technologies to provide and support health care when distance separates the participants."[35]

"Distance education has tremendous potential for providing education and training programs to different categories of medical and paramedical personnel as a means of helping achieve the goals of Health for All."[32]

In addition to the national agencies such as the Ministry of Human Resources Development, the Ministry of Health & Family Welfare and Indira Gandhi National Open University, international agencies such as WHO and UNICEF need to play increasingly prominent roles in facilitating the achievement of national and institutional targets."

"Extension of training and continuing education for health professionals in remote areas, . . . This will hopefully lead to a retention of healthcare staff in hardship areas and counteract the "brain drain" in developing countries."[94]

"A number of innovative projects are beginning to demonstrate how information technology can support an expanded view of CME and Barnes[6] has talked about three successful programmes viz, The Maintenance of Competence Program (MCOOMP), The Stanford Health Information Network for Education (SHINE) and Indiana University of Medicine and concluding his paper he says *"The effective use of information technology will be a key to the success of this journey"*. The details of the programmes are as follows:

## i) The Maintenance of Competence Program

## History

"Learning portfolios, traditionally used by students in the visual arts to promote reflective thinking, have only recently been used by health professionals".[80,84]

A software program, PC Diary, was developed using the model advocated by Schon[93], "to encourage practitioners to consciously reflect on their practice experiences, identify items of learning that they perceived had expanded or consolidated their expertise, and plan their professional development".[15]

## How MCOMP Works?

"Physicians using either the paper or PCDiary are requested to record each item of learning in the form of a question or statement of a problem; assign a principal stimulus to the item (i.e., what triggered the question), list the resources used to answer the question, and record the intended outcome of learning in terms of a commitment to either make a change, seek more information before deciding whether there was a need to change, or not change their current approach to practice. Completed items of learning are transferred to a searchable database on the Internet. PCDiary has search and sort capabilities that enables the user to review items of learning by topic, stimulus, and outcome; print reports; and interact with digital libraries. Collectively, these features reflect the software's ability to function as a learning portfolio."[18]

"A personal portfolio may contain artifacts, including personal activities, presentations, and papers that document the scholarly accomplishments of the individual; documentation of attendance at education sessions; records of formal evaluations; and journal or diary entries that document the student's insight into their professional development."[80]

"Physicians report that using the PC Diary software gives them a sense of control over their CME planning and also decreases their sense of information overload. First, the physician records an item of learning in the software in the form of a question or problem statement. Next, the activity that triggered the item of learning (termed "the stimulus") is selected from options presented by the software. The resources used to learn are also selected from a menu of options. Finally, the physician assigns the anticipated outcome of the learning from three options. The date of the recording and the time spent undertaking the learning project are entered, as well as any personal notes and references. The communication component of the software transmits saved files (consisting of the question, stimulus, learning resources, and intended outcome) by modem to central database. The software, available in DOS, MAC, and the Windows versions, enables users to search for and sort items of learning by topic, stimulus, or the assigned outcome and can generate summary reports."[28]

"MOCOMP satisfies many of the requirement of a good record in that it encourages planning, stimulates the learning process and permits peer comparison, the question of needs analysis is only touched upon, rather subtly, by asking the learner to record the stimulus that started the process, and at the same time providing him with a profile of what his peers are studying, thereby stimulating a reflection on needs. However MOCOMP leaves the question of needs analysis entirely in the hands of the learner – in keeping with the basic philosophy – the learner should be in control. If we think of CME in the context of accountability can we leave needs analysis entirely in the hands of the learner? Or does this result in wants rather than needs? Do we have too many blind spots? A pilot trial of MOCOMP under Danish conditions, including junior hospital doctors, hospital specialists and GPs gave, however, a very disappointing result. Less than half of the participants completed the one-year trial, several droppings out an early stage because of software problems. At the end of the trial only two of the original 30 participants were willing to continue using the system, while a further four stated they would continue using the principles they had learnt from MOCOMP but in another form. In spite of this depressing result the majority of comments from participants in the qualitative evaluation were extremely positive. The reasons for failure are perhaps best summed up in the following comments "it is a new learning culture which is difficult to introduce in the rigid structure of a working day" and "if only it had been introduced at the undergraduate level". In short old habit die hard.}This program has its own limitations as only learner decides what to learn

or what his peers want to learn. It is only a stimulus to learning."[30]

**ii) The Stanford Health Information Network for Education.**[6] "The Stanford Health Information Network for Education (SHINE)offers an integrated collection of core content, including texts, pharmaceuticals databases, a differential diagnosis system, a bibliographic database, national consensus statements and guidelines, on-line journals, multimedia resources, and custom-developed educational activities, all of which can be accessed through a unified interface on Internet." The system permits a user to distribute a query simultaneously to different types of resources (such as texts, guidelines, and journals), providing a consolidated search. SHINE will have the capability of supporting Tele-consultations with colleagues through the use of e-mail or video-conferencing. The system can also track a physician's use of the various resources and support the development of learning portfolios."[56]

**iii) Indiana University of Medicine.**[6] "Jay[2] and colleagues at Indiana University have developed several computer-simulation programs to encourage physicians to modify their practice behaviours, to evaluate the relative costs and benefits of various types of clinical interventions, and to determine the implications of patient demographics and physician practice patterns on the costs and outcomes of care". "Physicians[6], individually or in groups, can use these programs to assess the implications of various approaches to patient care and to choose optimal courses of action. Being able to assess the likely impacts of various interventions in several perspectives, such as clinical outcomes and cost, can help providers begin to make rational decisions regarding resource allocation. The computer simulations, by presenting all possible outcomes, including unexpected ones, can also help users to identify additional learning needs. The simulation models can be applied to quality improvement efforts, health services planning, and business planning."

**Learning Organizations, implication of Learning Organization on Health Care Delivery especially in the government sector.**

"...basic meaning of a "learning organization" – an organization that is continually expanding its capacity to create its future. For such an organization, it is not enough merely to survive. "Survival learning" or what is more often termed "adaptive learning" is important-indeed it is necessary. But for a learning organization, "adaptive learning" must be joined by "generative learning," learning that enhances our capacity to create." As the world becomes more interconnected and human becomes more complex and dynamic, work must become "learningful".[95]

"The organization that will truly excel in the future will be the organizations that discover how to tap peoples' commitment and capacity to learn at all levels in an organization."[95]

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"The organization that will truly excel in the future will be the organizations that discover how to tap peoples' commitment and capacity to learn at all levels in an organization."[95]

*In Chinese, " learning" literally means "study and practice constantly". Hence building learning organization entails profound cultural shift. In Building learning organizations, there is no "there", no ultimate destination, only a life long journey."*[95]

"Argyris and Schon[3] define significant learning in organizations as the ability to detect and correct errors. They distinguish between single-loop and double-loop learning. Single-loop learning produces behavior changes that are adaptive but do not produce significant value changes. This is the kind of learning that enables a person to cope with a particular situation without taking any steps towards resolving the underlying causes. Thus, this type of learning addresses only the symptoms and not the problem. By contrast, double loop learning produces value changes from which flow behavioral changes. This is learning that questions and explores the underlying causes of a problem and seeks to find lasting solutions. Their thesis is that single-loop learning, apart from perpetuating the status quo, produces skilled incompetence, that double-loop learning can be taught to individuals, and can replace single-loop learning in entire organizations. In order for this to occur, however, the following conditions have to be present: strong motivation o the part of targeted recipiants, substantial amounts of time (two to five years for major changes), and excellent concrete learning interventions."

"Watkins[108] and Marsick address individual learning and the role it plays in the learning organization, but still emphasize that collective learning is the necessary component in a learning organization. They view the role and purpose of individual learning as a means to enhance the organization's capacity to adapt to change and environmental pressures. They identify six "action imperatives" for a learning organization:

(1)  creating continuous learning opportunities,

(2)  promoting inquiry and dialogue

(3)  encouraging collaboration and team learning,

(4)  establishing systems to capture and share learning

(5)  empowering people  to a collective vision, and

(6)  connecting the organization to the environment.

These imperatives provide the framework for building the learning organization.

"Learning organizations are possible because, deep down we are all learners. Team learning is vital because teams, not individuals, are the fundamental learning unit in modern organizations. This where "the rubber meets the road", unless teams can learn, the organization cannot learn."[26]

"Six Step Approach" to make an organization a learning organization formulated around the 13 principles mentioned by Marquardt[68] and Reynolds are as follows:

**Step one**

Get the support of relevant senior staff, especially for changes related to the wider issues of organizational management.

**Step two**

Introduce systems of work that bring action, review, and application of learning so closely together that their boundaries become hard to distinguish.

**Step three**

Introduce working practices that enable staff to network freely, move between jobs, as required, and have ready access to senior staff.

**Step Four**

Get senior staff to network outside of the organization and report back on a regular basis.

**Step five**

Support as much learning as possible so that staff develop the learning habit and learn to question the existing systems.

Step Six

> Introduce new ways of learning so that a wide range of learning opportunities and options are available to meet individual needs and preferences.

## Barriers to learning[64]

The following are some generic thoughts on barriers to becoming a learning organization and solution for overcoming these:

## Individual barriers

- The unconscious assumption that " I know all I need to know"

- Discomfort at having to give up cherished opinions or beliefs

- Fear of becoming temporarily incompetent until a new skill is learned

- Unlearning what has worked in the past but is no longer effective

- The feeling of being too busy

- Sheer mental laziness

Lawrence[64] in "Some Thoughts on Turning a Government Organization into a Learning Organization" talks of organizational barriers and also gives us the remedies that are as follows:

## Organizational barriers[64]

- Management decisions that are not to be questioned

- Inability or failure to understand barriers

- A blaming rather than trusting culture

- An environment where questioning and/or challenging are not encouraged, or worse, actively discouraged.

- A "knowledge is power" syndrome  that blocks the sharing of learning

- The famous "Not Invented Here" syndrome

- Management behavior that says "our subordinates have to learn, but not us"

- Organizational silos that impede cross-functional co-operation

- Lack of training time, materials and resources

- Satisfaction with the status-quo

- Punishing mistakes rather that treating them as necessary learning experiences

- Failure to encourage innovation

- Lack of recognition for improving capabilities and contributions

- Lack of standardization mechanisms to capture and spread improvements as they are developed

- Lack of knowledge transfer or cross-fertilization mechanisms

**Overcoming the Barriers**[64]

The following are some suggestions for overcoming the barriers cited earlier:

**a) Organization**[64]

- Steering committees that prioritize and lead change

- Central "teaching" organization to develop adapt and deliver training materials

- Network of trainers or teachers-often specialized in various subjects

- Strong R&D organization to lead innovation

- Network of generic subject matter experts to support cross-fertilization

- Employee suggestion scheme organized for fast feedback, high acceptance rate and frequent recognition

## b) Conditions[64]

- Management learn faster and better when also required to teach in training cascades

- Teams are more effective than individuals in problem solving and improvement projects

- Short cycle times provide more cycles of learning in a given time period, accelerating the experience curve

- Lack of time and mental laziness are real issues

- Cross-fertilization within and among organizations must be actively supported

- Periodically new methods, procedures, know-how etc. have to be standardized, to provide a stable platform for another round of learning

- Innovation must be actively encouraged, and successful ideas recognized and rewarded

- Leaders with a global orientation, the ability and willingness to accommodate and guide rapid change

- Encouragement of experimentation and intelligent risk-taking

- Drive for continuous improvement

o      Fact-based decision making premised on a clear mandate and vision

o      Openness to new ideas and paradigms

o      Active promotion of innovation

**Example of an innovative learning systems**

## 1. Effective continuing education : the CRISIS criteria[48]

The need for continuing medical education (CME) has been well documented and is now widely accepted in response to the recognized need for continiuing education. In 1982, at the Assocation for Medical education in Europe/Assocation for the Study of medical Education meeting in Cambridge, the CRISIS[47] criteria were first described (Harden 1982). CRISIS is an acronym for seven criteria which contribute to the effectiveness of CME.

### (a) Convenience makes voluntary participation easy

"To suit the user, continuing education must be available at the right place, at the right time and the right pace. Access to resources should be rapid and easy. In the past few years the need for convenience has been reflected in the rapid expansion of distance-learning activities, where the learner is situated at a distance from the teacher but with an interaction between the two."[49]

This trend is likely to continue. With distance learning, the user chooses the time and the duration of each period of activity.
Solutions are easier with distance-learning programmes, which should let users work at their own pace – repeating as necessary or skimming material if already known.

Convenience of CME can be enhanced by producing learning materials designed to make constructive use of otherwise empty time.

Frequently, doctors find themselves unable to schedule long periods for study and the hours that are available for learning programs may be irregular. In these circumstances, for the learner's convenience, it is sometimes best to divide a programme into a series of modules or manageable units, each of which may stand independently.

On-the-job learning is a convenient form of CME. For its potential to be fulfilled, however, some organization or additional resources will probably be necessary.

**(b) Relevance reflects the user's day-to-day role in medical practice**

"Newton[75] & Newton recommend that relevance should be made explicit. In other words, knowledge alone is not enough – the learner must be shown the uses to which that knowledge can be put.

"A neat connection between relevance and the perceived needs of users is provided by Sheets & Henry [96.] In an evaluation of programmes for family doctors, participants did best in topics which they could apply immediately or in the very near future.Relevance of a programme can be improved by examining the needs of the doctor at whom the programme is addressed."

Since relevance depends heavily on meeting the educational needs of practitioners, how are the needs of practitioners to be identified? "Dunn[31] et al gave a review of the methods available. This included:

i. Task analysis;

ii. Delphi technique or panel of 'wise men';

iii. Critical-incident survey;

iv. Behavioural-event interview;

v. Interviews with recent graduates;

vi. Study of recent textbooks and other information on the subject;

vii. Mortality and morbidity statistics; and

viii. Study of errors in practice.

No single technique provides a total insight as to educational needs. Dunn et al. Concluded that Delphi, critical – incident survey and behavioural-event interview provide the best guidance in determining what competencies are required. Relevance

can be accentuated by presenting the subject matter in a context with which the user can identify.

**(c) Individualization allows learners a say in what is learnt and to adapt the programme to their own needs**

The variation in individual's needs can be divided into at least 10 areas:

I.    type of medical practice, e.g. hospital or community, urban or rural;

II.    previous experience and information about the subject of programme;

III.    degree of interest, e.g. some general practitioners are particularly interested in asthma, other in dermatology;

IV.    preferred learning strategies and methods, e.g. lectures, group work, problem – based learning;

V.    learning ability and speed;

VI.    amount of time willing to spend in continuing-education activities;

VII.    time of day and of the week available for learning;

VIII.    preferred location for learning, e.g. home, work, postgraduate centre, car;

IX.    learning on own or along with other professional members of the health-care team; and

X.    teaching responsibilities, e.g. GP trainer, undergraduate teacher.

**(d) Self-assessment encourage doctors to evaluate their understanding of the subject and to remedy any gaps identified**

A feature that often distinguishes successful from unsuccessful CME is the incorporation of a self-assessment component. Indeed continuing education has been equated with continuing self-assessment, critical self-appraisal being the hallmark of the good professional.

**(e) Interest arouses attention and encourages learners to participate in the programme**

For three main reasons, continuing education must be interesting to be successful:

(i)     to gain the attention of the potential user;
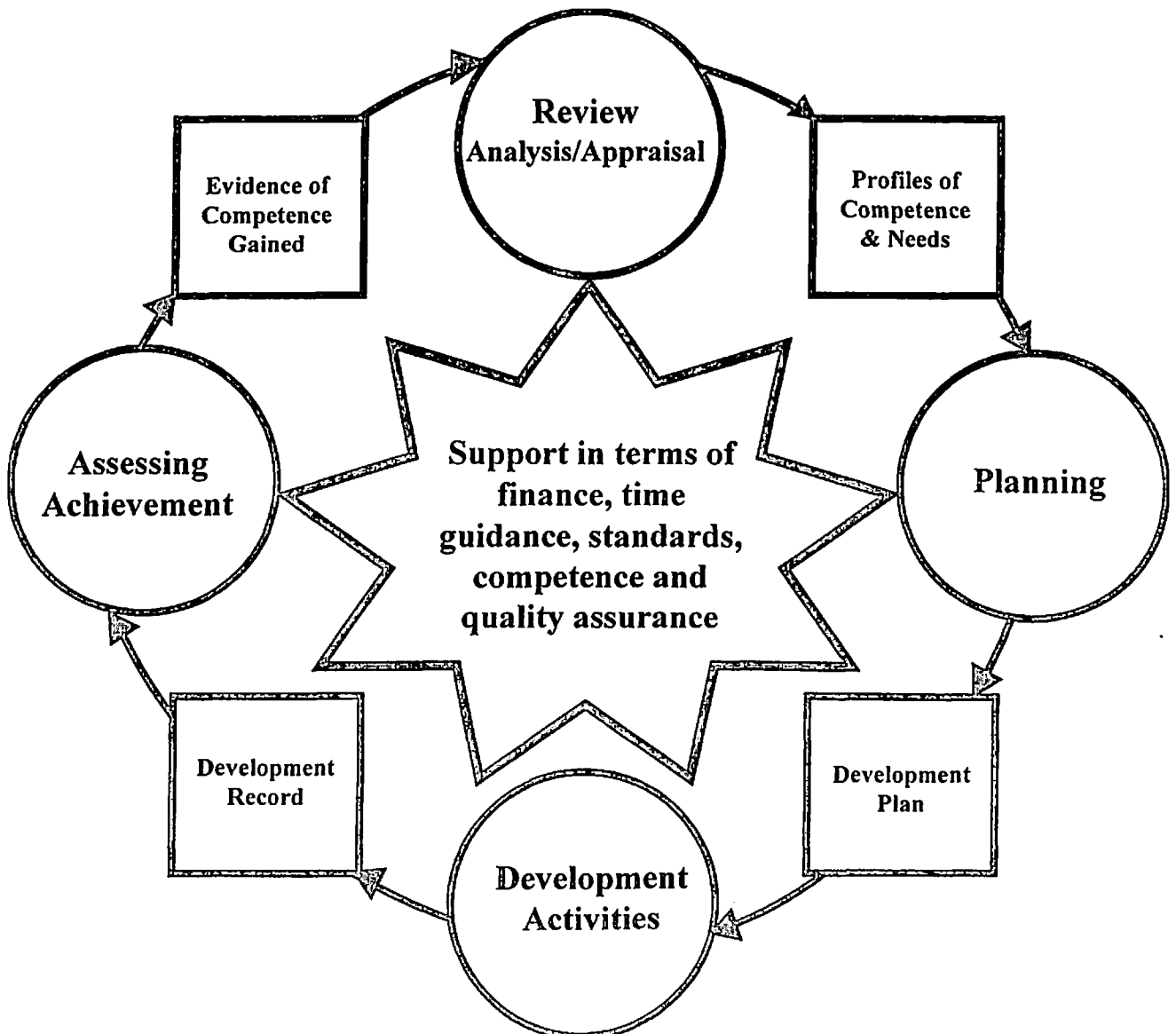
Fig 6

(ii)     to encourage potential users to become actual users, and to invest time, effort (and possibly money); and

(iii)    to hold attention and sustain the user's motivation to complete the material.

Anything that makes a programme more relevant will also make it more interesting.

How the meeting or programme is packaged will also affect the doctor's level of interest.

Text design and lay-out.
Visuals and colour
Cartoons and humour.

**(f) Speculation   recognizes controversial and grey areas in medicine**

All too frequently CME concentrates on aspects of medicine which are established facts and ignores areas where there is controversy or no single correct answer. It is important to include areas of controversy and speculation in CME programmes.

**(g) Systematic offers a planned programme, with coverage of a whole subject or an identified part of it**

To be systematic, a continuing-education programme should let the consumers know how and why aspects of the subject will covered over a planned period. The benchmark for systematic coverage is that a course provides all that the learners need to know about a particular topic. It need not include all there is to know or even all that it is nice to know. We should be looking towards a curriculum for continuing medical education: a curriculum planned with the same or greater rigour than the current undergraduate curriculum.

**The European project for the Use of Standards of Competence in CPD**

European project for the Use of Standards of Competence in CPD for Construction Industry Practitioners (EUSCCCIP), describes the "The European project for the Use of Standards of Competence in CPD for Construction Industry Practitioners" because "construction industry with many professions and occupations within it is as diverse as the medical profession."[30]

The report describes the project as follows:[30]

The principal output of the project was a framework for CPD systems. When examined in detail it will be seen that you can replace the words 'constructor' or 'builder' quite clearly with 'doctor'.

The framework provides a step by step guide of implementation of the CPD system called the implementation steps as *organisation steps*. (Fig. 6)

There is a second series of implementation steps for the individual who is starting off their CPD called *individual steps*.

The framework has been designed to be very flexible starting from where an organisation is at the moment rather than setting an impossible goal and being too tightly constraining.

Some organisations will need a very basic CPD system and others would want a much more structured and sophisticated approach, intention is that not only you can start from where you are but also that you can develop and structure systems with time so that it evolves into something even better, supporting the CPD of your members.

The heart of the framework is a diagram which we called the Senior model because it was put together by Mr Chris Senior, from the Engineering Council, our equivalent of the Academy of Medical Royal Colleges.

The diagram is the single greatest contribution of this project because it gives a coherence to CPD :

- Review-analysis/appraisal
- Planning
- Development activities
- Assessing achievement

Each of those processes has an output which is in turn an input for the next one. So the output from reviewing, analysing and appraising produces a profile of your competence and a profile of what the needs are so that you can learn and develop further. As a result of identifying that you will start to plan and produce an output in which there is a plan which involves:

- development activities
- actually doing it
- a record of doing it  -
- assessing where you've got to
- evidence of where you've got to, which might be in the form of an external assessment or a personal assessment of where you've got to.

In the centre is the energy that enables you to work your way around this cycle. This is the learning cycle which many of you will have come across. Within the central support there are three general areas,

- support in terms of finance, time and guidance
- support in terms of standards and competence
- support in terms of quality assurance.

The EUSCCCIP[30] (Fig. 6) framework is a checklist for what an organisation's CPD system should have within it, and it is valuable to help you see how complete is it and where you might take it. It is a specification of good practice, and offers various paths to consider in developing the system. In the long-term we very much hope that we can make it an international standard in the same way an organisation can look at having ISO 9000 quality assurance. We would like to think that an organisation that has a CPD system in place could have it accredited externally under some international standard, and that that would assist recruitment. People would prefer to work for an organization that encourages and supports their CPD, rather than one that did not.

During proceedings of the conference, "different authorities made many recommendations. Of those, following four are  important elements that have been incorporated into the proposed model."[30]

a)   **The role of the individual**
-   Define best process for learning and improving practice (including evaluation) including the use of Information Technology
-   Reassessment and feed back and
-   Re-teaching

**b)** **The role of training providers**

    I.       Identify and prioritize <u>need</u> of -           users
                                                                          Institutions
                                                                       Community

    II.      Resources-                                   financial
                                                                      Space
                                                                     Time
                                                                      I.T.

    III.     Accountability of providers-            quality
                                                                              Quantity

                                            (process needed so that there is some measure of effectiveness and benefit.)

    IV.     Outcome-                                  definition
                                                                      documentation
                                                                     evaluation

    V.      Records-                                    users
                                                                      Providers
                                                                   Subjects
                                                             Attendance records

VI. Encourage participation

- Providers should pay due interest in what their customers want.

- Assessment of the outcome with a target to document it in some way in order to assess its success. It would be important to compare rates of success with other groups carrying out the same type of work.

- Accountability/assessment

- Records

- Incumbent on the training providers to encourage participation and to make it enjoyable and memorable.

- Outcomes had to be clear to the trainer and the trainee and agreed at the outset in order to ensure the same expectations and similar perceptions of success or failure.

c)     **The role of the employers**

      I.   Establish a CME culture

- Identifying needs of all staff. Within that culture there should be opportunity of meritorious recognition in some way.

- Ring-fence time and money

- Develop a   written policy

- Provide an infrastructure

- Have an academic officer to add a focus. There should be some one whose responsibility it is to be 'gopher', but with an academic background and with an eye to the effectiveness aspect.

d)     **Role of the professional bodies**

- Professional bodies should set standards, and provide, promote and verify them as related to needs in respect of outcomes, process, structure and organizations. Standards should be transparent to employers, to consumers and to the public.

- Professional bodies should ensure harmonization of professional standards among different health care professions.

- Accreditation of the program

- Guidance on running CME programmes

- Evaluation of effect of CME on patient care.

- Learning Packages with self-assessment and feed back

- Leadership

- Relationship

**Earlier Models:**

1)      The World Bank aided project is one.of the training models that has already been discussed in detail in Chapter 5.

2)      The *Guidelines for developing in-service district family welfare training plan* were issued in 1996 by GOI. A change in focus in the in-service training under the Family Welfare programmes has been necessitated because of the following observations:[44]

**Transmission loss**

'      The cascade model of training, where in core trainers set up at the Central/ State level imparts training, has resulted in transmission loss. Further, since sufficient emphasis was not given to skills development, there has been a "learning loss" also as trainees were not adequately motivated to practice skills after the training programmes.

**Low skill development**

Another major deficiency has been the lack of skills development in all the training programmes. The weakest components have been the technical skills of conducting deliveries, care of the newborn, IUD insertions, tubectomies, vasectomies and medical termination of pregnancy.

**Need for communication and managerial skills**

There is also a felt need for enhancing the communication capabilities and managerial skills of all health providers. Training in these areas has also been found to be particularly deficient in both content and methodology.

Necessity for community linkage for participatory planning and reduction in disease burden.

Training Programmes have not focused on "Community linkages" of the Family Welfare interventions. Community linkage is an important component of the RCH package which will ensure community facilitation for identification of common RCH problems as well as community involvement for timely referral. This would specially be important to decrease morbidity by attending to issues like safe abortions,

prevention of STIs/RTIs, involving the community in clean safe deliveries etc.

**Inadequate management skills content**

Managerial skills components dovetailing with skills development has not been adequate to make a real change in service delivery. This is especially noticeable in the lack of progress in establishing First Referral Units for Emergency Obstetrics Care and establishment of Essential Newborn Care.

**Training systems/Planning at district level with support from State/Centre**

Well-developed training systems have to be developed to take up training as an ongoing and sustained activity. This is particularly critical as the current method of conducting ad hoc training under the different components of Family Welfare have neither been cost effective nor have they brought about the desired behavioral and attitudinal change in service providers.

The planning and implementation of in-service training will be at the district level

This training has thus to be seen as a responsibility of the district administration. The district must ensure that all personnel are exposed to the training programmes at regular specified intervals.

**My comments on the above reasons are as follows:**

The above cited reasons as expressed by this document are by themselves a good reason for *my proposing a new model.*

Has the spare time available with the CMO, BMO or Health Worker (F), to name a few categories, ever been sought to be determined by any one ? What system should there be to impart training under this document? Are they willing to spare some of their precious time for training? Are they motivated to train? Simply put,the clinician under the over burdened system, neither has time nor the desire. Hence, a separate training system in the district is required which is a subset of the **"State Training System".**

Transmission loss as, mentioned above, is simply because the trainings being conducted are teacher/trainer centred. This system, as already discussed in the earlier pages is against the principles of adult learning.

Low skill development, as mentioned in the guidelines, has been a major deficiency of the entire earlier training programmes. This is a difficult situation to correct for the simple reason that the skills are not there, hence the clients don't come and  they prefer to either go to bigger institutions or are attracted by the private sector. If you don't have the clients, how will you train the trainees? Under the RCH Program, e.g. for IUD insertions, " it should be ensured that the training centers should have minimum (600) cases per year." Many of the districts for the reasons mentioned, don't qualify. Multipurpose Health Workers (F) are the other group. They are trained in the training institutes where they are not allowed to conduct deliveries. They have qualified without mastering the skill of 'conducting normal delivery' and the system wants to them to be trainers for the 'Traditional Birth Attendants'? What could be the possible solution to break the deadlock of this no-win situation?

Need for communication and managerial skills is there, but all the training programmes taught the theory of these components without proper field experience. This and the necessity for community linkage for participatory planning and reduction in disease burden can only be taught in the real situation i.e. in the actual field conditions or in the Field Demonstration and Practice Area.

Keeping in mind the recommendations of the Government of India along with proposals of this study which follow, having an independent 'Training System', which has under its direct administrative control a Field Practice and Demonstration Area in each of the two divisions.

## Proposal for a new model in J&K

### Introduction

"Although the process of professionalism for doctors is called medical education, its rhetoric is that of training. ... training is a process which deals with the known outcomes. ... so it deals in repetitive skills and uniform performances which are expressed as standards or criteria which must be followed exactly. Medicine deals with some areas where some uniformity of this kind is desirable – for example, taking blood. But, clearly, these protocols are not the whole medicine."[85]

"For that we must turn to education. Education is a learning process which deals with unknown outcomes,with circumstances which require a complex synthesis of knowledge, skills,and experience to solve problems which are one off problems. ... education contains training but training cannot contain education. ...the philosphy of education is to empower learners to take control of and responsibility for their own learning and at the same time to be personally accountable. In education, as in medicine, a moral imperative is "to help or at least not to harm."[85]

"By teaching I mean the imparting of knowledge,
and for that we are dependent on our teachers;
by training I mean the cultivation of aptitude,
and for that we are dependent on
our opportunities and ourselves."

--*Wilfred Trotter, Surgeon, 1932, quoted in*[52]

"The current CME (in-service training system) model has inherent deficiencies, primarily because it fails to deal with some crucial aspects of the educational process required to enhance change in physician behavior".[86]

### Why a new model

Presently, the system emphasizes on providing different trainings,as and when required by the department of Health,Project Directors of various centrally sponsored projects,and others like ICMR etc.The trainees are not the choosers, at times are even reluctant, many a times they refuse to attend, resulting in all the efforts of the organizers going down the drain. **How can one teach when the learners don't want to learn?**

**"RE-SEARCH"**

HEALTH NEEDS OF INDIVIDUALS AND POPULA-TIONS RESIDING IN J&K STATE

**Profiles of Competence**

MANAGEMENT SKILLS

TEACHING SKILLS

APPRAISAL SKILLS

COMMUNICATION SKILLS

INFORMATION MANAGEMENT

TECHNOLOGY SKILLS &

MEDICAL KNOWLEDGE

Identify training needs

Objectives

Plan/design training to meet needs

Implement training

Assessment of Achievement

Evidence of Competence gained

**QUALITY ASSURANCE**

Internal

External

Monitoring

Trainees Evaluation

Self Assessment

Peer Review

Accreditation

Control

Improvement

**PLANNING**

Fig. 7

CONCEPTUAL MODEL PROPOSED FOR
CONTINUING PROFESSIONAL DEVELOPMENT
OF HEALTH CARE WORKERS IN J&K
DEPARTMENT OF HEALTH & FAMILY WELFARE

"The first objectives of a new educational model would be to compensate for the deficiencies in existing CME methods, emphasis is on individual learners rather than audiences, and on the process of education rather than its content.

"The role of CME (the proposed Competency Building system) faculty consequently shifts from being solely providers of information to becoming learning facilitators; and learners, instead of being passive participants in what to them is an obscure educational process, become actively engaged in the identification and fulfillment of their own learning needs."[86]

In brief, "the new model being proposed will be "creating an environment in which (Health Care Worker's) students can learn  effectively and efficiently becomes the new prerequisite, demanding not only that teachers (the training system being proposed) are experts in their fields but also—and more importantly-that they understand how people learn."Coles's as well as Kolbs's model will form the basis of the new system along with the Schon's model."[57]

"Continuing professional development is the process by which health professionals keep updated to meet the needs of patients, the health service, and their own professional development through the following three categories":[81]

(a)     "live" or external activities (courses, seminars, meetings, conferences, audio and video presentations),

(b)     internal activities (practice based activities, case conferences, grand rounds, journal clubs, teaching, consultation with peers and colleagues), and

(c)     "enduring" materials (print, CD-ROM, or web based materials, possibly based on a curriculum, with testing  or assessment); and where there is mandatory recertification or revalidation, showing an ongoing commitment to continuing professional development is a major component of the process.

The conceptual model proposed for Continuing Professional development of Health workers in J&K, illustrated in the Fig. 7, will  provide all the the above three categories including few others which are discussed later in the following paragraphs. This is prompted by the basic philosophy of the Danish philospher(1859), which means that, -"to lead someone to a new place, you must first meet them where they are" and not where you want them to be.

From all that has been emphasized in the preceding pages, it becomes imperative that to provide the Primary Health Care to our people, there is a need for Continuous Professional Development of the providers of the Care. The efforts of Govt. of India, WHO/UNICEF and other international funding agencies will be of little use until we take responsibility of doing this job as a policy.

Non-governmental organizations may have to be involved to  play a very major role in future in the proposed training system in the state.

The types of training as classified by Hargreaves[51] et al will be incorporated in the new 'Training System" which are as follows:

• 'off-the-job' or formal training, training occurs when teaching and learning are the only activities being intentionally undertaken and neither is directly related to any current or ongoing service delivery or patient under treatment. Lectures, seminars and courses are obvious examples. Formal training usually occurs in a dedicated place e.g. a seminar room.

• 'on the job' training (OJT), which is either informal or semi-formal.

OJT – informal training – takes place with a real case during service, usually with the patient present. The main settings for OJT are wards, clinics and on-take.

OJT – semi-formal training – is triggered by real cases during service but diverges from the case at hand into broader issues. Semi-formal training occurs, for instance, on a teaching ward round when the trainer discusses issues of diagnosis or management which link to but are not directly related to the patient before them. In some semi-formal situations – a meeting prior to the ward round, a case presentation session or a meeting to study patients' X-rays – the patients are not present.

**The following points are of maximum significance:**

In the first instance,optimal utilization of the existing infrastructure and resources,so far under utilized through ignorance or lack of initiative,has to be achieved. The trainers that have previously been trained under various programmes might be involved in the proposed system. Health Care Workers who are interested to play a key role in Competence Building in the state should be identified. Volunteers, if available,

should be preferred, if competent in their job.

Secondly, we should plan to increase the capacity of these resources at a rate greater to requirement so that our job of Competence Building is accomplished successfully.

Thirdly, we should try as much as possible, to identify the mutual requirements of the organization together with those of the individuals providing the Health Care at different levels.

Fourthly, exclusive requirements of those who are providing these services should be taken care of to the extent possible.

Fifthly, "facilitate self directed learning by providing for self assessment, the acquisition of knowledge and skills and the opportunity to reflect on clinical performance".[37]

Lastly, the proposed model should be within the reach of all learners,however remote, so as to enable the development of the skills and enhancement of professional competence of all those providing health care.

These recommendations, if incorporated into training policy,should provide the impetus for initiating the process of the J&K Health **"delivery systems to develop and practise organisational learning"**.[37]

In Jammu and Kashmir we have two Regional Institutes of Health and Family Welfare (discussed in detail in Chapter 5), one located at Nagrota for Jammu division and the other located at Dhobivan for Kashmir Division. The status of the District Training Teams has also been discussed point by point in the same chapter.

Under the RCH Project, District Training Teams have been identified in all the 14 districts of the State and an additional job of trainings assigned to them. All these teams have been trained at different training institutes out side the state. Each training team has 4 members, an in-charge, designated as the District Training Officer (DTO), one Gynecologist, one Child Specialist and a Communication Expert (MIEO/Principal ANMT School). Under the RCH Project there is no proposal to provide any infrastructure (District Training Halls along with furniture and teaching aids) in the non-IPP districts. Moreover, the state government does not have funds for the said purpose.

**Proposed In-Service Training System in the Department of Health & Family Welfare J&K. (Organogram I)**

WHO, UNICEF, UNFPA & OTHER INTERNATIONAL AGENCIES ALLIED TO HRD IN HEALTH CARE LIKE NETWORK OF COMMUNITY-ORIENTED EDUCATIONAL INSTITUTIONS FOR HEALTH SCIENCES

EXPERTS-RETIRED TRAINERS-CONSULTANTS AVAILABLE WITHIN THE STATE AND OUTSIDE THE STATE

NATIONAL PROJECTS IN THE STATE RCH/AIDS CONTROL ETC.

Voluntary organisations in the state like Red Cross etc.

OTHER TRAINING INSTITUTES OUTSIDE THE STATE

RFPTC, SRINAGAR & INSTITUTE OF PUBLIC MANAGEMENT & ADMINISTRATION

MINISTRY OF HEALTH & FAMILY WELFARE, GOVT. OF INDIA

NATIONAL INSTITUTE OF HEALTH & FAMILY WELFARE

Comm. Secretary Health, F.W. & M.E. J&K Govt.

Director ISM, J&K

DHS Jammu Division

Regional Institute of Health & Family Welfare, Nagrota, Jammu

OIT Jammu
OIT Udhampur
OIT Kathua
OIT Rajouri
OIT Poonch
OIT Doda

FPDA

DIRECTOR TRAININGS HEALTH & FAMILY WELFARE

FPDA

DHS Kashmir Division

Director F/W, J&K

Controller Drug Food Org. J&K

Regional Institute of Health & Family Welfare, Dhobivan, Kashmir

OIT Srinagar
OIT Anantnag
OIT Baramulla
OIT Budgan
OIT Pulwama
OIT Kupwara
OIT Kargil
OIT Leh

Population Research Centre, University of Kashmir

ANMT / AMT Schools in the state

Govt. Medical College Jammu / Srinagar

Distance Learning Programmes of various Universities like IGNOU & BITS, Pilani etc.

University of Jammu and University of Kashmir Deptt. of Management & Social Sciences

Sher-e-Kashmir Institute of Medical Sciences, Soura Srinagar & Govt. Medical College attached to it

Professional organisations in the state like Medical Associations, Nursing Associations etc.

Key: O   Solid lines represent direct lines of administrative decision-making

O   Shaded lines represent advisory functions.

# Proposed Organisation of Directorate of Trainings (Health & Family Welfare) in J&K State. (Organogram II)



Proposed Organisation of Directorate of Trainings (Health & Family Welfare) in J&K State. (Organogram II)

**Director Trainings**

- Regional Institute of Health & Family Welfare, Nagrota, Jammu
- Training material development Division
- Training Research, Evaluation and Consultation Division
- Finance Division
- Human Resources for Health Development Division
- Evaluation & Statistics Division
- Information Technology in Health Care Division
- Distance Learning Division
- Regional Institute of Health & Family Welfare, Dhobivan, Kashmir

**Principal** ⟷ **Principal**

Senior Faculty

| Community Health & Demography | Pedadogy | Management | IEC | MIS & Logistics | SOCIAL SCIENCES | BEHAVIO-URAL SCIENCES |
|---|---|---|---|---|---|---|

Junior Faculty

Administrative and other support staff

Senior Faculty

| Community Health & Demography | Pedadogy | Management | IEC | MIS & Logistics | SOCIAL SCIENCES | BEHAVIO-URAL SCIENCES |
|---|---|---|---|---|---|---|

Junior Faculty

Administrative and other support staff

**Proposed Training System in J&K State (Organogram I & II)**

A full-fledged Directorate of Trainings is' proposed to be created.

The Director Trainings will head the directorate.

The Directorate of Trainings will have the following divisions:

I.      Training Material Development.

II.     Training, Research, Evaluation and Consultation

III.    Finance

IV.     Human Resources for Health Development

V.      Evaluation and Statistics

VI.     Information Technology in Health Care

VII.    Distance Learning

VIII.   Administrative Staff

IX.     Two Regional Institutes of Health and Family Welfare (Nagrota and Dhobivan) and District Training Teams in all the 14 districts of the state.

For the Regional institutes the following faculty and departments are being proposed. Ideally these departments should come into existence simultaneously. However, if resources prove to be an impediment, they should be developed progressively.

i. Principal

ii. Senior Faculty heading and working in each department along with a Junior Faculty to assist. Following departments are proposed:

- Departments of Community Health and Demography
- Pedagogy,
- Management,
- IEC,
- MIS and Logistics,
- Social Sciences and
- Behavioral Sciences.

iii. Administrative and other support staff

iv. Similarly the District Training teams are proposed to be created for all districts. The staff deputed/ appointed shall work full time.

The Director of Trainings shall be under the Administrative control of the Commissioner cum Secretary, Health and Family Welfare J&K Govt. who in turn is directly under the control of the Ministry of Health and Family Welfare, Govt. of India. The Director Trainings should preferably be the senior most Director in the state. The two Directors shall be advisors to this Directorate in addition to the Director, Family Welfare and Director, ISM.
The National Institute of Health and Family Welfare will be guiding the Directorate. The other organizations that will be related to this directorate in an advisory capacity are as follows: clearly depicted in Organogram I.

The Director of Trainings shall keep constant liaison and have access to the below mentioned institutions/associations. This will ensure that we are a part of the National/International endeavour in Competency Building process.

- WHO, UNICEF, UNFPA, other international agencies allied to HRD in health care like NETWORK of Community Oriented Educational Institutions for Health Sciences, Maastricht, The Netherlands.

- Experts: Retired trainers, consultants available within and outside the state.

- Project Directors of the National Projects operating in the state like RCH/ AIDS control etc.

- Voluntary Organisations in the state /outside state eg Red Cross, Voluntary Health Association Of India.

- Other training institutes outside the state.

- RFPTC, Srinagar and Institute of Public Management and Administration, Jammu/Kashmir.

- Population Research Centre, University of Kashmir.

- ANMT/AMT Schools in the state.

- Govt. Medical College(s) Jammu and Srinagar.

- Distance Learning Universities e.g. IGNOU, BITS Pilani, CMC Vellore etc.

- Universities of Jammu and Kashmir (Deptt of Management and Social Sciences).

- Sher-i-Kashmir Institute of Medical Sciences, Soura , Srinagar and the Govt. Medical Colleges attached to it.

- Professional organisations in the state like Medical Associations, Nursing Associates etc.

- Heads of Health Organisations of the state so that any required modifications in the pre-service curriculum are highlighted and also their support /co-operation is available for Competency Building and they are:

- Principals of the Government Medical Colleges in the state

- Director, Health Services, Jammu.

- Director, Health Services, Kashmir.

- Director, ISM, Jammu & Kashmir.

- Director, Family Welfare, Jammu & Kashmir.

- Controller, Drug & Food Control Organization, J&K.

A conceptual model representing connectivity within and between the Health sector and the J&K Govt. has been outlined in Organogram III which is self-explanatory.

The conceptual model for continuous improvement and learning (creating learning environment) is depicted in Fig. 12.

The Directorate, with the infrastructure available at its disposal, shall devise a Trainings system where the following steps will be taken into consideration (Fig. 7):

- Health needs of the population through reviewing current knowledge, skills and identifying learning needs of the HCWs.

- Profiles of competencies required for individual categories of Health Personnel and planning developmental activities.

- Identification of training needs of that particular course.

- Objectives of each course along with that of each lecture/discussion/role-play or whatever be the methodology. It should preferably be learner and not teacher oriented.

**Designing a training plan[51]**

*The Four Elements Of a Training Plan*

- List of topics to be covered during training

- Target for each topic *& objectives.*

- Time-scale for achieving each target

- Record of targets achieved

The list of topics to be covered is a mixture of knowledge and skills within the medical specialty concerned, determined to be relevant to the particular trainee

for the specific training period.

o    The course will be planned.

o    Training will be implemented

o    Assessment of the achievement will be done and recorded

o    Evidence of competence gained will be recorded

o    Planning of miscellaneous activities for different categories

**Each of these processes has an output which in turn is the input to the next one in the cycle.**

Two specific features in the model that are being proposed are :

## Quality Assurance

The quality assurance in trainings/education is now a recognized feature. The model proposed by Vroeijenstijn[107] has been incorporated as it is proposed by the author. This includes an internal as well as an external mechanism. The internal mechanism includes monitoring, evaluation of trainees and self assessment. The external includes peer review, accreditation, control and improvement.

Research shall be encouraged and promoted for all the steps in the proposed system, separately as well as for different categories of the training. Stipulated funds will be kept for this purpose. This will ensure that the system keeps regulating itself uninterruptedly.

Internal quality care may be defined as "a systematic and structural attention to quality by the institution itself". "A[107] well-functioning system of internal quality assessment, though indispensable, is not sufficient. Because outside stakeholders (including medical profession, the government and international bodies) also pose quality requirements for medical education."[106]

## The features of effective on-the-job training[51]

Apprenticeship-by-coaching involves a distinctive philosophy and set of practices that can be explained in terms of the following distinctions. That is, OJT is:

- planned rather than just opportunistic

- fusional rather than intrusive

- cyclical rather than fragmented

- an investment rather than a duty

### Planned versus opportunistic OJT[51]

Much OJT has an opportunistic character. The trainer takes the line that training is contingent on the cases that turn up when the trainee is around to be taught, and when there is sufficient time to engage in the teaching. Since, the argument runs, both variables are difficult to predict or control, trainee and trainer are destined to take a 'wait and see' line and make the most of any opportunities that arise.

From the perspective of apprenticeship-by-coaching, opportunistic OJT has several faults:



FUSIONAL OJT
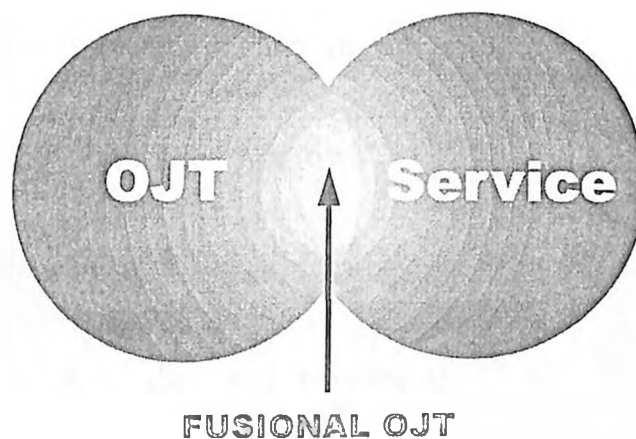
Fig. 8[51]

- it is a re-active rather than a pro-active philosophy, inducing in both trainer and trainee a fatalism that they are at the mercy of events rather than the masters of them

- it under-estimates the degree to which some aspects of both training and service delivery are predictable and open to control through planning

- it discourages both trainer and trainee from scanning service delivery for opportunities for OJT and then exploiting them in the interests of the trainee.

Planned OJT does not deny that OJT is indeed subject to the severe constraints of service pressures and the chance of what turns up in the case-load, but sees these as constraints upon training rather than as insurmountable barriers to it. OJT is most open to the kind of planning appropriate to formal training–deciding beforehand exactly what will be taught at what point in what sequence. OJT is, however, open to planning that is more flexible and readily adaptable in the light of experience and changing circumstances.

For skill based trainings the following **Seven Steps of progression, suggested by Hargreaves**[52] would be obligatory:

- Step 1:trainee observes

- Step 2:trainee assists the coach

- Step 3:trainee does under coach's supervision

- Step 4:trainee does with the coach in the vicinity

- Step 5:trainee does on his or her own

- Step 6:trainee perfects it through regular practice

- Step 7:trainee now a teacher and teaches it

## Fusional versus intrusive OJT[51]

Trainers and trainees often contrast training with service — one is doing either the one or the other. This is natural enough for we put a mental frame around our actions in the light of our intentions. If we intend to teach, our action is framed as 'training': if we intend to treat patients, our action is framed as 'service'.

Sometimes training interrupts service delivery because the trainer, in order to teach, stops the service to start teaching (e.g. explains, or asks the trainee some questions, or demonstrate a skill to the trainee) and so takes longer to complete the service. As trainers rightly see such training as intrusive of service, they say there is insufficient time for training. On-the-job training is fine, the arguments goes, but the job takes longer than it would otherwise do and that cannot be afforded.

OJT does not, however, always have to be intrusive. A second and far more significant form, which we might call fusional OJT, is when the OJT is fused with service, that is, the training is integrated, and takes place simultaneously, with service delivery. Intentions fuse, so frames fuse too. One is indeed doing two things at once.

OJT can mean learning then doing: fusional OJT means learning whilst doing. In fusional OJT the job often takes no more time than if no training were taking place. There are two types of fusional OJT:

- Single track, as when the trainer is carrying out a procedure and simultaneously provides a running commentary to explain that procedure to the trainee; and

- Double track, as when the trainer carries out a procedure and simultaneously talks to the trainee about something relevant to the case, but not about the procedure that the trainer is doing.

Fusional OJT is an efficient and effective form of OJT, but producing it in quantity and with quality is a highly skilled activity. There are two main components:

The first is the psychological change of abandoning the view that one can handle only one frame at a time — either teaching or service delivery. The two frames are combined in fusional OJT. The coach moves from thinking or saying

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'There just isn't enough time for teaching' to 'What opportunities are there in the next hour for any fusional OJT?' Every piece of service delivery in which coach and trainee are co-present contains potential for fusional OJT.

The second component is the practical skill of learning how to insert the maximal amount of fusional OJT into service and reduce intrusive OJT to a minimum.

Service is richer in opportunities for training than most trainers and trainees realize. Both coach and trainee have to learn how to scan the service in which they are jointly engaged, in order to recognise the opportunities and then exploit them to the full.

**Cyclical versus fragmented OJT[51]**

Ideally OJT has the structure of a coaching cycle with three phases. PHASES OF A COACHING CYCLE

- a planning phase where coach and trainee decide the aspect of training on which to focus

- a service delivery phase into which OJT is fused or blended

- a follow-up phase where coach and trainee review the quality of trainee performance and any training provided and decide what to do in the next training cycle.

In practice, coaching cycles rarely take this ideal, cyclical form, since both the planning and follow-up phases are left out. The structure of OJT is often highly fragmented, and sometimes for good reason. Since some OJT is necessarily opportunistic, a formal planning phase may not be possible. In the same way, OJT often slides back into service delivery and there is neither the time nor the opportunity for any follow-up discussion – and sometimes no appropriate private place in which to conduct it.

## OJT as an investment versus training as a duty – training pays![51]

The best planning is guided by a conception of training as an investment:

o  a short-term investment – faster and better service delivery

o  a long – term investment – a better Consultant in due course.

Training treated as a duty is a natural partner of OJT conceived as necessarily intrusive and opportunistic. But training can and should be seen also as an investment, not merely in the self-evident sense of contributing to the development of the trainee, but also in the less obvious sense of making a highly effective contribution to current service delivery, including the work-load of the trainer.

In medicine there are cases in clinics and aspects of patient care on the ward, that are appropriately handed over to trainees. If the acquisition of some of the relevant knowledge and skill by trainees occurs very soon after their arrival in the firm or department, this frees the trainer to get on with those aspects of service delivery that are too important or difficult to be delegated.

The element of investment is this: ensuring that trainees acquire some relevant knowledge and skills at a very early stage does require time and effort from the

| NOVICE →→→→→→→→→→→→→EXPERIENCED | | | | |
|---|---|---|---|---|
| LEVEL ONE | LEVEL TWO | LEVEL THREE | LEVEL FOUR | LEVEL FIVE |
| ◁—— RARE CONDITIONS ——▷ | | | | |
| | | | simple | complex | UNAIDED |
| | | simple | complex | WITH HELP |
| ◁—— UNUSUAL CONDITIONS ——▷ | | | | |
| | | simple | complex | UNAIDED |
| | simple | complex | WITH HELP | |
| ◁—— COMMON CONDITIONS ——▷ | | | | |
| | simple | complex | UNAIDED | |
| simple | complex | WITH HELP | | |
| NOVICE →→→→→→→→→→→→→EXPERIENCED | | | | |

Progression of Physicians - A schematic approach

Fig. 9[51]

trainer, both to teach the relevant knowledge and skill and then to provide the close supervision to check that trainees can carry out the relevant clinical tasks effectively. But the trainer's time saved in subsequent weeks or months more than compensates for the initial outlay of trainer time. Moreover, trainees see that their training is being made a priority and that they are making speedy progress at an early stage. As a result their morale and confidence rise rapidly, which makes a more committed and competent trainee. Therefore the investment in training pays off in several ways.

## HEALTH SITUATION ANALYSIS

- Define population
- Select appropriate information sources
- Determine relevant indicators
- Prioritize problems

## IDENTIFY ACTIONS FOR PRIORITY PROBLEMS

- Determine causes and "at risk" groups
- Appraise effectiveness and efficiency of possible interventions
- Identify appropriate agent(s)
- Specify roles/tasks

## DESIGN RELEVANT EDUCATION PROGRAMS

- State "end product" performance objectives, emphasizing new skills
- Select experience based on priority health problems
- Designate appropriate settings/resources
- Ensure compatible assessment system
- Prepare educators/facilitators

## EVALUATE OUTCOMES

- Short-trem
- Long-term

Fig. 10. Priority health problems model[74]

For training to be such a sound investment it has to be planned by the coach with great care. OJT occurs in arrange of settings – wards, clinics and on-take – and a sound plan takes ˉaccount of what can best be learned in one particular setting.

## Learning without coaching[51]

The coach helps the trainee to learn, but this does not always mean  that the coach must be engaged in teaching. It means, rather, that the coach ensures that the trainee is placed in conditions where learning can take place. On-the-job learning by a trainee often occurs in conditions where the trainer is not even present.

Trainees must be in a position to profit from their own experience. Learning to recognize clinical conditions in patients and  to make judgments about them, along continua such as normal/abnormal, common/rare, trivial/serious or superficial/extensive, requires exposure to many actual examples as well as text-book knowledge. Interpersonal skills, e.g. the appropriate ways in which to relate to nursing and paramedical staff, or breaking bad news to patients or relatives, are learned through experience as well as observation of role models.

Coaches can help trainees to see the importance of learning through experience if they point out what can be learned in this way and in which settings. Work on wards and clinics can seem unduly boring to trainees if they ignore the fact that seeing common cases with high frequency provides the essential background for recognising important variations of the condition and, allows the mental processes underlying such recognition to move from being slow and analytical to becoming faster and more intuitive. Learning-on-the-job in the  absence of explicit teaching is an important but under-estimated part of OJT.

## The CRISIS criteria is also proposed to be incorporated, always, while formulating the training courses

In the Assessment phase , the needs in which training is required will be determined These should be identified in order of priority.
In the Planning phase,  keeping the identified  needs in view,  the objectives of trainings will be formulated. The instruction material, training methods and method of delivery are selected and the training design is planned. In this phase criteria

for evaluating training outcomes are also formulated.

In the Implementation phase, training is conducted and the impact of training is assesed in the Evaluation phase.

A competent Health personnel is required to acquire proficiency in the following:

- Management skills

- Teaching skills

- Communication skills

- Information skills

- Technology skills

- Medical knowledge

The degree of the above mentioned skills will vary for different category of Health Personnel. Fig. 9 clearly illustrates the steps that are involved in moving from the right side to the left to become a fully competent doctor. These steps, without a doubt, to a lesser extent, are also applicable to the other categories.

Identifying the health care needs of the population residing in J&K state will be the foremost job of the proposed training system. Also the system shall ensure that the Health Care Workers know their job well and in addition also ensure, by researching, that adequate time is available for designated duties. There are various methods of ensuring this, but one of the most accepted is by prioritization of the problems as depicted in the figure[74] 10.

In case of uncertainty or lack of adequate time, some of the assigned activities of a particular category can be shifted one step up or down depending upon the recommendations of the researcher/s. The proposed Directorate of Trainings will also prioritize Health Care needs of the population by getting information from Health Care Workers viz:

Through Health Care Managers at different levels

o   Planning and Statistics Divisions of the Health Department.

o   By independently reviewing the reports regarding incidence of various health problems and processing the information thus collected the health care needs of the community can be formulated in order of priority.

o   Critical Incident technique will also be used independently of the earlier steps so as to triangulate the results thus obtained.

o   Having identified the priority needs, objectives will then be set for planning and designing of the training programme.

The evaluation of each training will be done both by the participants and the trainers.
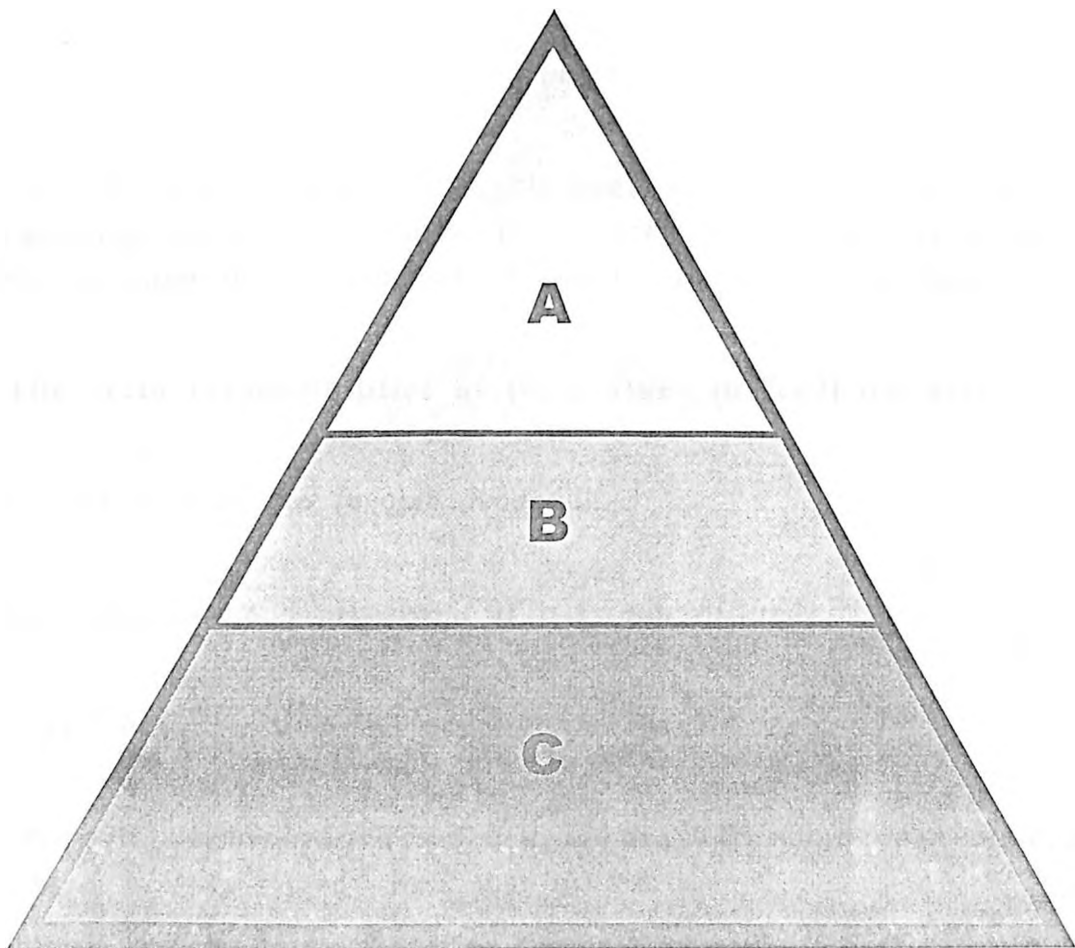


Fig. 11[51]

This assessment is most vital because:

a) By self assessment, each trainee shall be able to identify what he/she has gained from the training and ,

b) The assessment by the trainers will help them to understand to what extent they have been able to achieve the objectives of the training and to detect any gaps in the design. Evaluations by trainers/trainees enable the training organisations to re-search its shortcomings, gaps between want and needs of Health Care Workers and the future training courses to be improved upon.

**The main responsibilities of the trainer in feedback are:**[51]

● to always be prepared to offer feedback

● to take the initiative in providing feedback

● to provide both positive feedback (e.g. what is being done well) and negative feedback (e.g. what is being done badly)

● to make the negative feedback highly specific and directed in a practical way to improvement, that is, it refers to concrete examples and is accompanied by advice or suggestion about how it can be done better in future.

**The main responsibilities of the trainee in feedback are:**

● always to be ready to receive feedback

● to take initiative and ask for it if it is not offered

● to expect both positive and negative feedback

● to listen carefully to negative feedback, and to ask for some constructive, practical advice on how to remedy weakness or faults.

A golden rule for trainees is this: if you don't get feedback, ask for it.

Feedback is easier and more supportive of learning if the coach:

o gives it reasonably close to the relevant trainee behavior

o bases it where ever possible on what has been directly observed

o provides positive feedback as often as possible – most trainees are starved of it

o avoids indiscriminate or vague positive feedback and focuses on something specific

• where criticism is involved, criticizes the trainee's behavior, not the trainee as a person

o offers clear positive advice on what to do, not just on what not to do, in future.

**And if the trainee**

o tries to avoid being defensive; trainees have generally been successful at school and university and find it hard after qualifying to find themselves making mistakes

o uses criticism as an occasion to seek detailed advice on how to get it right

o encourages the trainer to keep giving feedback – e.g. by saying 'thank you' for it – for the positive feedback will eventually come and be its own reward.

Feedback, then, is not a one-way process, but a commitment by both coach and trainee to co-operate in this most delicate but important aspect of training.

**The feedback pyramid[51]**

The feedback pyramid consists of three layers, each being a different kind of feedback.

# Organogram III

Conceptual Model representing connectivity within & between the Health sector & Govt. of J&K.
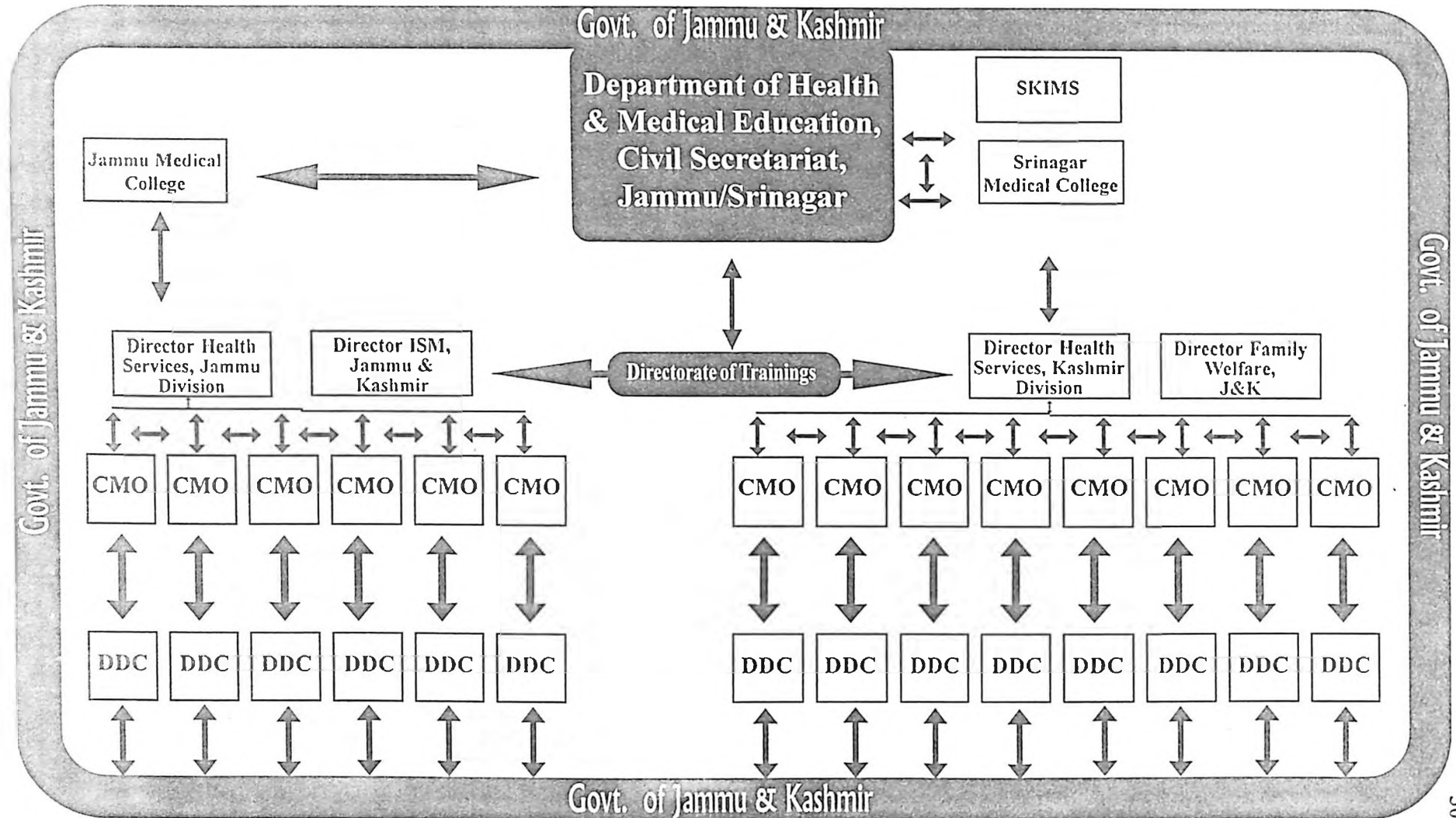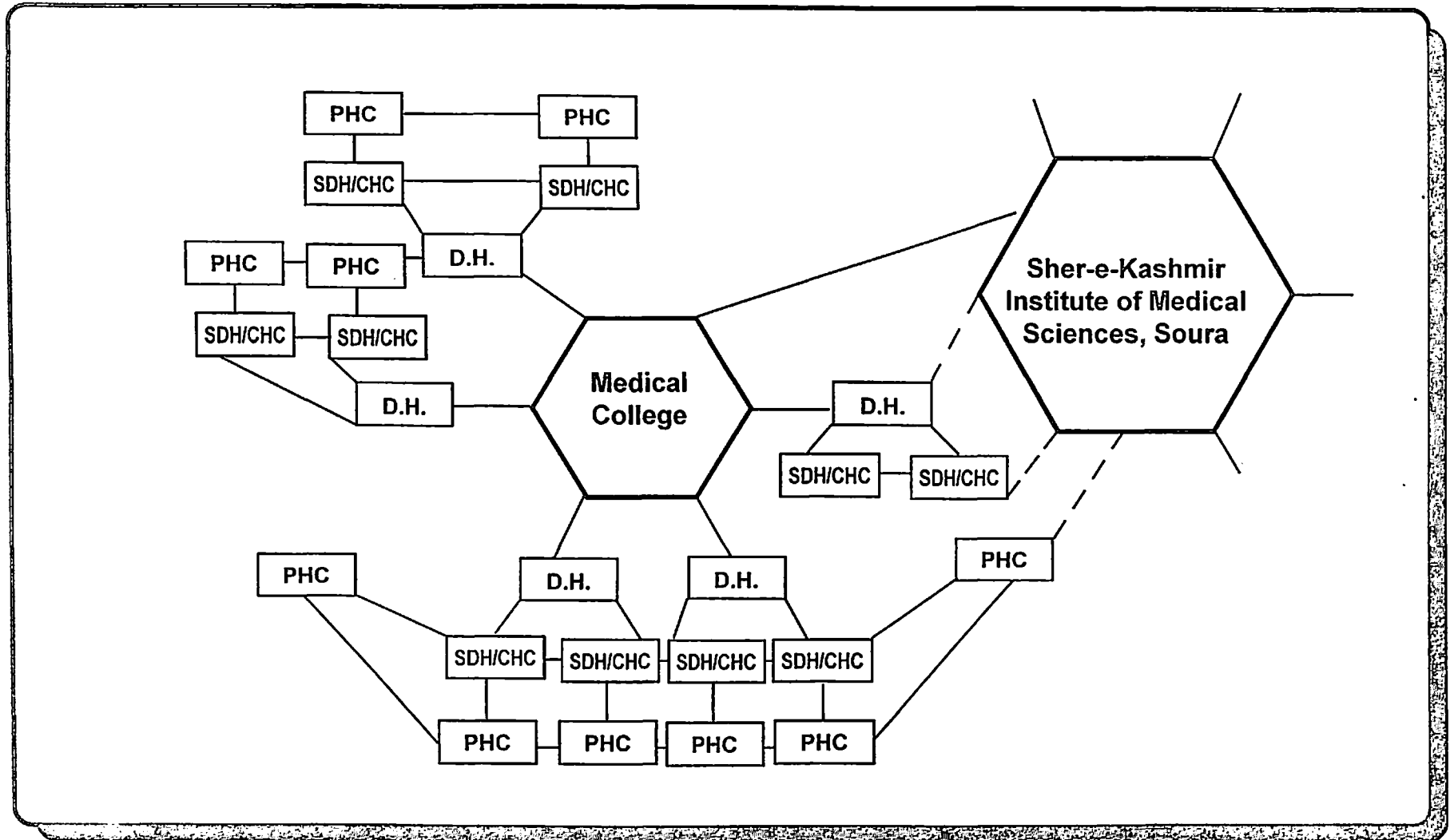
**A = formal & summative feedback in an assessment**

There is a reletively small amount of this. If it occurs at all, it is provided by the coach in a rather formal way at the end of the period of training.

**C = instant/short-term feedback on specific acts**

There is often a substantial amount of this form, both positive & negative, provided by the coach. The positive comes as the 'Welldone' or 'That's good' and negative as 'No' or 'There's another way of doing that, when trainees are doing something wrong, inappropriate or dangerous.

**B = holistic feedback on a sequence of acts**

It is this middle tier of the feedback pyramid-the feedback on a sequence of acts that belong at the end of a coaching cycle-that so very often is missing and yet is a vital element in effective feedback.

A follow-up phase to a sequence of acts is the obvious way of providing the missing tier. This kind of holistic feedback makes a huge contribution to learning and progression in that in ideal terms it[51]:

⊙ allows the coach to give feedback on the trainee's behaviour in the episode as a whole.

⊙ allows the trainee to ask questions that might not have been possible or appropriate during service.

⊙ is retrospective in that it relates the feedback to the intentions made in the planning phase and also, if links are made with previous coaching cycles, potentially provides an evaluation of trainee progress.

⊙ is prospective in that it points forward to future learning needs and opportunities, thus feeding into later coaching cycles.

⊙ gives the coach an opportunity to offer/advice support.

**Fig - 12: A conceptual model for continuous improvement & learning.**
*(Modified from Langley[63] )*

| What are we trying to accomplish ? |
| How will we know that a change is an improvement ? |
| What change can we make that will result in an improvement ? |

# LEARNING ENVIRONMENT

```
        ACT  |  PLAN
       ------+------
       STUDY |  DO
```

On-the-job methods

Off-the-job methods

Managing the process of learning

INTERNET

- Health care audits
- Job rotations
- In-service training
- On-site supervision and guidance
- Journal article review club
- Team assignments and projects
- Review of patient records, monthly reports
- Meetings with colleagues
- Telephone conferncing
- Staff meetings and conferences
- Information sources on the Internet

- Distance learning/Modular Approach
- Academic studies
- Training courses
- Self-study/Independent Studies
- Guided studies
- Seminars and workshops/Case Studies
- Conferences
- Meetings of professional organization
- Meetings of scientific societies
- Interactive learning opportunities on the Internet

The other important function of the Training Directorate will be to design distance learning modules for different categories of Health Care Providers. Modular approach will be used. Modules will be carefully designed and assembled in a meticulous, pre-determined sequence, without leaving any gaps and avoiding any unnecessary overlaps. Resource materials will be developed/modified as per the local needs. Learning material in local languages like Gojri, Dogri, Balti, Ladakhi, Pahari and Kashmiri etc. will be developed. This Directorate either in collaboration with IGNOU or itself can start different courses. These can be through the proposed system of telecommunication-computer network (use of Information Technology. J&K government, for electronic governance, has already decided to use a mix of communication system such as VSAT, optical fiber, wireless, DSN technology, as shown in Ornogram III & Ornogram No. IV.

Ornogram III represents conceptual model representing connectivity within and between the health sector and Govt. of J&K so far as the administrative setup is concerned.

The use of IT in telemedicine and continuing professional development through tele-education is proposed in ornogram IV, where in horizontal and vertical connectivity is proposed through length and breadth of health sector as a whole.

"Telehealth has many applications including the education and training of health professionals. Using (this) technology to educate FNPs (family nurse practitioners) in rural communities has resulted in greater percentage of graduates going to work in rural underserved communities".[27] "Researchers have hypothesized that reducing isolation can help to reduce personnel turnover."[104]

Appropriate training techniques need to be put to use for building knowledge, skills and attitudes within the participants. Majority of the methods illustrated in the Fig. 12 modified from Langley[63]. "Learning environment" can be used at will as every learner has distinct requirements in addition to an individual pace of learning, along with varying learning styles. This figure, which is self explanatory, shows the choices accessible to the learner both "on-the-job methods" together with "off-the–job methods".

Consequently, one and all amongst the learners will be able to settle down to the best method appropriate to his/her style of learning. For that reason solely, these alternatives are destined to be popular with all. The main philosophy is to make learning interesting together with using Professor David Pencheons' "new" paradigms in learning,as mentioned in his full list of contrasts, because "creating[23] an environment that provides practioners with oppurtunities to explore and un-

derstand the personal theories underpining their own practice is crucial for continuous professional development at all stages".

"Our efforts should be directed towards creating the conditions needed for effective learning, that is by contextualizing the educational events we arrange and by supporting our learners in their learning."[24] *Nothing more is needed. Nothing less will do.*

## A model for improvement[13]

Nolan and colleagues have devised a simple and elegant model for achieving changes that are improvements Fig. 12. Nolan's model comprises three basic questions and a fourth element that describes a cycle for testing innovations.

What are we trying to accomplish? Improvement must be intended, and specific aims are crucial.

The plan-do-study-act (PDSA) cycle describes, in essence, inductive learning—the growth of knowledge through making changes and then reflecting on the consequences of those changes.[97]

Such inductive learning is familiar to scientists, but such formal cycles of action and reflection are unusual in daily work. Nolan's model intends that the enterprise of testing change in informative cycles should be part of normal daily activity throughout an organisation. This is what George Box has called "the demonstration of science," and it amounts to little less than a new view of the nature of work itself.

## Lessons about using PDSA cycles for learning[13]

The plan-do-study-act cycle is a mnemonic for testing changes in real work settings. It defines activities not normally part of work but which if made part of work can convert a system from at best a merely stable one to one capable of continuous learning.

The science in PDSA is in the cat of reflection, learning from what one did. Those who want improvement to occur need to reserve specific times to ask, "What did we learn, and how can we build on it?"

"Reflection on action is so crucial that leaders themselves should probably model it in their personal behavior."[90]

"A variety of educational resources will be made available to accommodate individual information needs,learning styles, motivation and commitment to change practice behavior" under the proposed system."[70]

Another recommendation of this study is to go in for Maintenance of Competency Program, as discussed earlier, in the first stage, for all specialists. They can opt either for the Paper Diary or for the P.C. Diary, because "educational[29,78] programs or strategies that involve 2 or more interventions appear to have more impact on physician behavior and health care outcomes than single interventions."

The fundamental idea, as already discussed, is to support a system that promotes 'Self Directed Learning' as already discussed before, identifies dyscompetence among the Health Professionals, brings them back to competence as well as organizes training programs both for centrally sponsored projects and also, in addition, designs local specific programs on the basis of the inputs discussed earlier.

Another method which can be used by this directorate to identify dyscompetence *(describes the entire gamut of sub-optimal practice behaviours, alongwith its companion adjective "dyscompetent", and the implication is that our remedial efforts are designed to effect a return to competence)* is by way of peer review. It would be illustrative to know that the " Dutch system of peer review is different in which "Each specialist[16] is required to belong to a group of four to eight like minded specialists, which is reviewed every five years. The specialists need not be working in the same hospital. Before the review the group members complete a questionnaire about facilities, workload, audit undertaken, etc. The visiting team consists of three doctors from the same specialty: a member of the board of the specialist society, someone who has been reviewed in the past three months, and someone who is to be reviewed in the next three months. One of the reviews lasts six hours. As well as discussing the questionnaire and the audit material with the group the review team meets representatives of local management, of the nursing staff, and of the local general practitioners. Before the final meeting with the group it inspects the facilities and a sample of the case notes. It sends the group a draft report of the visit for comment. The final report may include a reccomendation that a further visit should take place in two years. The group decides whether or not to show the report to managemnet. An appeal mechanism exists.

"The system has three advantages. Firstly, group peer review is much less threatening than peer review. Secondly, as the individuals are to be reviewed as a group they are likely to meet together and support each other. This in itself

often raises the quality of care. In addition, group members can be mentors for each other in the preparation of personal development plans. Thirdly, everyone in the specialty is involved as each group can visit two other centres every five years; the educational value of such visits is well established."[16]

"A visit rarely fails to identify a doctor whose performance is giving cause for concern. Even if the members of the group support each other when meeting the review team, the discussions with management, the nursing staff, and general practitioners identify any doctor who seems to be performing poorly."[16]

Another recommendation that this system will incorporate in its day to day activities is to identify poor performing individuals, blocks, districts and division in order to provide extra support to those who require it, to enable them, individually as well as in groups. Poor performing individuals will be reported to the higher authorities by their supervisors. Every monthly/weekly visit by the supervisor will also be for on-the-job training. The supervisors, within this proposed system will not only do supportive supervision but be teachers/trainers/mentors for the category below them.

Small group training, in the field. This would fulfill the argument articulated by "Manning that education is most effective at the point at which patient care takes place."[67]

Training in small groups for all those who work together will also be a regular characteristic, as "most doctors work in teams with other doctors, other health professionals, and administrators. Successful functioning depends not only on the doctor but on the performance of the whole team. This multi professional team represents a complex learning system which must be reflected in planning of CME."[11]

WHO suggested a definition for use in this context: the community is a "group of individuals and families living together in a defined geographical area, usually comprising a village, town, or city".[113] This group would require primary, secondary, and tertiary care services.

Using the term in a similar way, the WHO[113] defined community oriented medical education as 'an education which is focused on population groups and individual persons taking into account the health needs of the community concerned'. The value of this term is dependent on the way in which the community is defined (usually geographical) interpretations. It is usually taken to include learning about health care services both inside and outside hospital, through with a focus

on the latter.

"There is an implication in the use of the term that the community has one voice as far as its health care needs are concerned. In fact, any geographical group is not likely to be homogeneous, but is a complex web of individuals, associations, and interest groups with variable status and conflicting views. Agreeing on the health care needs and priorities of such a group is a complex task, with political and ethical implications as well as medical ones, and there is a risk that the use of the word community, with its somewhat cosy associations, may obscure this."[34]

"A result of considering a curriculum based on patient's health care needs is a clearer idea of where students might learn. Learning about health care is likely to be most effective if related to the context in which it will be used."[22]

"As Silver[98] wrote in 1983, 'Medical education is a reflection of medical practice; it is not the education that will change the practitioners, but reformed practice will redesign medical education'.

**Idea not only is to learn, but to learn together, from each other. The benefits of group learning are annexed at annexure[102] 6.1.**

This Directorate shall also promote training activities in the State to the extent that every trainee shall be a trainer for the other so as to develop a teaching/ training culture in the Department of Health and Family Welfare so that a system of service increments for teaching/training facilitators is established to promote this culture.

**(i) Shared project** - The individual Doctor works with a colleague who is an equal in knowledge for the subject identified. They may prepare different aspects of the subject and teach other. The knowledge may be obtained by reading, visits to relevant centres of excellence or by attending meetings, seminars or conferences. Similarly, the Doctor works with an expert in the subject or a respected senior colleague but not necessarily an expert.

**(ii) Knowledge swap** - One individual teaches a colleague a specific technique or subject in exchange for instruction in the special intrest subject of that collegaue. Ideally there should be a written outcome e.g. local guidelines for practice, a scientific paper, a review, a book or chapter, a series of lectures or tutorials for postgraduate trainees, etc. The benefit should be measured by audit to test the effect of the study project on clinical practice.

Below are two illustrative models which may help develop a culture of learning.

At the moment, progress through the ranks is neither based on the doctors' research output or on his/her teaching ability or experience. It is a running grade. Promotions are biased towards years of service and not on competence or performance. As doctors progress through their careers, there should be more formal emphasis placed on teaching/training. This Directorate shall independently evolve a system to promote this idea for all categories of health personnel.

This proposed Directorate would "remove each and every barrier to individual, group together with organizational learning. Training programs will be developed to support the specific competencies required for practice, including both clinical and non-clinical skills."[41]

Lastly, a few, outstanding, from all categories of health professionals will be deputed to relevant centres of excellence for training, seminars, or meetings/conferences.

Finally "since the commitment of health workers depends on motivation and positive attitudes as well as skills, managers must try to complement continuing education by dealing with the causes of poor motivation and low standards in the working and living environment. They need to be competent in the planning, implementation and evaluation of continuing education."[110]

The Directorate of Trainings will do co-ordination between Health Care Workers and professional bodies and the different Directorates in the Health Department. This will be done by:

Obtaining confidence of everyone.[30]

Document the learning needs and CME activities under taken.[30]

Providing regular feedback.[30]

## Up-to-date about drugs[112]

To help the doctors so as to keep up-to-date about drugs, they will be supported by the 'Training Directorate', directly or indirectly, as per the recommendations of WHO with active participation of the pharmaceutical departments of

government Medical Colleges in the state. They are:[112]

**Drug compendia**[112]

Publish every year a list of drugs available in the market and will include generic and brand names; chemical composition; clinical indications and contraindications; warnings, precautions and interactions; side effects; administration and dosage recommendations.WHO model of essential drugs and treatment guidelines for each level of care (dispensary, health centre, district hospital, referral hospital) will be adopted . It is based on a consensus on the treatment of choice for the most common diseases and complaints, and defines the range of drugs that is available to prescribers.

**A list of Medical journals** will be prepared by the proposed Training Directorate. CD version of the Journals will be available through the interconnectivity within the Department as already discussed earlier.

**Drug information centres**

Linked to poison information centres. Health workers, can call and get help with questions concerning drug use, intoxications, etc. Modern informatics, such as on-line computers and CD-ROM, have dramatically improved access to large volumes of data. Many major reference data bases, such as Martindale and Meyler's Side Effects of Drugs, are now directly accessible through international electronic networks prescribers. In countries where such technology is easily accessible it can make a useful contribution to prescribing practice.

**Recertification**

In formulating a training policy for in-service Competence Building/Continuing Professional Development in our state, the policy makers are requested to think about recertification. Questions remain whether recertification/revalidation should be mandatory. The views of the policy makers, trainers and doctors are discussed in detail in the next chapter. A brief summary regarding international scenario on the subject is also annexed at annexure ?. "The recertification procedures set up by the member boards of the American Board of Medical Specialties aim to encourage doctors to continue learning and keep up to date; give recognition to doctors who continue to meet the specialty board's standards; and remove certification status  for doctors holding time limited certificates who fail to apply for recertification. Most of the boards use a snapshot assessment of knowledge,

**Annexure 6.1**

**Table I – Advantages and Limitations of Group – Based Training[102]**

| Advantages | Limitations |
|---|---|
| Being part of a group can generate excitement and a feeling of camaraderie among patients. | A group-based course requires a minimum number of participants. |
| Participants learn from each other | Participants requiring training must wait for the next scheduled course. |
| Interactions among participants can add richness and depth to the training experience | Generally, costs associated with facilities, travel, etc. are high. |
| The trainer is able to focus her/his full attention on the training process. | A large client caseload is needed at one time in order for all participants to have adequate clinic experience. |
| The trainer is able to assure the quality of training. | Large quantities of materials and supplies must be obtained and stored. |
| Participants are available to take part in demonstrations, role plays and to assist with coaching each other. | Trainers may have limited options when an inappropriate participants attends the course |
| Group-based training courses provide positive recognition to both the clinical training site and the participants | Participants must stop providing services at their clinical site in order to attend training |
| It is easier to standardize knowledge and skills as all participants receive the same information in the same way. | Program demands for a large number of trained service providers may not be met. |

skills, and performance."[10] Written examinations, usually in the form of multiple choice questions, are used by all boards, and "require set credit hours of continuing medical education (CME), typically 50 hours a year in the three years before recertification. Performance is measured indirectly by report of licensure status, letter of recommendations from chiefs of healthcare organisations and hospitals, attendance at CME programmes, and independent assessment by peers and other health professionals. Some boards allow specialists to select their own form of assessment."[9]

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# 7

COMPETENCE BUILDING : IMPLICATIONS & RECOMMENDATIONS

# Implications

1. The model proposed regarding establishing of an independent Directorate of Trainings in J&K State, although based on research, needs to be implemented after holding seminars to educate, inform and convince all stake holders like politicians, state bureaucrats, including senior officers of the Department of Health & Family Welfare, Planning and Development Department etc. about its essential nature.

2. Paucity of funds cannot be cited as an excuse because the financial implication on account of the Training System will be approximately Rs.207 lacs in the Ist year of its implementation, which is less than 1.4% of the plan outlay of the Health sector (1999-2000), and as such is very meager in view of the advantages acquiring to it as already explained in the foregoing chapter. If the proposals are implemented next year 10% needs to be added to Rs. 207 to cover the inflation.

3. Competency is build over the years through experience and in-service trainings. Training model was given to us by World Bank Project under IPP Programme but we could hardly avail of less than 25% of funds in absence of an independent Training Directorate. If we would have had an independent Directorate of Trainings we could have not only spent the whole amount of funds on trainings programme envisaged in the project, but also asked for more funds resulting in Competence Building for the overall development of the State in general and Health Sector in particular.

4. The model presupposes utilisation of already available infrastructural facilities like two RIHFW institutes and District training halls where all infrastructural facilities are available. The remaining 5 districts where district training halls are non-available, can be catered through utilising infrastructural facilities of other district sister departments for the training programme with the result that financial implication on creation of infrastrctural facilities will be nil. However, some financial implication is envisaged on appointment of 14 professors, 14 Junior lecturers with some supporting staff for the two RIHFW institutes.

5.  District training teams stand constituted and trained under the Reproductive Child Health Project. and as such no extra expenditure is envisaged on this account. Running costs on these are already in-built in the form of 10% overheads under training under the Reproductive Child Health Project and other centrally sponsored, fully financed projects in the state.

6.  The whole exercise of building the training system will be futile unless and until the state goes in for training policy for inservice incumbents of Health Services. This policy, after being subjected to thorough debating by all stake holders should be documented to clearly state the following:

a   Mission of trainings policy.

b   Goal of training policy.

c   Objectives.

d   Policy dimensions.

e   Implementation of Institutional arrangements

·   Training system and its management

·   Training capacity and its utilisation to the optimal limit

·   Training approaches

·   Ensuring maintenance as well as improvement of Trainers' Competence at contemporary level, so that their accreditation is accepted by National and International accreditation agencies, thus gaining acceptability for the two Regional Institutes among international organisations such as WHO, UNICEF, Network of Community Oriented Educational Institutions etcetra. This recognition would ensure a flow of funds,

and exchange of trainers and infrastructural support, which would bring about a qualitative enhancement in the Institutes.

7. Accessing the policy by discussing the performance, initially after six months and then annually, and modifying it accordingly.

A review of this policy should be carried out after 3 to 5 years and necessary modifications, if required, be incorporated.

- Training resources development both for on the job and distance learning

- Training research, its implementation and support

- Evaluation and monitoring, internal as well as external

- Support to trainers and trainees for attending seminars etc. at national and international levels

- Support to trainers to become consultants in their respective fields.

8. Proposals, requirement, models to meet the requirements for recertification if required, be incorporated.

9. Proposals, requirement, models to meet the requirements for revalidation if required, be incorporated.

10. Relationship between annual evaluation of the employees to their learning portfolios, if required, be incorporated.

11. Finally the Policy document should declare assuredly who in the government would provide leadership in the transformation of the Department of Health & Family Welfare from present situation into a Learning Organization in which individual, team learning and innovation will be promoted. A time frame for the same has to be agreed upon by accepting unquestionably the management of the above stated transformation.

## Conclusion

Competency building through in-service training/education is crucial for the Health Care Workers so that they are in a situation to serve their clients besides accomplishing the goals of their organisation effectively and efficiently. The State Government would benefit by the recommendations suggested only then our Health Care Workers can maintain and continuously improve their competence. Their Continuing Professional Development will make them flexible, adaptable and responsive to the needs of our population as well as of the Department of Health & Family Welfare. Supporting Health Care Workers and protecting patients will be a good investment for achieving the goals of National Health Policy in the shortest possible time.

12.   Table of Expenditure statement of the proposed training system shows the basic pay and also includes D.A. and other allowances as applicable to J&K Govt.Employees.

**A.     Salary for staff being proposed for Directorate of Trainings**

|     |     | ( Rs. In lacs ) |
|-----|-----|-----:|
| 01. | 1 Director @ 18000 pm | 3.30 |
| 02. | 7 Dy. Director/ADs @ 12000 pm | 16.00 |
| 03. | Supporting staff: | |
|     | 8 PA s @   8000 pm | 11.70 |
|     | 8 Peons @ 5000 pm | 7.50 |
|     | 2 drivers @ 7000 pm | 2.50 |
|     | 2 chowkidars @ 4000 pm | 1.00 |
|     | 2 Xerox operators @ 5000 pm | 1.20 |
| 4.0 | Office Expenses | 3.00 |
| 5.0 | Travel Expenses | 2.00 |
| 6.0 | POL | 3.00 |
| 7.0 | Others | 4.00 |
|     | **Total** | **55.20** |

**B.     Salary for Staff   being proposed for two Regional Institutes.**

| | |
|---|---:|
| 01. 14 Professors @ 18000 pm | 46.00 |
| 02. 14 Jr. Lecturers @ 16000 pm | 41.00 |
| 03. Supporting Staff: | |
| 14 PA s @ 9000 pm | 24.00 |
| 4 Chowkidar @ 4000 | 3.00 |
| 4 Gardner @ 4000 | 3.00 |
| 14 Peon @ 4000 | 10.00 |
| 2 Electrician @ 5000 | 2.00 |
| 2 Xerox operator @ 5000 | 2.00 |
| 2 Photographer @ 5000 | 2.00 |
| 2 Drivers @ 7000 pm | 2.50 |
| 0.4. Office Expenses | 4.00 |
| 0.5. Travel Expenses | 3.50 |
| 0.6. POL | 4.00 |
| 0.7. Others | 5.00 |
| **Total** | **152.00** |

Grand Total, (A+B) i.e. 55.20 + 152.00      =   207 lacs

## Recommendations

1.  A new in-service training model is being proposed for which formulation of a training policy is being recommended.

2.  The model should, preferably, have an independent Directorate of Trainings headed by the senior most doctor from within the department.

3.  Self Directed Learning should be promoted and all should be trained in 'How to learn'. Health services should promote the creation of a learning environment. *(Knowledge rich workplace)*.

4.  On-the-job and off-the-job learning methods should be provided. The trainee should have options to choose and pursue the one he prefers.

5.  The Canadian Maintenance of Competence Program (MOCOMP) should be field tested in the state and on the basis of results if acceptable, should be introduced in a phased manner.

6.  Use of Information Technology should be promoted for learning/teaching (Tele-education) and the Directorate should take full benefit of the planned introduction of Information Technology in the state for e-governance. It should encourage the development of such skills by prompting the two universities within the state to initiate and design learning programmes specific to departments' needs. Such collaboration should also be extended to include the two medical colleges and institutions/organizations where similar programmes are already operative (BITS-CMC, Vellore-Tulane University:USA etc.).

7. Supervisors responsible for supportive supervision and on-the-job training should themselves, at times, be monitored by the Directorate to enhance the competency of the supervisory process.

8. Supervisors should identify the specific training needs of poorly performing subordinates and the Directorate should initiate remedial measures.

9. Directorate should devise a mechanism whereby poorly performing blocks, districts, divisions can be identified and remedial mechanisms in the form of trainings be initiated.

10. Training curriculums should be designed by area specific analysis of health problems. Doctors with wide specialist skills should be released from performing low-skill jobs, such as IUD insertions, etc. by providing training to female MPHWs, thereby enabling them to apply their skills to more demanding needs (to reach the large number of population in the remote areas, contraception will be moved out of the hands of the doctors by moving reproductive health provision down the medical skills' pyramid). The Directorate should ensure this on a most urgent basis. Also, increase in life expectancy has sizeably increased numbers of the elderly. Most advanced-age problems do not require specialist care beyond a point and can and should be handled by a trained para-medic, thereby reducing the burden on doctors, allowing them to attend to more urgent needs. The Directorate should ensure the urgent training of all workers concerned with the care of the old.

11. The Directorate should ensure a two-way trainer-trainee feed back interaction and incorporate relevant suggestions in future training programmes.

12. Peer review should be introduced in a phased manner. Initially starting with specialists/Medical Suprintendent/CMO's it should later move on to include other categories of health care workers.

13. Clinical training being provided in the hospitals should be strengthened by creating a culture of teaching and by providing special incentives for teaching. (Making teaching as attractive as clinical practice).

14. Training in small groups (working groups) at the place of work and not only classroom teaching in the training institutes should be ensured as a regular feature. A process of developing 'Group learning portfolios' should also be initiated. (Who learned what from whom, where, how and why).

15. A culture of 'Shared project' and 'knowledge swap' should be promoted at the work place and some incentives be provided for it. A process of developing 'Team learning portfolios' should also be initiated. (Who learned what from whom, where, how and why).

16. Annual increment/promotion should be based on performance as well as on individual learning portfolios. Individual learning portfolios are recommended, initially, for senior level doctors/specialists. Gradually, in the next 2-3 years, every one working in the J&K Health Services (Department of Health and Family Welfare) should be required to form and maintain these as a useful tool which would be used to plan and record learning and incorporate personal development plans to form the basis of appraisal or peer review.

17. The Department of Health and Family Welfare should devise specific annual performance appraisal proformas for different categories of health personnel.

18. Training Directorate should evolve a process of keeping doctors up-to-date about drugs. Drug manufacturers at times exploit this ignorance to their advantage by promoting more expensive drugs with no known superior abilities over less expensive but equally effective drugs.

19. The Directorate should evolve a system whereby before promotions or change in job demands, the officials are trained for their new assignments.

20. Training at the induction point should be compulsory for all categories.

21. A study needs to be conducted on the feasibility of introducing re-certification/revalidation for doctors every few years as is being done in Europe, the USA and Canada.

22. A library is recommended for all health institutions. Its size and the number and the nature of the books which it should contain should be decided by a core group in the department.

23. Directorate training should identify and subscribe to on-line journals that should be made available for a token charge.

24. A culture that promotes research should be supported by the proposed Directorate and separate funds should be earmarked for this.

25. A core group within the department should decide the time frame, within which this department can be transformed into a 'learning organization'.

26. A mechanism should be evolved whereby the few who keep performing poorly and show no improvement whatsoever can be identified and dealt with so as to protect the patients.

27. Though the transfer-policy of the J&K Health Services has very little that can be faulted in principle, however, the implication leaves much to be desired. To the extent possible, square pegs should be avoided in round holes. To ensure effectiveness of functioning, Health Care Workers with established professional training/qualifications should occupy posts commensurate with their capabilities.

28. Finally, the Directorate should remain dynamic and keep learning from the research of others as well as its own in house research so as not to get bogged down in a bureaucratic style of functioning.

29. In conclusion, to ensure the successful implementation of the mentioned recommendations by the Directorate within a cost effective time frame, this Directorate should nurture contacts with governmental, non-governmental and academic institutions pursuing similar objectives within and outside the state as also out side the country. All programs, national and otherwise, being implmented in our state should function in consonance with the proposed Directorate to ensure avoidance of duplication of effort and allow maximum utilization of resources.

# Annexure 7.1

## What success would look like

- far fewer cases than at present, of patients experiencing harm or sub-optimal outcomes of care due to poor practitioner performance;

- doctors with competency, conduct or ill health problems recognized at much earlier stage than at present. Doctors willing to report their concerns about colleagues;

- the public and patients confident that the doctor who treats them is well trained, highly competent and up-to-date in their practice;

- patients not put at risk or denied a response to their concerns because the system is finding it too difficult to assess or decide how to resolve problems with a doctor's practice;

- the workings of the regulatory bodies fulfill explicit criteria, easily understood and publicised;

- widely accepted statements on standards of conduct, performance and ethics primarily aimed at the protection of patients;

- a strong effective partnership between the NHS (*Directorate of Trainings*) and medical professional bodies to prevent, recognize and deal with poor clinical performance;

- benefits for doctors in the availability of well targeted continuing professional development and support.

*(Modified from Supporting doctors, protecting patients. A consultation paper on preventing, recognizing and dealing with poor clinical performance in the NHS in England. http://www.doh.gov.uk/cmoexecusm.htm accessed on 08-04-2000.)*

# 8

COMPETENCY BUILDING : QUESTIONNARIES ADMINISTERED AND
ANALYSIS OF REPLIES RECEIVED

## 001

**Q.1.** Are you satisfied with the in-service trainings being provided under the India Population Project?

i.   1. To a very great extent ☐
ii.  2. To a considerable extent ☐
iii. 3. To some extent ☐
iv.  4. To a very little extent ☐
v.   5. Not at all ☐

**Q.2.** After recruitment, **Medical Officers** are placed in different positions in the health system, including that of the Medical Officer, P.H.C. However, in the absence of proper training during the **undergraduate and internship** period, they find themselves **unsuited for providing primary health care. The same is true for paramedics.**

In your opinion, do the Health Care Workers have appropriate **pre-service** training as per the requirements of providing primary health care in our state?

**(a) Doctors**

i.   1. To a very great extent ☐
ii.  2. To a considerable extent ☐
iii. 3. To some extent ☐
iv.  4. To a very little extent ☐
v.   5. Not at all ☐

**(b) Paramedics**

i.   1. To a very great extent ☐
ii.  2. To a considerable extent ☐
iii. 3. To some extent ☐
iv.  4. To a very little extent ☐
v.   5. Not at all ☐

**Q.3.** The **learning\*** organization is one that creates an environment where the behaviors and practices involved in continuous development are encouraged. **(Mumford, 1995).** In your opinion, do you think that J&K Health Services is a learning\* organization?

i.   1. To a very great extent ☐
ii.  2. To a considerable extent ☐
iii. 3. To some extent ☐
iv.  4. To a very little extent ☐
v.   5. Not at all ☐

**Q.4.** Is there any definite **Policy Statement** available for J&K Health Services on trainings that indicates the **commitment** of top management to cater to the in-service training needs of its staff?

i.   1. Yes ☐
ii.  2. No ☐
iii. 3. I don't know ☐

**Q.5.** Is this Training Policy in the form of a **written** document?

i.   1. Yes ☐
ii.  2. No ☐
iii. 3. I do not know ☐
iv.  4. N.A. ☐

Q.6. If it is not a **written** document, do you think it should be documented and have mission statements as well as **objectives** clearly stated for all in the department to know?
   i.    1. Yes    ☐
   ii.   2. No    ☐
   iii.  3. N.A.   ☐

Q.7. Please state below how **in-service training** is being managed in the J&K Health Services? (Training has been identified as key strategy in the IPP VII).

(a) In-service training is perceived as being relevant
   i.    1. Yes    ☐
   ii.   2. No    ☐

(b) Planned in-service training is being **effectively** implemented by senior-level administrators.
   i.    1. Yes    ☐
   ii.   2. No    ☐

(c) J&K Health Services has a separate **Training Department** for in-service training at the **secretariat** level.
   i.    1. Yes    ☐
   ii.   2. No    ☐

(d) J&K Health Services has a separate Training Department for in-service training at **directorate** level.
   i.    1. Yes    ☐
   ii.   2. No    ☐

(e) Training is given after some **promotion**
   i.    1. Almost always    ☐
   ii.   2. Often    ☐
   iii.  3. Sometimes    ☐
   iv.  4. On a few occasions  ☐
   v.   5. Rarely    ☐

(f) People are trained for the **new job** before promotion
   i.    1. Almost always    ☐
   ii.   2. Often    ☐
   iii.  3. Sometimes    ☐
   iv.  4. On a few occasions  ☐
   v.   5. Rarely    ☐

(g) People are trained for the **new assignment**
   i.    1. Almost always    ☐
   ii.   2. Often    ☐
   iii.  3. Sometimes    ☐
   iv.  4. On a few occasions  ☐
   v.   5. Rarely    ☐

(h) The organization **encourages** Health Care Workers to attend outside programs
   i.    1. Almost always    ☐
   ii.   2. Often    ☐
   iii.  3. Sometimes    ☐
   iv.  4. On a few occasions ☐
   v.   5. Rarely    ☐

(i) There is a **separate budget** for sponsoring employees outside the state to some listed institutes
   i.    1. A very large amount  ☐
   ii.   2. Enough    ☐
   iii.  3. Not enough    ☐
   iv.  4. Some amount    ☐
   v.   5. Very little    ☐

(j) Attention is paid to **utilization** of trained people i.e. proper placement of trained people
  i.   1. Almost always ☐
  ii.   2. Often ☐
  iii.   3. Sometimes ☐
  iv.   4. On a few occasions ☐
  v.   5. Rarely ☐

Q.8. What criteria do you use for selecting Health Care Workers for nominating them for various trainings? Please rank the following in order of priority (i to ii)

**CRITERIA**
  i.   1. Need of the department ☐
  ii.   2. Need and the interest of the trainee ☐
  iii.   3. i & ii together ☐
  iv.   4. Giving opportunities to personal who have never had any in-service training ☐

Q.9. In your opinion, what should be the maximum duration of a training program for:

(a) **Multipurpose Health Workers**
  i.   1. 06 working days ☐
  ii.   2. 10 working days ☐
  iii.   3. 15 working days ☐
  iv.   4. ? days ☐

(b) **Assistant Surgeons**
  i.   1. 06 working days ☐
  ii.   2. 10 working days ☐
  iii.   3. 15 working days ☐
  iv.   4. ? days ☐

(c) **Dy. CMOs, BMOs, DIOs, DHOs**
  i.   1. 06 working days ☐
  ii.   2. 10 working days ☐
  iii.   3. 15 working days ☐
  iv.   4. ? days ☐

(d) **Directors, Dy. Directors, Asstt. Directors, Medical Suptds., CMOs**
  i.   1. 06 working days ☐
  ii.   2. 10 working days ☐
  iii.   3. 15 working days ☐
  iv.   4. ? days ☐

Q.10. After June 1998, when the present project **completes** its term, government is committed by an agreement with the government of India and the World Bank to finance and support the training infrastructure developed under this project. In your opinion, despite a heavy resource crunch, has the government made adequate provisions to **honour its legal commitment.**
  i.   1. Yes ☐
  ii.   2. No ☐
  iii.   3. I don't know ☐

Q.11. The **in-service training infrastructure** being developed under the project still lacks **staff.** In your opinion, will the government appoint the faculty before the end of the project?
  i.   1. Yes ☐
  ii.   2. No ☐
  iii.   3. I do not know ☐

Q.12. Are you satisfied with the **competency** of the trainers in our state?

i.    1. To a very great extent   ☐
ii.   2. To a considerable extent ☐
iii.  3. To some extent           ☐
iv.   4. To a very little extent   ☐
v.    5. Not at all               ☐

Q.13. Human Resource Development (HRD) is concerned with the development of individuals, teams and total organization. **(Pareek, 1994)**. In your opinion, as a part of HRD in our State Health Services;

(a) **Career** Planning has been systematized for different categories of personnel

i.    1. Always     ☐
ii.   2. Usually    ☐
iii.  3. Sometimes  ☐
iv.   4. Rarely     ☐
v.    5. Not at all ☐

(b) **Promotion** is linked with in-service training

i.    1. Always     ☐
ii.   2. Usually    ☐
iii.  3. Sometimes  ☐
iv.   4. Rarely     ☐
v.    5. Not at all ☐

(c) **Performance** review and performance counseling is functioning

i.    1. Always     ☐
ii.   2. Usually    ☐
iii.  3. Sometimes  ☐
iv.   4. Rarely     ☐
v.    5. Not at all ☐

(d) **A systematic Human Resource Information** System is functioning

i.    1. Always     ☐
ii.   2. Usually    ☐
iii.  3. Sometimes  ☐
iv.   4. Rarely     ☐
v.    5. Not at all ☐

(e) Development of **competency** is linked to rewards

i.    1. Always     ☐
ii.   2. Usually    ☐
iii.  3. Sometimes  ☐
iv.   4. Rarely     ☐
v.    5. Not at all ☐

(f) A culture and system of rewarding **effectiveness** and **excellence** is functioning

i.    1. Always     ☐
ii.   2. Usually    ☐
iii.  3. Sometimes  ☐
iv.   4. Rarely     ☐
v.    5. Not at all ☐

Q.14. In-service trainings in our state should be the responsibility of the Health Department, Department of Medical Education, a NGO or any other

i.    1 for Health Department         ☐
ii.   2 for Department of Medical Education ☐
iii.  3 for NGO                       ☐
iv.   4 for i+ ii                     ☐
v.    5 for i+ ii+ iii                ☐

Q.15. Do you recommend **External Peer Review?** (Where an expert/ or a team goes to assess the individual performance of a doctor at the place of his work)
  i.   1 for Yes                □
  ii.  2 for No                 □

Q.16. Should the annual increment be linked with some credit points in **Continuing Medical Education** or in-service training hours a doctor receives every year?
  i.   1 for Yes                □
  ii.  2 for No                 □

Q.17. Kindly enumerate in order of priority (i to v), the below stated options as a means of achieving professional competence and to counter redundancy caused by the rapid growth of medical knowledge:

(a)  Compulsory renewal of medical registration every five years, subject to achieving minimum credit points in **Continuing Medical Education** be made compulsory          □

(b)  Through program of self-assessment, **CHECK** i.e. (Continuous Home Evaluation of Clinical Knowledge)          □

(c)  **A monthly news-letter** to be published by the Department of Health Services/Medical College/s for communicating **contemporary medical advances**          □

(d)  **Time based** refresher courses in medical training institutes          □

(e)  Monthly **on-the-job Modular** training at the **place of work.** On this day, all the routine activities such as **outpatients' clinics** etc. are canceled in order that department modular training activities can take place. Each module contains **one topic** and the topic title is **circulated** a week before the session.          □

Background: -

The Questionnaire 001was administered to 39 Officers who were responsible for framing policy for the J&K Health Services viz., Commissioners/Secretaries to Govt of J&K (Health Deptt.), Directors of both divisions of state who had served on these posts during last 5 years and Deputy Directors, CMOs, Assistant Directors and Deputy CMOs who were presently serving on these posts. Out of 39, only 25 officers responded to the questionnaire.

Q: 1- n=25,

To the question, 'Are you satisfied with the in-service training being provided under the Indian Population Project –VII (J&K)?'. Of a total of 25; 7 were of the view that they were satisfied *"To a considerable extent"*, 12 were satisfied *"To some extent"* and 6 were satisfied *"To a very little extent"*.

| | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 7 |
| To some extent | 12 |
| To a very little extent | 6 |
| Not at all | 0 |

Q: 2- n=25

To the question, 'In your opinion, do the Health Care Workers (A- doctor, B-para-medics) have pre-service training as per the requirements of providing Primary Health Care in our state?'

a) **Doctors**; out of 25; 6 were satisfied *"To a considerable extent"*, 13 *"To some extent"* and 6 were satisfied *"To a very little extent"*.

| | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 6 |
| To some extent | 13 |
| To a very little extent | 6 |
| Not at all | 0 |

b) **Paramedics**; out of 25; 4 were satisfied *"To a considerable extent"*, 14 *"To some extent"* and 7 *"To a very little extent"*.

| | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 4 |
| To some extent | 14 |
| To a very little extent | 7 |
| Not at all | 0 |

Q: 3- n=25.

To the question, 'Do you think that J&K Health Services is a learning organization?', Of 25; 11 were of the view that it was *"To some extent"*, 10 were satisfied *"To a very little extent"* whereas 4 thought that J&K Health Service was *"Not at all"* a learning organization".

| | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 11 |
| To a very little extent | 10 |
| Not at all | 4 |

Q: 4 - n=25

To the question, 'Is there any definite policy document available for J&K Health Services on trainings?': out of 25; 18 said *"No"* whereas 7 said, *"I don't know"* if any such document existed.

| | Response Score |
|---|---|
| Yes | 0 |
| No | 18 |
| I don't know | 7 |

Q: 5- n=25

To the question, 'Is this training policy in the form of a written document?'; all of the 25 said, *"N.A"*.

| | Response Score |
|---|---|
| Yes | 0 |
| No | 0 |
| I don't know | 0 |
| N.A | 25 |

Q: 6- n=25.

To the question, 'Do you think this document should have a mission statement as well as objectives clearly stated for all in the department to know?'; all the 25 officers replied *"Yes"*.

| | Response Score |
|---|---|
| Yes | 25 |
| No | 0 |
| N.A | 0 |

Q: 7-  n=25

To the view sought, 'Please state below how in-service training is being managed in the J&K Health Services?'

a)  'In-service training is perceived as being relevant'; out of 25; 12 said *"Yes"* and 13 said *"No"*.

|  | Response Score |
|---|---|
| Yes | 12 |
| No | 13 |

b)  'Planned in-service training is being effectively implemented by senior level administrators'; out of 25 respondents 7 said *"Yes"* and 18 said *"No"*.

|  | Response Score |
|---|---|
| Yes | 7 |
| No | 18 |

c)  'J&K Health Services has a separate training department for in-service training at the secretariat level'; all 25 said *"No"*.

|  | Response Score |
|---|---|
| Yes | 0 |
| No | 25 |

d)  'J&K Health Services has a separate training department for in-service training at directorate level'; all 25 said *"No"*.

|  | Response Score |
|---|---|
| Yes | 0 |
| No | 25 |

e)  'Training is given after some promotion'; out of 25 respondents 7 said *"Sometimes"*, 2 said *"On a few occasions"* and 16 said *"Rarely"*.

|  | Response Score |
|---|---|
| Almost always | 0 |
| Often | 0 |
| Sometimes | 7 |
| On a few occasions | 2 |
| Rarely | 16 |

f) 'People are trained for the new job before promotion'; out of 25 respondents 4 said "*Sometimes*", 7 said *"On a few occasions"* and 14 said *"Rarely"*.

| | Response Score |
|---|---|
| Almost always | 0 |
| Often | 0 |
| Sometimes | 4 |
| On a few occasions | 7 |
| Rarely | 14 |

g) 'People are trained for the new assignment'; out of 25; 3 said *"Often"*, 14 said *"Sometimes"*, and 8 said *"On a few occasions"*.

| | Response Score |
|---|---|
| Almost always | 0 |
| Often | 3 |
| Sometimes | 14 |
| On a few occasions | 8 |
| Rarely | 0 |

h) 'The organization encourages Health Care Workers to attend outside programs'; out of 25 respondents 2 said *"Sometimes"* and 23 said *"On a few occasions"*.

| | Response Score |
|---|---|
| Almost always | 0 |
| Often | 0 |
| Sometimes | 2 |
| On a few occasions | 23 |
| Rarely | 0 |

i) 'There is a separate budget for sponsoring employees outside the state to some listed institutes'; out of 25; 14 said."*Not enough*" and 11 said "*Some amount*".

| | Response Score |
|---|---|
| A very large amount | 0 |
| Enough | 0 |
| Not enough | 14 |
| Some amount | 11 |
| Very little | 0 |

j)  'Attention is paid to utilization of trained people by proper placement of trained people'; out of 25 respondents 16 said "*Sometimes*" and 9 said "*On a few occasions*".

| Response Score | |
|---|---|
| Almost always | 0 |
| Often | 0 |
| Sometimes | 16 |
| On a few occasions | 9 |
| Rarely | 0 |

Q: 8-  n=25.

The question, 'What criteria do you use for selecting Health Care Workers for nominating them for various trainings?', was to be answered by arranging the four provided options in order of priority (i to iv). The numbers of persons answering in a particular sequence were grouped. Thus, four groups emerged giving a particular sequence, of priorities. These groups, alongwith the priority wise choice sequence, have been detailed below in the table (where 'P' stands for priority):

| Response Score | | | | |
|---|---|---|---|---|
| | P1 | P2 | P3 | P4 |
| Need of the Department | 7 | 6 | 6 | 6 |
| Need and the interest of the trainee. | 6 | 6 | 6 | 7 |
| i + ii (together) | 6 | 9 | 7 | 3 |
| Giving opportunities to personnel who have never had in-service training. | 6 | 4 | 6 | 9 |

Q: 9-  n=25

In response to the question, 'What should be the maximum duration of training programmes?', for:

a)  'Multipurpose Health Workers'; of 25; 8 replied "*10 working days*" and 17 said "*15 working days*".

| Response Score | |
|---|---|
| 06 working days | 0 |
| 10 working days | 8 |
| 15 working days | 17 |
| ? days | 0 |

b)  'Assistant Surgeons'; out of 25 respondents 13 replied "*06 working days*" and 12 said "*10 working days*".

|  | Response Score |
|---|---|
| 06 working days | 13 |
| 10 working days | 12 |
| 15 working days | 0 |
| ? days | 0 |

c)  'Dy. CMO's, BMO's; DIO's DHO's'; 8 replied "*06 working days*", while 17 responded to the 4th choice ("*? Days* ") in which number of days is other than those mentioned in the questionnaire.

|  | Response Score |
|---|---|
| 06 working days | 8 |
| 10 working days | 0 |
| 15 working days | 0 |
| ? days | 17 |

d)  'Directors, Dy. Directors, Asstt Directors, CMO's, Med Supdt'; out of 25; 7 replied "*06 working days*" whereas 18 opted for choice 4 ("*? Days*") in which number of is other than those mentioned in the questionnaire.

|  | Response Score |
|---|---|
| 06 working days | 7 |
| 10 working days | 0 |
| 15 working days | 0 |
| ? days | 18 |

Q:10-  n=25

To the question, 'Has the government made adequate provisions to honour its legal commitment to finance and support the infrastructure (trainings) developed under this project?'; out of 25; 4 said, "*Yes*" and 21 said, "*I don't know*".

|  | Response Score |
|---|---|
| Yes | 4 |
| No | 0 |
| I don't know | 21 |

Q: 11- n=25

To the question 'Will the Government appoint the faculty before the end of project?'; out of 25 respondents 4 said, *"Yes"* and 21 said *"I don't know"*.

|  | Response Score |
|---|---|
| Yes | 4 |
| No | 0 |
| I don't know | 21 |

Q: 12- n=25

To the question, 'Are you satisfied with the available competencies of the trainers in our state?'; 15 said *"To a considerable extent"*, 9 said *"To some extent"* and 1 said *"To a very little extent"*.

|  | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 15 |
| To some extent | 9 |
| To a very little extent | 1 |
| Not at all | 0 |

Q: 13- n=25

In your opinion, as a part of HRD in our State Health services:

a)  'Is the career planning systematised for different categories of personnel?'; 5 said *"Sometimes"*, 7 said *"Rarely"* and 13 said *"Not at all"*.

|  | Response Score |
|---|---|
| Always | 0 |
| Usually | 0 |
| Sometimes | 5 |
| Rarely | 7 |
| Not at all | 13 |

b)  'Is Promotion linked with in-service training?'; out of 25 respondents 5 said *"Rarely"* and 20 said *"Not at all"*.

|  | Response Score |
|---|---|
| Always | 0 |
| Usually | 0 |
| Sometimes | 0 |
| Rarely | 5 |
| Not at all | 20 |

c)  'Is Performance review and performance counselling functioning?'; 6 said *"Rarely"* and 19 said *"Not at all"*.

| Response Score | |
|---|---|
| Always | 0 |
| Usually | 0 |
| Sometimes | 0 |
| Rarely | 6 |
| Not at all | 19 |

d)  'Is systematic Human Resource Information System functioning?'; 11 said *"Rarely"* whereas, 14 said *"Not at all"*.

| Response Score | |
|---|---|
| Always | 0 |
| Usually | 0 |
| Sometimes | 0 |
| Rarely | 11 |
| Not at all | 14 |

e)  'Is development of competency linked to rewards?'; 3 said *"Usually"*, 16 said *"Sometimes"*, 3 said *"Rarely"* while another 3 said *"Not at all"*.

| Response Score | |
|---|---|
| Always | 0 |
| Usually | 3 |
| Sometimes | 16 |
| Rarely | 3 |
| Not at all | 3 |

f)  'Is culture and system of rewarding effectiveness and excellence functioning?'; 17 said *"Sometimes"*, 6 said *"Rarely"* and 2 said *"Not at all"*.

| Response Score | |
|---|---|
| Always | 0 |
| Usually | 0 |
| Sometimes | 17 |
| Rarely | 6 |
| Not at all | 2 |

Q:14- n=25.

'In-service training in our state should be the responsibility of the Health Department, Department of Medical Education, an NGO or any other?'; 12 said "*Health Department*" and 13 gave the opinion that it should be the combined responsibility of the "*Health Department*", "*Medical Education Department*" and "*NGO*".

|  | Response Score |
| --- | --- |
| Health Department | 12 |
| Deptt. Of Medical Education | 0 |
| NGO | 0 |
| i + ii | 0 |
| i + ii + iii | 13 |

Q:15- n=25

'Do you recommend external peer review?'; out of 25 respondents 16 said "*Yes*" and 9 said "*No*".

|  | Response Score |
| --- | --- |
| Yes | 16 |
| No | 9 |

Q:16- n=25

'Should the annual increment be linked with some credit points/or number of in-service training hours a doctor receives every year?'; out of 25 respondents 7 said "*Yes*" and 18 said "*No*".

|  | Response Score |
| --- | --- |
| Yes | 7 |
| No | 18 |

Q:17- n=25.

They were asked to 'enumerate in order of priority (i to v) the five given choices as a means of achieving professional competence and to counter redundancy caused by growth of medical knowledge'; five choices given were:

a) 'Compulsory renewal of registration every 5 years'.

b) 'Through program of self assessment'

c) 'A monthly news letter'

d) 'Time based refresher course(s)'

e) 'Monthly on the job modular training at the place of work. On this day, all the routine activities such as outpatients, clinics etc, are cancelled in order that department modular training activities can take place. Each module contains one topic and the topic title is circulated a week before the session'.

The persons giving a common sequence were grouped. Thus five groups were formed. Groups' alongwith priority wise sequence of options is enumerated in the table (Where 'P' stands for priority):

| Response score | | | | | |
|---|---|---|---|---|---|
| | P1 | P2 | P3 | P4 | P5 |
| Compulsory renewal of registration every 5 years. | 15 | 0 | 3 | 1 | 6 |
| Through program of self assessment | 0 | 7 | 11 | 7 | 0 |
| A monthly news letter | 0 | 0 | 3 | 3 | 19 |
| Time based refresher course(s) | 2 | 16 | 7 | 0 | 0 |
| Monthly on the job modular training at the place of work. On this day, all the routine activities such as outpatients, clinics etc., are cancelled in order that department modular training activities can take place. Each module contains one topic and the topic title is circulated a week before the session. | 8 | 2 | 1 | 14 | 0 |

# 002

## *Background*

**Divisions**

| 01 | for Jammu |
|----|-----------|
| 02 | for Kashmir |

**Gender Code**

| 01 | for Male |
|----|----------|
| 02 | for Female |

**Age code**

| 01 | for 20+ to 30 years of age |
|----|----------------------------|
| 02 | for 30+ to 40 years of age |
| 03 | for 40+ to 50 years of age |
| 04 | for 50+ to 60 years age. |

**Educational Qualification**

| 01 | for Graduate |
|----|--------------|
| 02 | for Post Graduate |
| 03 | for Mch, DM or PhD |

**Designation**

| 01 | for faculty from Medical Colleges (GMC, Jammu/ Srinagar) |
|----|----------------------------------------------------------|
| 02 | for trainers form Deptt. of Health & Family Welfare |
| 03 | for faculty of Jammu/Kashmir University or IMPA |
| 04 | Retired personnel/consultants |
| 05 | for Others |

## Q002

**Q.1.** Have you received any formal **Education/Training** in teaching methods **(Training/ Education Technology)** ?

        1-for Yes, 2-for No ☐

**Q.2.** Is there any need for such training so as to improve your capabilities ?

        1-for Yes, 2-for No ☐

**Q.3.** In your opinion, do you think J&K Health Services is **learning'** **organization** ?

    i. To a very great extent    ☐
    ii. To a considerable extent ☐
       iii. To some extent  ☐
    iv. To a very little extent  ☐
         v. Not at all ☐

**(The learning organization is one that creates an environment where the behaviors and practices involved in continuous development are actively encouraged). (Mumford, 1995).**

**Q.4.** Are the aims of providing in-service trainings being made available in our state, **realistic and achievable ?**

    i. To a very great extent    ☐
    ii. To a considerable extent ☐
       iii. To some extent  ☐
    iv. To a very little extent  ☐
         v. Not at all ☐

**Q.5.** After recruitment, Medical Officers are placed in different positions in the health system, including that of the Medical Officers, P.H.C. However, in the absence of proper training during the **undergraduate and internship** period,

they find themselves unsuited for providing Primary Health Care.

**The same is true for paramedics.**

In your opinion, do the Health Care Workers have appropriate **pre-service** training as per the requirements of providing Primary Health Care in our state ?

**(a) Doctors;**

    i. To a very great extent    ☐
    ii. To a considerable extent ☐
       iii. To some extent  ☐
    iv. To a very little extent  ☐
         v. Not at all ☐

**(b) Paramedics;**

    i. To a very great extent    ☐
    ii. To a considerable extent ☐
       iii. To some extent  ☐
    iv. To a very little extent  ☐
         v. Not at all ☐

**Q.6.** In your opinion, are the aims and objectives of an in-service training course being provided, clearly stated to the guest faculty before the start of a training course?

    i. To a very great extent    ☐
    ii. To a considerable extent ☐
       iii. To some extent  ☐
    iv. To a very little extent  ☐
         v. Not at all ☐

**Q.7.** In your opinion, are these trainings **learner** centered?

    i. To a very great extent    ☐
    ii. To a considerable extent ☐
       iii. To some extent  ☐
    iv. To a very little extent  ☐
         v. Not at all ☐

Q.8. Do the in-service training/s offer sufficient opportunities to the trainees, to develop an understanding of their **present professional duties**?

      i. To a very great extent   ☐
      ii. To a considerable extent ☐
      iii. To some extent ☐
      iv. To a very little extent   ☐
      v. Not at all ☐

Q.9. Are the aims and objectives of a training course translated adequately into the **structure and content** of the training?

      i. To a very great extent   ☐
      ii. To a considerable extent ☐
      iii. To some extent ☐
      iv. To a very little extent   ☐
      v. Not at all ☐

Q.10. Is the manner of various teaching methods (eg. lectures, simulators*, case studies, using role plays to teach skill, demonstrating a skill, films and video cassettes and field visits etc.) relevant?

      i. To a very great extent   ☐
      ii. To a considerable extent ☐
      iii. To some extent ☐
      iv. To a very little extent   ☐
      v. Not at all ☐

*(**Simulators** are difficult to define, eg. an orange can be used as a simulator for trainees to practice giving injections).

Q.11. Does a good **climate** exist for successful trainings?

      i. To a very great extent   ☐
      ii. To a considerable extent ☐
      iii. To some extent ☐
      iv. To a very little extent   ☐
      v. Not at all ☐

Q.12. Do the training institutes have a good evaluation system, including **evaluation** by trainees?

      i. To a very great extent   ☐
      ii. To a considerable extent ☐
      iii. To some extent ☐
      iv. To a very little extent   ☐
      v. Not at all ☐

Q.13. Do the course Directors/Training Officers make use of the trainees' feed back for improving future trainings?

      i. To a very great extent   ☐
      ii. To a considerable extent ☐
      iii. To some extent ☐
      iv. To a very little extent   ☐
      v. Not at all ☐

Q.14. Are adequate **library** materials available to the staff and trainees?

      i. To a very great extent   ☐
      ii. To a considerable extent ☐
      iii. To some extent ☐
      iv. To a very little extent   ☐
      v. Not at all ☐

Q.15. Are adequate **background** materials/handouts provided to the trainees?

      i. To a very great extent   ☐
      ii. To a considerable extent ☐
      iii. To some extent ☐
      iv. To a very little extent   ☐
      v. Not at all ☐

Q.16. Kindly indicate from the below mentioned **options**, the method/s being practised at the training institute/s, as a means of good assessment techniques for a training course;

    (a) Pre-requisite level test  ☐
    (b) Pre-testing     ☐
    (c) Interval testing  ☐
    (d) Final testing   ☐
    (e) Follow-up testing  ☐

**( 01 for Yes, 02 for No in the appropriate box/boxes)**

Q.17. Is the honorarium paid to you adequate?

    1-for Yes, 2-for No, 3-NA  ☐

Q.18. Is there any provision for **rewarding** effective trainers?

    i. To a very great extent  ☐
    ii. To a considerable extent ☐
    iii. To some extent ☐
    iv. To a very little extent  ☐
    v. Not at all ☐

Q.19. Did the **INDIA POPULATION PROJECT** have a satisfactory **Trainers'-Development Program?**

    i. To a very great extent  ☐
    ii. To a considerable extent ☐
    iii. To some extent ☐
    iv. To a very little extent  ☐
    v. Not at all ☐

Q.20. How many trainings **(Trainer Development Programmes)** did you receive as a trainer/guest faculty during last 05 years?  ☐
0 for Nil, 1 for 1, 2 for2, 3 for 3, 4 for 4, 5 for 5, 6 for 6, 7 for 7 or more

Q.21. Were you **benefited** by the training/s you received?
    i. To a very great extent  ☐

    ii. To a considerable extent ☐
    iii. To some extent  ☐
    iv. To a very little extent   ☐
    v. Not at all ☐
    vi. Not applicable ☐

Q.22. **Kindly enumerate in order of priority (i to v) the below stated options as a means of achieving of professional competence and** to counter **redundancy** caused by the rapid growth of medical knowledge:

(a) **Compulsory renewal** of medical registration every five years, subject to achieving minimum credit points in **Continuing Medical Education** be made compulsory.   ☐

(b) Through program of self assessment, **CHECK** i.e. (Continuous Home Evaluation of Clinical Knowledge).   ☐

(c) A monthly **news letter** to be published by the Department of Health Services/Medical College/s for communicating contemporary medical advances.   ☐

(d) Time based **refresher** courses in medical institutes.   ☐

(e) Monthly **on-the-job modular** training at the place of work. On this day, all the routine activities such as outpatients clinics, etc. are cancelled in order that department modular training activities can take place. Each module contains one topic title and the topic title is circulated a week before the session.   ☐

Q.23. In your opinion, what should be the **maximum duration** of a training program for:

(a) Multipurpose Health Workers?

    i. 06 working days  ☐
    ii. 10 working days  ☐
    iii. 15 working days☐
    iv. ? days   ☐

(b) Assistant Surgeons?

    i. 06 working days  ☐
    ii. 10 working days  ☐
    iii. 15 working days☐
    iv. ? days   ☐

(c) Dy. CMOs, BMOs, DIOs, DHOs?

    i. 06 working days  ☐
    ii. 10 working days  ☐
    iii. 15 working days☐
    iv. ? days   ☐

(d) Directors, Dy. Directors. Asstt. Directors, Medical Suptd., CMOs, etc.?

    i. 06 working days  ☐
    ii. 10 working days  ☐
    iii. 15 working days☐
    iv. ? days   ☐

Q.24. Can you suggest specific proposals to improve in-service trainings in future? **(Please elaborate).**

# QUEST 002

## Background:

The Questionnaire 002 was administered to 44 persons working in the two divisions viz. (i) Jammu and (ii) Kashmir. Of the 44, 39 responded.

## Age code

The age-wise break-up is; 1 in the age group "*30+ to 40*"; 19 in the "*40+ to 50 yrs*" group whereas 19 were "*50+ to 60 yrs*" of age

|  | Response Score |
|---|---|
| 20+ to 30 years of age | 0 |
| 30+ to 40 years of age | 1 |
| 40+ to 50 years of age | 19 |
| 50+ to 60 years age. | 19 |

## Gender Code

Gender-wise, 27 were "*Males*" whereas 12 were "*Females*".

|  | Response Score |
|---|---|
| Male | 27 |
| Female | 12 |

## Educational Qualification

Out of 39; 4 were "*Graduates*", 28 were *Postgraduates*" while 7 were either "*DM or MCH or PhD.*"

|  | Response Score |
|---|---|
| Graduate | 4 |
| Post Graduate | 28 |
| Mch, DM or PhD | 7 |

## Designation

Out of 39; 16 belonged to "*Faculty of Medical Colleges*", 8 were from "*Health Services*", 9 were from the "*Faculty of the University/IMPA*", 4 were "*Retired personnel/consultants*" and 2 belonged to the category "*Others*".

|  | Response Score |
|---|---|
| faculty from Medical Colleges (GMC, Jammu/ Srinagar) | 16 |
| Trainers form Deptt. of Health & Family Welfare | 8 |
| faculty of Jammu/Kashmir University or IMPA | 9 |
| Retired personnel/consultants | 4 |
| Others | 2 |

Q : 1 - n=39,

To the question, 'Have you received training or any formal education in teaching methods?; 21 said, *"Yes"* whereas 18 said *"No"*.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| Yes | 21 | 14 | 7 |
| No | 18 | 9 | 9 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =1.112772, the difference is statistically not significant at 5% level **(p>0.05)**.

Q : 2 - n=39

To the question, 'Is there any need for such trainings?'; 26 said *"Yes"* and 13 said *"No"*. Majority (69%) of those who were not earlier trained felt that such trainings are necessary whereas from those who were trained only 8(50%) felt these trainings were necessary.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| Yes | 26 | 18 | 8 |
| No | 13 | 5 | 8 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir,

$\chi^2$ =3.391304, the difference is statistically not significant at 5% level **(p>0.05)**.

Q : 3- n=39

To the question, 'Whether J&K Health Services is a learning Organization?'; 7 replied *"To some extent"*, 15 said *"To a very little extent"* and 17 replied *"Not at all"*.

On bifurcating this answer between those from Jammu and those from Kashmir, there was not significant variation.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 7 | 3 | 4 |
| To a very little extent | 15 | 9 | 6 |
| Not at all | 17 | 11 | 6 |

**CHI-square** test carried out between the responses of thoseTrainers from Jammu/ Kashmir

$\chi^2$ =0.988893, the difference is statistically not significant at 5% level **(p>0.05)**.

Q : 1 - n=39,

To the question, 'Have you received training or any formal education in teaching methods?; 21 said, *"Yes"* whereas 18 said *"No"*.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| Yes | 21 | 14 | 7 |
| No | 18 | 9 | 9 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/Kashmir

$\chi^2$ =1.112772, the difference is statistically not significant at 5% level **(p>0.05)**.

Q : 2 - n=39

To the question, 'Is there any need for such trainings?'; 26 said *"Yes"* and 13 said *"No"*. Majority (69%) of those who were not earlier trained felt that such trainings are necessary whereas from those who were trained only 8(50%) felt these trainings were necessary.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| Yes | 26 | 18 | 8 |
| No | 13 | 5 | 8 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/Kashmir,

$\chi^2$ =3.391304, the difference is statistically not significant at 5% level **(p>0.05)**.

Q : 3- n=39

To the question, 'Whether J&K Health Services is a learning Organization?'; 7 replied *"To some extent"'*, 15 said *"To a very little extent"'* and 17 replied *"Not at all"*.

On bifurcating this answer between those from Jammu and those from Kashmir, there was not significant variation.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 7 | 3 | 4 |
| To a very little extent | 15 | 9 | 6 |
| Not at all | 17 | 11 | 6 |

**CHI-square** test carried out between the responses of thoseTrainers from Jammu/Kashmir

$\chi^2$ =0.988893, the difference is statistically not significant at 5% level **(p>0.05)**.

Q:4 - n=39

To the question, 'Are the aims of providing inservice trainings being made available in our state; realistic and achievable?', 19 said *"To some extent""* whereas 20 said *"To a very little extent"".*

On comparing the answers between the two groups no significant variation was found when T-Test was applied.

| | J&K | Jammu | Kashmir |
|---|---|---|---|
| Response Score | | | |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 19 | 11 | 8 |
| To a very little extent | 20 | 12 | 8 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =0.017849, the difference is statistically not significant at 5% level **(p>0.05).**

Q:5- n=39

To the question, "Do the health care workers have appropriate pre-service training as per the requirements of providing Primary Health Care in our state";

a) **'For Doctors':-** 7 replied *"To a considerable extent"*, 29 said *"To some extent"* and 3 said *"To a very little extent".*

| | J&K | Jammu | Kashmir |
|---|---|---|---|
| Response Score | | | |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 7 | 3 | 4 |
| To some extent | 29 | 18 | 11 |
| To a very little extent | 3 | 2 | 1 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =0.939709, the difference is statistically not significant at 5% level **(p>0.05).**

b)     'For Paramedics': 11 replied *"To a considerable extent"*, 19 said *"To some extent"* and 9 said *"To a very little extent"*. On comparing the answers between two groups there was no significant variation when T-test was applied.

| Response Score | J&K | Jammu | Kashmir |
|---|---|---|---|
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 11 | 5 | 6 |
| To some extent | 19 | 12 | 7 |
| To a very little extent | 9 | 6 | 3 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =1.188579, the difference is statistically not significant at 5% level **(p>0.05)**.

Q:6-    n=39

To the question, 'Are the aims and objectives of the in-service training being stated clearly to the guest faculty before the start of training?'; 2 said *"To a very great extent"*, 14 said *"To a considerable extent"* and 23 said *"To some extent"*.

There was no significant variation in the opinion of two groups.

| Response Score | J&K | Jammu | Kashmir |
|---|---|---|---|
| To a very great extent | 2 | 2 | 0 |
| To a considerable extent | 14 | 8 | 6 |
| To some extent | 23 | 13 | 10 |
| To a very little extent | 0 | 0 | 0 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =1.467898, the difference is statistically not significant at 5% level **(p>0.05)**.

Q:7-    n=39

To the question, 'Are these trainings learner centred?'; 12 replied *"To a considerable extent"*, 18 said *"To some extent"*, and 9 said *"To a very little extent"*.

There was no significant variation in the opinion of two groups.

| Response Score | J&K | Jammu | Kashmir |
|---|---|---|---|
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 12 | 7 | 5 |
| To some extent | 18 | 13 | 5 |
| To a very little extent | 9 | 3 | 6 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =3.753397, the difference is statistically not significant at 5% level **(p>0.05)**.

Q:8- n=39

To the question, 'Do the In-service trainings offer sufficient opportunities to the trainees to develop an understanding of their present professional duties?; 16 said *"To a very great extent"*, 11 said *"To a considerable extent"* and 12 said *"To some extent"*.

| Response Score | J&K | Jammu | Kashmir |
|---|---|---|---|
| To a very great extent | 16 | 6 | 10 |
| To a considerable extent | 11 | 5 | 6 |
| To some extent | 12 | 12 | 0 |
| To a very little extent | 0 | 0 | 0 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =12.22845, the difference is statistically significant at 5% level **(p<0.05).**

Q:9- n=39

To the question, 'Are the aims and objectives of training courses translated adequately into the structure and content of training?'; 11 replied *"To a considerable extent"*, 28 replied *"To some extent"*.

On comparing the view of the two groups, no significant variation was seen.

| Response Score | J&K | Jammu | Kashmir |
|---|---|---|---|
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 11 | 6 | 5 |
| To some extent | 28 | 17 | 11 |
| To a very little extent | 0 | 0 | 0 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =0.124215, the difference is statistically not significant at 5% level **(p>0.05).**

Q:10- n=39

To the question, 'Is the manner of various teaching methods relevant?', 18 replied "To a very great extent", 19 said "To a considerable extent" whereas 2 said "To some extent".

| | Response Score | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 18 | 10 | 8 |
| To a considerable extent | 19 | 11 | 8 |
| To some extent | 2 | 2 | 0 |
| To a very little extent | 0 | 0 | 0 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/Kashmir

$\chi^2$ =1.487414, the difference is statistically not significant at 5% level **(p>0.05)**.

Q:11- n=39

To the question, 'Does a suitable climate exist for successful trainings?'; 8 said "To a considerable extent", 31 said "To some extent".

| | Response Score | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 8 | 2 | 6 |
| To some extent | 31 | 21 | 10 |
| To a very little extent | 0 | 0 | 0 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/Kashmir

$\chi^2$ =4.801499, the difference is statistically significant at 5% level **(p<0.05)**.

Q:12- n=39

To the question, 'Do the training institutes have a good evaluation system including evaluation by trainers?', 16 said "To a considerable extent", another 16 said "To some extent" and 7 said "To a very little extent".

| | Response Score | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 16 | 9 | 7 |
| To some extent | 16 | 7 | 9 |
| To a very little extent | 7 | 7 | 0 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/Kashmir

$\chi^2$ =6.451427, the difference is statistically significant at 5% level **(p<0.05)**.

Q:13- n=39

To the question, 'Do the course directors/training officers make use of the trainees feedback for improving future trainings?'; 9 said *"To a great extent"*, 15 replied *"To a considerable extent"* and another 15 replied *"To some extent"*.

| | Response Score | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 9 | 0 | 9 |
| To a considerable extent | 15 | 8 | 7 |
| To some extent | 15 | 15 | 0 |
| To a very little extent | 0 | 0 | 0 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =17.41572, the difference is statistically significant at 5% level **(p<0.05)**.

Q:14 - n=39

To the question, 'Are adequate library materials available to the staff and trainees?'; 2 said *"To some extent"*, 26 said *"To a very little extent"* whereas 11 replied *"Not at all"*.

| | Response Score | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 2 | 2 | 0 |
| To a very little extent | 26 | 21 | 5 |
| Not at all | 11 | 0 | 11 |

**CHI-square** test carried out between the responses of Trainers from Jammu/ Kashmir

$\chi^2$ =22.30842, the difference is statistically significant at 5% level **(p<0.05)**.

Q:15- n=39

To the question, 'Are adequate background materials/handouts provided to the trainees?'; 3 said *"To a great extent"*, 16 said *"To a considerable extent"*, another 16 said *"To some extent"*, whereas 4 said *"To a very little extent"*.

| | Response Score | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 3 | 3 | 0 |
| To a considerable extent | 16 | 12 | 4 |
| To some extent | 16 | 8 | 8 |
| To a very little extent | 4 | 0 | 4 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =10.06793, the difference is statistically significant at 5% level (p<0.05).

Q:13- n=39

To the question, 'Do the course directors/training officers make use of the trainees feedback for improving future trainings?'; 9 said *"To a great extent"*, 15 replied *"To a considerable extent"* and another 15 replied *"To some extent"*.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 9 | 0 | 9 |
| To a considerable extent | 15 | 8 | 7 |
| To some extent | 15 | 15 | 0 |
| To a very little extent | 0 | 0 | 0 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =17.41572, the difference is statistically significant at 5% level **(p<0.05)**.

Q:14 - n=39

To the question, 'Are adequate library materials available to the staff and trainees?'; 2 said *"To some extent"*, 26 said *"To a very little extent"* whereas 11 replied *"Not at all"*.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 2 | 2 | 0 |
| To a very little extent | 26 | 21 | 5 |
| Not at all | 11 | 0 | 11 |

**CHI-square** test carried out between the responses of Trainers from Jammu/ Kashmir

$\chi^2$ =22.30842, the difference is statistically significant at 5% level **(p<0.05)**.

Q:15- n=39

To the question, 'Are adequate background materials/handouts provided to the trainees?'; 3 said *"To a great extent"*, 16 said *"To a considerable extent"*, another 16 said *"To some extent"*, whereas 4 said *"To a very little extent"*.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 3 | 3 | 0 |
| To a considerable extent | 16 | 12 | 4 |
| To some extent | 16 | 8 | 8 |
| To a very little extent | 4 | 0 | 4 |
| Not at all | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =10.06793, the difference is statistically significant at 5% level (p<0.05).

Q:16- n=39

To the question, 'Methods being practised at the training institutes as a means of good assessment for a training course?'; 4 said *"Pre-requisite level test"* ; 37 said *"Pre-testing"*; 6- said *"Interval testing"*; 37- said *"Final testing"* and 4-said *"Follow-up testing"*.

| | Response Score | | | | | |
|---|---|---|---|---|---|---|
| | J&K | | Jammu | | Kashmir | |
| | Yes | No | Yes | No | Yes | No |
| Pre-requisite level test | 4 | 35 | 4 | 19 | 0 | 16 |
| Pre-testing | 37 | 2 | 21 | 0 | 14 | 2 |
| Interval testing | 6 | 33 | 6 | 17 | 0 | 16 |
| Final testing | 37 | 2 | 23 | 0 | 14 | 2 |
| Follow-up testing | 4 | 35 | 4 | 19 | 0 | 16 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

For Yes:

$\chi^2$ =6.342342, the difference is statistically not significant at 5% level **(p>0.05)**.

For No:

$\chi^2$ =15.22747, the difference is statistically significant at 5% level **(p<0.05)**.

Q:17- n=39

To the question, 'Is the honorarium paid to you adequate?'; 25 said *"No"* and 14 said *"NA"* (Not Applicable).

| | Response Score | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| Yes | 0 | 0 | 0 |
| No | 25 | 14 | 11 |
| Not Applicable | 14 | 9 | 5 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =0.254651, the difference is statistically not significant at 5% level **(p>0.05)**.

Q:18- n=39

To the question, 'Is there any provision for rewarding effective trainers?'; 16 replied *"To a very little extent"* and 23 said *"Not at all"*.

| | Response Score | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 0 | 0 | 0 |
| To a very little extent | 16 | 7 | 9 |
| Not at all | 23 | 16 | 7 |

**CHI-square** test carried out between the responses of Trainers from Jammu/ Kashmir

$\chi^2$ =1.970227, the difference is statistically not significant at 5% level **(p>0.05)**.

Q:19- n=39

To the question, 'Did India Population Project-VII, have satisfactory trainers-development programs?'; 9 replied *"To a considerable extent"*, 17 said *"To some extent"*, 4 said *"To a very little extent"* and 9 said *"Not at all"*.

| | Response Score | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 9 | 9 | 0 |
| To some extent | 17 | 14 | 3 |
| To a very little extent | 4 | 0 | 4 |
| Not at all | 9 | 0 | 9 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =21.15888, the difference is statistically significant at 5% level **(p<0.05)**.

Q:20- n=39, X=1.025641, s=1.901066.

To the question, 'How many trainings (Trainers development programmes) did you receive as trainer/guest faculty during last 5 years?'; 23 received *"No training"*, 6 received *"once"*, 3 received *"twice"*, 4 received *"thrice"*, 1 received *"four times"*, 2 received *"six times"*.

| | Response Score | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| Nil | 23 | 13 | 10 |
| One | 6 | 2 | 4 |
| Two | 3 | 3 | 0 |
| Three | 4 | 3 | 1 |
| Four | 1 | 0 | 1 |
| Five | 0 | 0 | 0 |
| Six | 2 | 2 | 0 |
| Seven | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =7.027971, the difference is statistically not significant at 5% level **(p>0.05)**.

Q:21- n=39

To the question, 'Were you benefited by the trainings you received?'; 4 said *"to a considerable extent"*, 8 *"To some extent"*, 4 *"To a very little extent"*, whereas 23 replied *"Not Applicable"*.

|  | Response Score | | |
|---|---|---|---|
|  | J&K | Jammu | Kashmir |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 4 | 4 | 0 |
| To some extent | 8 | 7 | 1 |
| To a very little extent | 4 | 0 | 4 |
| Not at all | 0 | 0 | 0 |
| Not Applicable | 23 | 12 | 11 |

**CHI-square** test carried out between the responses of those Trainers of Jammu/ Kashmir

$\chi^2$ =11.22317, the difference is statistically significant at 5% level **(p<0.05)**.

Q:22- n=39

The persons involved were asked to 'enumerate in order of priority (i to v) the options as a means of achieving of professional competence and to counter redundancy caused by the rapid growth of medical knowledge'; they were clubbed into five groups, each group following a particular priority sequence. Number in each group has been shown in the table below alongwith the priority sequence.

a     'Compulsory renewal of medical registration every five years, subject to achieving minimum credit points in continuing medical Education be made compulsory'.

b     'Through program of self-assessment, CHECK i.e., (Continuous Home Evaluation of Clinical Knowledge)'.

c     'A monthly news letter to be published by the Department of Health Services/Medical College/s for communication contemporary medical advances'.

d     'Time based refresher courses in medical Institutes'.

e     'Monthly on-the-job modular training at the place of work. On this day, all the routine activities such as outpatient's clinics, etc. are cancelled in order that department modular training activities can take place. Each module contains one topic title and the topic title is circulated a week before the session.'

**comb –J&K**

|  | Response Score | | | | |
|---|---|---|---|---|---|
|  | P1st | P2nd | P3rd | P4th | P5th |
| a | 20, (51.28%) | 0, (0%) | 0, (0%) | 2, (5.13%) | 17, (43.59%) |
| b | 0, (0%) | 0, (0%) | 19, (48.72%) | 19, (48.72%) | 1, (2.56%) |
| c | 0, (0%) | 0, (0%) | 0, (0%) | 18, (46.15%) | 21, (53.85%) |
| d | 2, (5.13%) | 37, (94.87%) | 0, (0%) | 0, (0%) | 0, (0%) |
| e | 17, (43.59%) | 2, (5.13%) | 20, (51.28%) | 0, (0%) | 0, (0%) |

**DIV-1, (Jammu)**

| | P1st | P2nd | P3rd | P4th | P5th |
|---|---|---|---|---|---|
| | | | Response Score | | |
| a | 12, (52.17%) | 0, (0%) | 0, (0%) | 1, (4.35%) | 10, (43.48%) |
| b | 0, (0%) | 0, (0%) | 11, (47.83%) | 11, (47.83%) | 1, (4.35%) |
| c | 0, (0%) | 0, (0%) | 0, (0%) | 11, (47.83%) | 12, (52.17%) |
| d | 1, (4.35%) | 22, (95.65%) | 0, (0%) | 0, (0%) | 0, (0%) |
| e | 10, (43.48%) | 1, (4.35%) | 12, (52.17%) | 0, (0%) | 0, (0%) |

**DIV-2, (Kashmir)**

| | P1st | P2nd | P3rd | P4th | P5th |
|---|---|---|---|---|---|
| | | | Response Score | | |
| a | 8, (50%) | 0, (0%) | 0, (0%) | 1, (6.25%) | 7, (43.75%) |
| b | 0, (0%) | 0, (0%) | 8, (50%) | 8, (50%) | 0, (0%) |
| c | 0, (0%) | 0, (0%) | 0, (0%) | 7, (43.75%) | 9, (56.25%) |
| d | 1, (6.25%) | 15, (93.75%) | 0, (0%) | 0, (0%) | 0, (0%) |
| e | 7, (43.75%) | 1, (6.25%) | 8, (50%) | 0, (0%) | 0, (0%) |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir for:

a   "Compulsory renewal of medical registration every five years, subject to achieving minimum credit points in Continuing Medical Education be made compulsory", $\chi^2=0.075432$, the difference is statistically not significant at 5% level **(p>0.05)**.

b   "Through program of self-assessment, CHECK i.e., (Continuous Home Evaluation of Clinical Knowledge)", $\chi^2 =0.713959$, the difference is statistically not significant at 5% level **(p>0.05)**.

c   "A monthly newsletter to be published by the Department of Health Services/Medical College/s for communicating contemporary medical advances", $\chi^2 =0.063082$, the difference is statistically not significant at 5% level **(p>0.05)**.

d   "Time based refresher courses in Medical Institutes", $\chi^2 =0.070175$, the difference is statistically not significant at 5% level **(p>0.05)**.

e   "Monthly on-the-job modular training at the place of work. On this day, all the routine activities such as outpatient's clinics, etc. are cancelled in order that department modular training activities can take place. Each module contains one topic title and the topic title is circulated a week before the session", $\chi^2 =0.075432$, the difference is statistically not significant at 5% level **(p>0.05)**.

Q:23 - n=39

To the opinion sought regarding 'What should be the maximum duration of training programmes?';

a)     "For multipurpose workers":- 22 replied *"10 working days"*, 17 said *"15 working days"*.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| 06 working days | 0 | 0 | 0 |
| 10 working days | 22 | 13 | 9 |
| 15 working days | 17 | 10 | 7 |
| ? days | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers from Jammu/ Kashmir

$\chi^2$ =0.000283, the difference is statistically not significant at 5% level **(p>0.05)**.

b)     "For Assistant Surgeons":- 20 said "*06 working days*" and 19 said "*10 working days*".

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| 06 working days | 20 | 12 | 8 |
| 10 working days | 19 | 11 | 8 |
| 15 working days | 0 | 0 | 0 |
| ? days | 0 | 0 | 0 |

**CHI-square** test carried out between the responses of those Trainers of Jammu / Kashmir

$\chi^2$ =0.017849, the difference is statistically not significant at 5% level **(p>0.05)**.

c)     "For Dy. CMO's; BMO's; DIO's":- 17 said "*06 working days*" whereas 22 said, "*?days*" duration other than mentioned in the questionnaire.

| Response Score | | | |
|---|---|---|---|
| | J&K | Jammu | Kashmir |
| 06 working days | 17 | 10 | 7 |
| 10 working days | 0 | 0 | 0 |
| 15 working days | 0 | 0 | 0 |
| ? days | 22 | 13 | 9 |

**CHI-square** test carried out between the responses of those Trainers of Jammu/ Kashmir

$\chi^2$ =0.000283, the difference is statistically not significant at 5% level **(p>0.05)**.

d) "For Directors, Dy Directors, Asstt Directors, CMO's, Med Supdt."; 15 said "*06 working days*" whereas 10 preferred "*? days*" duration other than mentioned in the questionnaire.

|  | Response Score | | |
| --- | --- | --- | --- |
|  | J&K | Jammu | Kashmir |
| 06 working days | 15 | 9 | 6 |
| 10 working days | 0 | 0 | 0 |
| 15 working days | 0 | 0 | 0 |
| ? days | 24 | 14 | 10 |

**CHI-square** test carried out between the responses of those Trainers of Jammu/ Kashmir

$\chi^2$ =0.010598, the difference is statistically not significant at 5% level **(p>0.05)**.

Q: 24 To the question "Can you suggest specific proposals to improve in-service trainings in future?"

Mentioned below are the responses received that are arranged in descending sequence from the highest preference to the lowest preference?

i. Committed people trained in Training/Education technology should only be posted to these institutes and not those who are given this task in addition to their own job function.

ii. Monthly training program of the institute should be discussed/approved/ and monitored by Training Advisory Committee.

iii. These institutes should be linked to the other National / International institutes.

iv. Views of the trainees should be forwarded to Training Advisory Committee for further discussion and necessary action.

v. Less of theory and more of practical/ exercises/ case studies/ demonstrations/ re-demonstrations and role-plays should be used.

vi. Teams should be trained together instead of training them separately/ individually (doctors and para-medicals should be trained together instead of doctors being trained individually and others being trained separately i.e., some of the total trainings should be training in teams as they work in real work situation).

vii. Some system should be developed to find out that ever-changing need for trainees so that the trainings' should be always remain need based.

viii. Trainings in self directed learning should be provided. (How to learn i.e. learning how to learn).

ix. Training Institutes should be autonomous but monitored regularly.

x. Trainers should be provided incentives appropriate to their inputs (performances).

## 003

### *Background*

**Age code**

| 01 | for 20 to 30 years of age |
|----|---------------------------|
| 02 | for 30+ to 40 years of age |
| 03 | for 40+ to 50 years of age |
| 04 | for 50+ to 60 years age. |

**Gender Code**

| 01 | for Male |
|----|----------|
| 02 | for Female |

**Educational Qualification**

| 01 | for Graduate |
|----|--------------|
| 02 | for Post Graduate |

**Designation**

| 01 | for Assistant Surgeon |
|----|----------------------|
| 02 | for BMO |
| 03 | for Specialist |
| 04 | for Dental Surgeon |

## 003

Q.1. How many in-service training courses have you attended in last two years ? ☐
i.     0 for Nil
ii.    1 for having training once
iii.   2 for having training twice
iv.    3 for having training thrice
v.     4 for having training four times
vi.    5 for having training five times or more.

Q.2. Objective/s of attending the training courses:
My objective/s of attending the training course/s were to:
(01 for Yes, 02 for N.A, 03 for No)
a.    Update my knowledge        ☐
b.    Exchange ideas with experts  ☐
c.    Gain from others experience  ☐
d.    Interact socially           ☐
e.    Just like that

Not applicable (if not attended any training
**Tick the appropriate box/s**

Q.3. Are adequate background materials/handouts provided to the trainees in the training course/s you attended ? (for those who did not receive training - N.A.)
i.     1. To a very great extent      ☐
ii.    2. To a considerable extent    ☐
iii.   3. To some extent              ☐
iv.    4. To a very little extent     ☐
v.     5. Not at all                  ☐
vi.    6. N.A.                        ☐

Q.4. Is the TA/DA paid to you adequate?
i.     1. Yes        ☐
ii.    2. No         ☐
iii.   3. N.A.       ☐

Q.5. In your opinion, is the curriculum learner centered?
i.     1. To a very great extent      ☐
ii.    2. To a considerable extent    ☐
iii.   3. To some extent              ☐
iv.    4. To a very little extent     ☐
v.     5. Not at all                  ☐
vi.    6. N.A.                        ☐

Q.6. In your opinion, the training methods used by the trainers for achieving the objectives were:
i.     1. Appropriate     ☐
ii.    2. In-appropriate  ☐
iii.   3. N.A.            ☐

Q.7. In your opinion, should in-service training be a regular feature after joining service?
i.     1. Yes          ☐
ii.    2. No           ☐
iii.   3. Don't know   ☐

Q.8. Should this in-service training be voluntary or mandatory?
i.     1 for voluntary    ☐
ii.    2 for mandatory    ☐

Q.9. In-service training is seen as a wider strategy of increasing the competency of health professionals.

i.    1. To a very great extent    ☐
ii.    2. To a considerable extent    ☐
iii.    3. To some extent    ☐
iv.    4. To a very little extent    ☐
v.    5. Not at all    ☐

Q.10. In-service trainings are taken seriously by health professionals working for the J&K Health Services because development of their professional competency matters.

i.    1. To a very great extent    ☐
ii.    2. To a considerable extent    ☐
iii.    3. To some extent    ☐
iv.    4. To a very little extent    ☐
v.    5. Not at all    ☐

Q.11. Providing in-service trainings in our state should be the responsibility of the Health Department, Department of Medical Education, a NGO or any other your choice:

i.    1 for Health Department    ☐
ii.    2 for Department of Medical Education    ☐
iii.    3 for NGO    ☐
iv.    4 for i+ii and    ☐
v.    5 for i + ii + iii    ☐

Q.12. Do you recommend **"External Peer Review"? (where a team goes to assess the individual performance of doctors at their place of work)?**

i.    1 for yes    ☐
ii.    2 for No    ☐

Q.13. Should the annual increment be linked with some credit points for continuing medical education or in-service training hours a doctor receives every year ?

i.    1 for Yes    ☐
ii.    2 for No    ☐

Q.14. Can you suggest some ways to make these in-service trainings more meaningful?

Q.15. The learning* organization is one that creates an environment where the behaviors and practices involved in continuous development are encouraged. **(Mumford, 1995)**. In your opinion, do you think that J&K Health Services is a learning* organization?

i.    1. To a very great extent    ☐
ii.    2. To a considerable extent    ☐
iii.    3. To some extent    ☐
iv.    4. To a very little extent    ☐
v.    5. Not at all    ☐

Q.16. How do you keep yourself professionally **up-to-date:** Kindly enumerate in order of priority (i to v) the below stated options

a.    1. Discussion with your colleagues and peers    ☐

b.    2. Seeking opinions in order to solve a problem that emerged during the management of a current patient    ☐

c.    3. Regular scanning of journals, texts (literature)    ☐

d.    4. Completing a self-assessment
      program or quiz   .          ☐

e.    5. Others                    ☐


## Q.17. **Kindly enumerate in order of priority (i to v) the below stated options as a means of achieving of professional competence and** to counter redundancy caused by the rapid growth of medical knowledge:

a.    Compulsory renewal of medical
      registration every five years,
      subject to achieving minimum
      credit points in Continuing Medical
      Education.                   ☐

b.    Through program of self
      assessment, **CHECK** i.e.

(Continuous Home Evaluation of
Clinical Knowledge).              ☐

c.    3. A monthly news letter to be
      published by the Department of
      Health Services/Medical College
      for communicating contemporary
      medical advances.           ☐

d.    4. Time based refresher courses in
      medical training institutes.  ☐

e.    5. Monthly on-the job modular
      training at the place of work. On
      this day, all the routine activities
      such as outpatients clinics etc. are
      cancelled in order that department
      modular training activities can take
      place. Each module contains one
      topic and the topic title is circulated
      a week before the session.    ☐

# QUEST/003

**Background:** The Questionnaire 003 was administered to 300 doctors working in 16 blocks of 08 selected districts of the state and 283 responded. The response rate was very good (94%).

## District:

The district wise break-up of the doctors is as follows: 42 from Jammu district, 56 from Kathua, 25 from Poonch, 37 from Rajouri, 34 from Baramulla, 39 from Anantnag, 32 from Badgam and 18 from Leh district, respectively.

| Response score | |
|---|---|
| 1 for Jammu = 42 | 1 for Ramgarh |
| | 2 for Bishnah |
| 2 for Kathua = 56 | 3 for Hiranagar |
| | 4 for Bilawar |
| 3 for Poonch = 25 | 5 for Mandi |
| | 6 for Surankote |
| 4 for Rajouri = 37 | 7 for Sunderbani |
| | 8 for Darhal |
| 5 for Baramulla = 34 | 9 for Tangmarg |
| | 10 for Pattan |
| 6 for Anantnag = 39 | 11 for Bijbehara |
| | 12 for Qazigund |
| 7 for Budgam = 32 | 13 for Chadura |
| | 14 for Budgam |
| 8 for Leh = 18 | 15 for Leh |
| | 16 for Khalsi |

## Trained/Not Trained

Out of the total of 283, 120 doctors were trained in different courses arranged by India Population Project while 163 doctors had not received any in-service training under the Project.

| Response score | |
|---|---|
| Trained | 120 |
| Not Trained | 163 |

**Age Group (Code)**

n= 283, $\bar{x}$ = 36.96, $s$=37.87

The age wise break-up of the doctors who responded is as under: 60 were "*20+ to 30 years of age*", 129 belonged to age group "*30+ to 40 years of age*", 70 were between "*40+ to 50 years of age*" and 24 were above "*50+ to 60 years of age*".

|  | Combined | Trained | Not Trained |
|---|---|---|---|
| 20+ to30 years of age | 60 | 21 | 39 |
| 30+ to 40 years of age | 129 | 51 | 78 |
| 40+ to 50 years of age | 70 | 38 | 32 |
| 50+ to 60 years of age | 24 | 10 | 14 |

(Response Score heading spans Combined, Trained, Not Trained)

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ = **5.833217**, the difference is statistically not significant at 5% level **(p>0.05)**.

**Gender (Code)**

n= 283,

Of the 283 doctors who formed this study, 222 were "*Male* "and 61 "*Female*"

|  | Combined | Trained | Not Trained |
|---|---|---|---|
| Male | 222 | 94 | 128 |
| Female | 61 | 26 | 35 |

(Response Score heading spans Combined, Trained, Not Trained)

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ = **0.001543**, the difference is statistically not significant at 5% level **(p>0.05)**.

**Highest Academic Degree (Code)**

n= 283,

Of the 283 total, 224 were "*Graduates*" and 59 "*Post-graduates*".

|  | Combined | Trained | Not Trained |
|---|---|---|---|
| Graduates | 224 | 105 | 119 |
| Post Graduate | 59 | 15 | 44 |

(Response Score heading spans Combined, Trained, Not Trained)

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =**8.798805**, the difference is statistically not significant at 5% level **(p>0.05)**.

**Age Group (Code)**

n= 283, $\bar{x}$ = 36.96, $s$=37.87

The age wise break-up of the doctors who responded is as under: 60 were "*20+ to 30 years of age*", 129 belonged to age group "*30+ to 40 years of age*", 70 were between "*40+ to 50 years of age*" and 24 were above "*50+ to 60 years of age*".

|  | Combined | Trained | Not Trained |
|---|---|---|---|
| **Response Score** | | | |
| 20+ to30 years of age | 60 | 21 | 39 |
| 30+ to 40 years of age | 129 | 51 | 78 |
| 40+ to 50 years of age | 70 | 38 | 32 |
| 50+ to 60 years of age | 24 | 10 | 14 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ = **5.833217**, the difference is statistically not significant at 5% level (**p>0.05**).

**Gender (Code)**

n= 283,

Of the 283 doctors who formed this study, 222 were "*Male* "and 61 "*Female*"

|  | Combined | Trained | Not Trained |
|---|---|---|---|
| **Response Score** | | | |
| Male | 222 | 94 | 128 |
| Female | 61 | 26 | 35 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ = **0.001543**, the difference is statistically not significant at 5% level (**p>0.05**).

**Highest Academic Degree (Code)**

n= 283,

Of the 283 total, 224 were "*Graduates*" and 59 "*Post-graduates*".

|  | Combined | Trained | Not Trained |
|---|---|---|---|
| **Response Score** | | | |
| Graduates | 224 | 105 | 119 |
| Post Graduate | 59 | 15 | 44 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =**8.798805**, the difference is statistically not significant at 5% level (**p>0.05**).

**Present Designation (Code)**

n= 283,

Of the 283 total, 193 were "*Assistant Surgeons*", 14 "*Block Medical Officers*", 59 "*Specialist*" (with post-graduate diploma/degree), and 17 "*Dental Surgeons*".

Regardless of how they were split or categorised, no CO-relation was visible between the status of a doctor and his desire to acquire further training.

|  | Response Score | | |
|---|---|---|---|
|  | Combined | Trained | Not Trained |
| Assistant Surgeon | 193 | 78 | 115 |
| BMO | 14 | 5 | 9 |
| Specialist | 59 | 22 | 37 |
| Dental Surgeon | 17 | 15 | 2 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =4.976156, the difference is statistically not significant at 5% level (**p>0.05**).

Q:1- n= 283,

To the question 'Number of courses of in-service training attended by them in the preceding two years?' : 163 had received "*Nil*" training, 89 had received training "*once*", 7 received "*twice*" training courses, 18 received training "*thrice*" and 6 of them had received training "*five times or more than 5 times*".

|  | Response Score | | |
|---|---|---|---|
|  | Combined | Trained | Not Trained |
| Nil | 163 | 0 | 163 |
| 1 (once) | 89 | 89 | 0 |
| 2 (twice) | 7 | 7 | 0 |
| 3 (thrice) | 18 | 18 | 0 |
| 4 (four times) | 0 | 0 | 0 |
| 5 (five or more than 5 times) | 6 | 6 | 0 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =4.976156, the difference is statistically not significant at 5% level (**p>0.05**).

Q: 2(a) – 'Whether through these trainings i.e., they updated their knowledge?' : 119 opined "*Yes*" by attending these training courses and 1 said, "*No*".

Q: 2(b) - To the question, 'Whether they exchanged ideas with experts?' 111 doctors answered "*Yes*" and 9 of them said, "*No*".

Q: 2(c)- To the question 'Whether they gained from others' experience?' : 97 said, "Yes" whereas 23 said, "*No*".

Q: 2(d) - Regarding query, 'Did they attend these trainings to interact socially?' : 69 responded as "Yes" whereas 51 as "*No*".

Q: 2(e) - To the question 'Whether they attended these training courses just like that?': 94 doctors replied "*Yes*" whereas 26 said "*No*". A majority of those who received training were of the view that these trainings had helped them to "*update their knowledge*".

A comparatively less percentage of trained doctors had *exchanged ideas with experts*"/ "*gained from others' experiences*".

*Tables depicting the above statements.*
**(Combined: Trained + Not Trained)**

| | Response Score | | |
|---|---|---|---|
| | **yes** | **No** | **N.A** |
| Update my knowledge | 119 | 1 | 163 |
| Exchange ideas with experts | 111 | 9 | 163 |
| Gain from others experience | 97 | 23 | 163 |
| Interact socially | 69 | 51 | 163 |
| Just like that | 94 | 26 | 163 |

**(Trained)**

| | Response Score | | |
|---|---|---|---|
| | **yes** | **No** | **N.A** |
| Update my knowledge | 119 | 1 | 0 |
| Exchange ideas with experts | 111 | 9 | 0 |
| Gain from others experience | 97 | 23 | 0 |
| Interact socially | 69 | 51 | 0 |
| Just like that | 94 | 26 | 0 |

**(Not Trained)**

| | Response Score | | |
|---|---|---|---|
| | **yes** | **No** | **N.A** |
| Update my knowledge | 0 | 0 | 163 |
| Exchange ideas with experts | 0 | 0 | 163 |
| Gain from others experience | 0 | 0 | 163 |
| Interact socially | 0 | 0 | 163 |
| Just like that | 0 | 0 | 163 |

Q : 3 - To the question, 'Are adequate background materials/handouts provided to the trainees in the training courses they attended?': out of total 120 who had received training 2 replied "*To a great extent*", 46 said: "*To a considerable extent*", 64 said "*To some extent*", 8 said "*To a very little extent*"", 163 doctors answered "*N.A*" as they had not received any training. The significant feature to the answer of this question came out to be that none gave the answer "*Not at all*".

Majority of trained doctors opined that background material/handout material was provided to them only "*to some extent*".

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| To a very great extent | 2 | 2 | 0 |
| To a considerable extent | 46 | 46 | 0 |
| To some extent | 64 | 64 | 0 |
| To a very little extent | 8 | 8 | 0 |
| Not at all | 0 | 0 | 0 |
| Not Applicable | 163 | 0 | 163 |

Q : 4- Regarding 'Whether TA/DA is being paid adequately to the trainees?'; 88 said "*Yes*", 32 said "*No*", TA/DA was received by majority of doctors who had undergone training. For the rest 163 it was "*N.A*" (not applicable).

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| Yes | 88 | 88 | 0 |
| No | 32 | 32 | 0 |
| Not Applicable | 163 | 0 | 163 |

Q : 5- To the question 'Whether the curriculum is learner centred?': no doctors replied "*To a very great extent*", no one said "*To a considerable extent*", 25 said "*To some extent*", 80 said "*To a very little extent*", 15 opined "*Not at all*", whereas this question was "*N.A*" to 163 doctors (those who had not had any in-service training).

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 25 | 25 | 0 |
| To a very little extent | 80 | 80 | 0 |
| Not at all | 15 | 15 | 0 |
| Not Applicable | 163 | 0 | 163 |

Q:6- About the question 'Whether training methods used were appropriate/ in-appropriate?': only 2 replied as "*Appropriate*", 118 said "*In-appropriate*". Majority of the trained doctors were of the view that training methods were "*In-appropriate*". This question was "*Not Applicable*" to 163 doctors.

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| Appropriate | 2 | 2 | 0 |
| In appropriate | 118 | 118 | 0 |
| Not Applicable | 163 | 0 | 163 |

Q : 7- n=283

To the question 'Should in-service training be a regular feature after joining service?': 210 doctors said, "*Yes*"; 57 said "*No*" whereas 16 said "*I don't know*".
Although only 120 out of 283 had received training yet majority from 283 believed that 'in-service trainings should be a regular feature'.

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| Yes | 210 | 65 | 145 |
| No | 57 | 46 | 11 |
| I don't know | 16 | 9 | 7 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =46.76347, the difference is statistically significant at 5% level (p<0.05).

Q : 8- n=283

'Should in-service training be voluntary or mandatory?': 246 favoured "*Voluntary*", whereas 37 said it should be "*Mandatory*".
About 87% of the total participants were of the view that In-service trainings should be a "*Voluntary*" feature

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| Voluntary | 246 | 97 | 149 |
| Mandatory | 37 | 23 | 14 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =11.91455, the difference is statistically significant at 5% level (p<0.05).

Q : 9- n=283

To the question 'In-service training is seen as a wider strategy of increasing the competency of health professionals?': 182 doctors replied "*To a great extent*", 101 said "*To some extent*", Peculiarly no doctor replied to this question with comments of "*To a considerable extent*", "*To a very little extent*" or "*Not at all*".

Majority of participants (64%) believed that such trainings increased competency of health professionals "*To a great extent*" whereas 36% replied that it increased competency "*To some extent*".

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| To a very great extent | 182 | 85 | 97 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 101 | 35 | 66 |
| To a very little extent | 0 | 0 | 0 |
| Not at all | 0 | 0 | 0 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =45.13337, the difference is statistically significant at 5% level **(p<0.05)**.

Q:10- n=283

'In-service trainings are taken seriously by health professionals working for the J&K Health Services because development of their professional competency matters?': 4 said "*To a great extent*", 256 said "*To some extent*", 23 replied "*To a very little extent*", No body gave the opinion "*Not at all*" or "*To a considerable extent*".

Majority (90%) considered that such training are being taken seriously by doctors because trainings developed their professional competency "To some extent".

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| To a very great extent | 4 | 4 | 0 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 256 | 95 | 161 |
| To a very little extent | 23 | 21 | 2 |
| Not at all | 0 | 0 | 0 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =30.89088, the difference is statistically significant at 5% level **(p<0.05)**

Q : 11- 'Providing In-service trainings in our state should be the responsibility of the Health Department, Department of Medical Education, a NGO or any other organization?': 13 replied that it should be the responsibility of "*Health Department*", one said of the "*Medical Education Department*". Majority (151) felt it should be responsibility of a "*NGO*" whereas 118 doctors felt it should be combined responsibility of "*Health and Medical Education Departments*".

Majority (53%) felt that such trainings should be responsibility of a "*NGO*" whereas 42% felt it should be combined responsibility of "*Health and Medical Education Department*".

| | Response Score | | |
| --- | --- | --- | --- |
| | Combined | Trained | Not Trained |
| Health Department | 13 | 13 | 0 |
| Deptt. of Medical Education | 1 | 0 | 1 |
| NGO | 151 | 63 | 88 |
| i + ii | 118 | 44 | 74 |
| i + ii + iii | 0 | 0 | 0 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =19.68714, the difference is statistically significant at 5% level **(p<0.05)**

Q:12-  n=283

To the question, 'Do you recommend external peer review?': 30 doctors said "*Yes*" whereas 253 said, "*No*".
Majorities (90%) were against such review.

| | Response Score | | |
| --- | --- | --- | --- |
| | Combined | Trained | Not Trained |
| Yes | 30 | 27 | 3 |
| No | 253 | 93 | 160 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =31.12816, the difference is statistically significant at 5% level **(p<0.05)**

Q:13-  n=283

To the question 'Whether annual increment or to be linked with some credit points/or number of training hours a doctor receives every year?': only 8 said "*Yes*" whereas 275 said "*No*".
97% doctors were against linking increment to the number of training hours received in a year.

| | Response Score | | |
| --- | --- | --- | --- |
| | Combined | Trained | Not Trained |
| Yes | 8 | 8 | 0 |
| No | 275 | 112 | 163 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =11.18279, the difference is statistically significant at 5% level **(p<0.05)**

Listed below are commonly suggested ways to make in-service training more meaningful?

i.  Less of theory and more of practical/exercises/case studies/demonstrations/re-demonstrations and role-plays should be used.

ii.  Only clinical skill training should be provided at hospitals. Other trainings preferably should be given at the actual place of work.

iii.  Teams should be trained together instead of training them separately/individually.

iv.  Some system should be developed to find out needs for trainings so that the trainings could be need based.

v.  Trainings in self directed learning should be provided (How we can learn on our own).

Q:15- n=283

'The learning organization is one that creates an environment where the behaviours and practices involved in continuous development are encouraged (Munford 1995). In your opinion, do you think that the J&K Health Services is a learning organization?' 172 doctors felt "*Not at all*", 94 felt "*To a very little extent*" and 17 felt "*To some extent*". Nobody felt that the J&K Health Services is a learning organization "*To a very great extent*" or "*To a considerable extent*".
61% felt that J&K Health Services is "*Not at all*" a learning organization whereas 33% felt that it is "*upto a very little extent*".

|  | Response Score | | |
|---|---|---|---|
|  | Combined | Trained | Not Trained |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 17 | 14 | 3 |
| To a very little extent | 94 | 39 | 55 |
| Not at all | 172 | 67 | 105 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =11.9794, the difference is statistically significant at 5% level **(p<0.05)**

Q : 16- To the question, 'How they (Doctors) kept themselves professionally upto date?':
Five choices were given to them. They were:
a)  Discussion with colleagues and peers.
b)  Seeking opinion in order to solve a problem (current patient).
c)  Regular scanning of journals and texts.
d)  Completion a self-assessment programs or quiz.
e)  Others.
As these were five choices, the doctors were divided into five groups and the prioritie(s) given by them have been enumerated below in the table in order of (i to v)

a)   'Discussion with colleagues and peers'.

|  | Response Score | | |
| --- | --- | --- | --- |
|  | Combined | Trained | Not Trained |
| 1st priority | 44 | 21 | 23 |
| 2nd priority | 39 | 17 | 22 |
| 3rd priority | 113 | 45 | 68 |
| 4th priority | 23 | 16 | 7 |
| 5th priority | 64 | 21 | 43 |

CHI-square test carried out between the responses of those Trained and Not-Trained
$\chi^2$ =4.162548, the difference is statistically not significant at 5% level **(p>0.05)**

b)   **'Seeking opinion in order to solve a problem (current patient)'.**

|  | Response Score | | |
| --- | --- | --- | --- |
|  | Combined | Trained | Not Trained |
| 1st priority | 85 | 31 | 54 |
| 2nd priority | 198 | 89 | 109 |
| 3rd priority | 0 | 0 | 0 |
| 4th priority | 0 | 0 | 0 |
| 5th priority | 0 | 0 | 0 |

CHI-square test carried out between the responses of those Trained and Not-Trained
$\chi^2$ =11.6206, the difference is statistically significant at 5% level **(p<0.05)**

c)   **'Regular scanning of journals and texts'.**

|  | Response Score | | |
| --- | --- | --- | --- |
|  | Combined | Trained | Not Trained |
| 1st priority | 154 | 68 | 86 |
| 2nd priority | 46 | 14 | 32 |
| 3rd priority | 83 | 38 | 45 |
| 4th priority | 0 | 0 | 0 |
| 5th priority | 0 | 0 | 0 |

CHI-square test carried out between the responses of those Trained those and Not-Trained
$\chi^2$ =3.279889, the difference is statistically not significant at 5% level **(p>0.05)**

d) 'Completion a self-assessment programs or quiz'.

| | Response Score | | |
| | Combined | Trained | Not Trained |
|---|---|---|---|
| 1st priority | 0 | 0 | 0 |
| 2nd priority | 0 | 0 | 0 |
| 3rd priority | 87 | 37 | 50 |
| 4th priority | 113 | 45 | 68 |
| 5th priority | 83 | 38 | 45 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =0.696825, the difference is statistically not significant at 5% level **(p>0.05)**

e) 'Others'.

| | Response Score | | |
| | Combined | Trained | Not Trained |
|---|---|---|---|
| 1st priority | 0 | 0 | 0 |
| 2nd priority | 0 | 0 | 0 |
| 3rd priority | 0 | 0 | 0 |
| 4th priority | 158 | 67 | 91 |
| 5th priority | 125 | 53 | 72 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =7.33, the difference is statistically not significant at 5% level **(p>0.05)**

Q : 17- To the question, 'Means to achieve professional competence and to counter redundancy caused by the rapid growth of medical knowledge?': the following five options were offered:
a) Compulsory renewal of medical registration every 5 years subject to achieving minimum credit points in CME.
b) Through program of self-assessment.
c) Monthly newsletter to be published by Health Services/Medical College.
d) Time based refresher courses in Medical Training Institutes.
e) Monthly in-the-Job training (modular) at the place of work.

As there were five options, the doctors were divided into five groups. The number of doctors in each group giving similar option priority-wise have been enumerated in the table below:-

a) 'Compulsory renewal of medical registration every 5 years subject to achieving minimum credit points in CME'.

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| 1st priority | 22 | 5 | 17 |
| 2nd priority | 0 | 0 | 0 |
| 3rd priority | 19 | 7 | 12 |
| 4th priority | 0 | 0 | 0 |
| 5th priority | 242 | 108 | 134 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =4.218454, the difference is statistically not significant at 5% level **(p>0.05)**

b) **'Through program of self-assessment'.**

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| 1st priority | 0 | 0 | 0 |
| 2nd priority | 0 | 0 | 0 |
| 3rd priority | 48 | 14 | 34 |
| 4th priority | 235 | 106 | 129 |
| 5th priority | 0 | 0 | 0 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =81.12906, the difference is statistically significant at 5% level **(p<0.05)**

c) **'Monthly newsletter to be published by Health Services/Medical College'.**

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| 1st priority | 0 | 0 | 0 |
| 2nd priority | 89 | 32 | 57 |
| 3rd priority | 107 | 62 | 45 |
| 4th priority | 46 | 14 | 32 |
| 5th priority | 41 | 12 | 29 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =17.69051, the difference is statistically significant at 5% level **(p<0.05)**

d)    'Time based refresher courses in Medical Training Institutes'.

|  | Response Score | | |
|---|---|---|---|
|  | Combined | Trained | Not Trained |
| 1$^{st}$ priority | 175 | 72 | 103 |
| 2$^{nd}$ priority | 86 | 43 | 43 |
| 3$^{rd}$ priority | 22 | 5 | 17 |
| 4$^{th}$ priority | 0 | 0 | 0 |
| 5$^{th}$ priority | 0 | 0 | 0 |

CHI-square test carried out between the responses of those Trained and Not-Trained $\chi^2$ =5.633371, the difference is statistically not significant at 5% level (p>0.05)

e)    'Monthly in-the-Job training (modular) at the place of work'.

|  | Response Score | | |
|---|---|---|---|
|  | Combined | Trained | Not Trained |
| 1$^{st}$ priority | 86 | 43 | 43 |
| 2$^{nd}$ priority | 108 | 45 | 63 |
| 3$^{rd}$ priority | 87 | 32 | 55 |
| 4$^{th}$ priority | 2 | 0 | 2 |
| 5$^{th}$ priority | 0 | 0 | 0 |

CHI-square test carried out between the responses of those Trained and Not-Trained $\chi^2$ =4.654345, the difference is statistically not significant at 5% level (p>0.05)

# 004

## *Background*

**Age code**

| 01 | for 20+ to 30 years of age |
|----|----------------------------|
| 02 | for 30+ to 40 years of age |
| 03 | for 40+ to 50 years of age |
| 04 | for 50+ to 60 years age.   |

**Gender Code**

| 01 | for Male   |
|----|------------|
| 02 | for Female |

Q.1. In your opinion, what was the degree of **autonomy** under which the India Population Project functioned?
- i. 1. Complete ☐
- ii. 2. Partial ☐
- iii. 3. Not at all ☐

Give reasons for your choice.

Q.2. Are you **satisfied** with the in-service training being provided under the India Population Project?
- i. 1. To a very great extent ☐
- ii. 2. To a considerable extent ☐
- iii. 3. To some extent ☐
- iv. 4. To a very little extent ☐
- v. 5. Not at all ☐

Q.3. A **Training Advisory Committee** was established under the project to fulfill certain functions. Please indicate the degree of success it achieved in your opinion, with regard to the functions stated below:

(a) In **coordinating** with the various agencies involved in trainings
- i. 1. To a very great extent ☐
- ii. 2. To a considerable extent ☐
- iii. 3. To some extent ☐
- iv. 4. To a very little extent ☐
- v. 5. Not at all ☐

(b) In developing and finalizing training **modules,** the instructional methodologies and detailed training plans
- i. 1. To a very great extent ☐
- ii. 2. To a considerable extent ☐
- iii. 3. To some extent ☐
- iv. 4. To a very little extent ☐
- v. 5. Not at all ☐

(c) In **working** out and **finalizing** the detailed functions of the training institutions
- i. 1. To a very great extent ☐
- ii. 2. To a considerable extent ☐
- iii. 3. To some extent ☐
- iv. 4. To a very little extent ☐
- v. 5. Not at all ☐

(d) In **monitoring** the **implementation** of the training activities and evaluating the impact of training programs
- i. 1. To a very great extent ☐
- ii. 2. To a considerable extent ☐
- iii. 3. To some extent ☐
- iv. 4. To a very little extent ☐
- v. 5. Not at all ☐

Q.4. Your **assessment** of the functions of the Training Advisory Committee to date and suggestions, if any, for its future functioning.

Q.5. In order to achieve the project objectives, the following **strategies** were envisaged.

In your opinion, have we been successful in:

(a) **Developing a training model** so that we could achieve the objectives contemplated under the project
- i. 1. To a very great extent ☐
- ii. 2. To a considerable extent ☐
- iii. 3. To some extent ☐
- iv. 4. To a very little extent ☐
- v. 5. Not at all ☐

Questionnaire Code 004. Confidential only for research.
(Tick the response you feel is the most appropriate)

(b) Developing **simple, effective, replicable and affordable** methods and materials for achieving the objectives contemplated under the project

   i.    1. To a very great extent  ☐
   ii.   2. To a considerable extent ☐
   iii.  3. To some extent  ☐
   iv.  4. To a very little extent  ☐
   v.   5. Not at all  ☐

(c) **Developing** a project Administration, Training and Human Resources Development Cell (ATHRDC) so as to implement the training strategy. This cell was also to ensure the timely provision of the necessary infrastructural facilities as well as coordinate and manage the project effectively

   i.    1. To a very great extent  ☐
   ii.   2. To a considerable extent ☐
   iii.  3. To some extent  ☐
   iv.  4. To a very little extent  ☐
   v.   5. Not at all  ☐

(d) **Involving** and **internalizing** the Health and Family Welfare System so as to achieve the project objectives successfully

   i.    1. To a very great extent  ☐
   ii.   2. To a considerable extent ☐
   iii.  3. To some extent  ☐
   iv.  4. To a very little extent  ☐
   v.   5. Not at all  ☐

Q.6. Are you satisfied with the available **competencies** of the trainers in our state?

   i.    1. Yes  ☐
   ii.   2. No  ☐
   iii.  3. I don't know  ☐

Q.7. Were the consultants recommended by the World Bank appointed?

Q.8. Is there any definite **Policy** Statement available for the J&K Health Services on trainings that indicates the **commitment** of top management to cater to the in-service training needs of its staff? This was one of the objectives of the project

   i.    1. Yes  ☐
   ii.   2. No  ☐
   iii.  3. I don't know  ☐

Q.9. Is this **Training Policy** in the form of a written document?

   i.    1. Yes  ☐
   ii.   2. No  ☐
   iii.  3. I don't know  ☐
   iv.  4. N.A  ☐

Q.10. If it is **not** a written document, do you think it should be documented and have a mission statement as well as **objectives** clearly stated for all in the department to know?

   i.    1. Yes  ☐
   ii.   2. No  ☐
   iii.  3. N.A.  ☐

Q.11. Under the project, training **materials** and **manuals** and **teaching aids** were to be developed. In your opinion, have we been successful in developing the requisite tools as per our local needs?

|       |                              |   |
|-------|------------------------------|---|
| i.    | 1. To a very great extent    | ☐ |
| ii.   | 2. To a considerable extent  | ☐ |
| iii.  | 3. To some extent            | ☐ |
| iv.   | 4. To a very little extent   | ☐ |
| v.    | 5. Not at all                | ☐ |

Q.12. This project was to encourage **innovations** to sustain and support the **qualitative** improved Health Delivery System in our State. In your opinion, have we been successful in promoting innovations?

|       |                              |   |
|-------|------------------------------|---|
| i.    | 1. To a very great extent    | ☐ |
| ii.   | 2. To a considerable extent  | ☐ |
| iii.  | 3. To some extent            | ☐ |
| iv.   | 4. To a very little extent   | ☐ |
| v.    | 5. Not at all                | ☐ |

Q.13. The training infrastructure being developed under the project still lacks **staff**. In your opinion, will the government appoint the faculty before the **end** of the project?

|       |                 |   |
|-------|-----------------|---|
| i.    | 1. Yes          | ☐ |
| ii.   | 2. No           | ☐ |
| iii.  | 3. I don't know | ☐ |

Q.14. After June 1998, when the present project completes its term, the government is committed by an agreement with the Government of India and the World Bank to finance and support the training infrastructure developed under this project. In your opinion, despite a heavy resource crunch, has the govrnment/project made adequate provisions to **honour its legal commitment?** (Tick the responses you feel is the most appropriate.)

|       |                 |   |
|-------|-----------------|---|
| i.    | 1. Yes          | ☐ |
| ii.   | 2. No           | ☐ |
| iii.  | 3. I don't know | ☐ |

Q.15. The Jammu and Kashmir Seventh National Family Welfare Training and Manpower Development Population Project started operations in December 1990 and will close in June 1998. During these years, **six different Directors** were posted to the Project. Of six, **three** handled the project as an **additional charge**.
**Your comments in this regard**

Q.16. In your opinion, should the staff deputed to the project **have been left in place** until the completion of the project.

|       |                     |   |
|-------|---------------------|---|
| i.    | 1. Yes              | ☐ |
| ii.   | 2. No               | ☐ |
| iii.  | 3. Makes no difference | ☐ |

(i) If **"Yes"**, state reasons thereof.
(ii) If **"No"**, state reasons thereof.

Q.17. On the recommendation of the World Bank, various officials of the IPP were sent for study tours to the four states where the IPP has been **successfully implemented**

**Q.11.** Under the project, training **materials** and **manuals** and **teaching aids** were to be developed. In your opinion, have we been successful in developing the requisite tools as per our local needs?

| | | |
|---|---|---|
| i. | 1. To a very great extent | ☐ |
| ii. | 2. To a considerable extent | ☐ |
| iii. | 3. To some extent | ☐ |
| iv. | 4. To a very little extent | ☐ |
| v. | 5. Not at all | ☐ |

**Q.12.** This project was to encourage **innovations** to sustain and support the **qualitative** improved Health Delivery System in our State. In your opinion, have we been successful in promoting innovations?

| | | |
|---|---|---|
| i. | 1. To a very great extent | ☐ |
| ii. | 2. To a considerable extent | ☐ |
| iii. | 3. To some extent | ☐ |
| iv. | 4. To a very little extent | ☐ |
| v. | 5. Not at all | ☐ |

**Q.13.** The training infrastructure being developed under the project still lacks **staff**. In your opinion, will the government appoint the faculty before the **end** of the project?

| | | |
|---|---|---|
| i. | 1. Yes | ☐ |
| ii. | 2. No | ☐ |
| iii. | 3. I don't know | ☐ |

**Q.14.** After June 1998, when the present project completes its term, the government is committed by an agreement with the Government of India and the World Bank to finance and support the training infrastructure developed under this project. In your opinion, despite a heavy resource crunch, has the govrnment/project made adequate provisions to **honour its legal commitment?** (Tick the responses you feel is the most appropriate.)

| | | |
|---|---|---|
| i. | 1. Yes | ☐ |
| ii. | 2. No | ☐ |
| iii. | 3. I don't know | ☐ |

**Q.15.** The Jammu and Kashmir Seventh National Family Welfare Training and Manpower Development Population Project started operations in December 1990 and will close in June 1998. During these years, **six different Directors** were posted to the Project. Of six, **three** handled the project as an **additional charge**.
**Your comments in this regard**

**Q.16.** In your opinion, should the staff deputed to the project **have been left in place** until the completion of the project.

| | | |
|---|---|---|
| i. | 1. Yes | ☐ |
| ii. | 2. No | ☐ |
| iii. | 3. Makes no difference | ☐ |

(i) If **"Yes"**, state reasons thereof.
(ii) If **"No"**, state reasons thereof.

**Q.17.** On the recommendation of the World Bank, various officials of the IPP were sent for study tours to the four states where the IPP has been **successfully implemented**

(Punjab, Gujarat, Andhra and Haryana):

Kindly state if any **positive** feedback was received from these officials and also if it was incorporated into the execution of the project, specifically with regards to trainings.

- i.   1. To a very great extent  ☐
- ii.   2. To a considerable extent ☐
- iii.   3. To some extent  ☐
- iv.   4. To a very little extent  ☐
- v.   5. Not at all  ☐

Q.18. Various officials of the project were sent abroad (Australia, Indonesia & Malaysia) on the recommendation of the Government of India.

In your opinion, could the project **benefit** from their feedback, both as far as their development as master trainers was concerned or incorporating their recommendations for improving the quality of the trainings in our state?

- i.   1. To a very great extent  ☐
- ii.   2. To a considerable extent ☐
- iii.   3. To some extent  ☐
- iv.   4. To a very little extent  ☐
- v.   5. Not at all  ☐

Q.19. Has there been an adequate **evaluation** and **follow up** of these trainings by the authorities or some independent agency?

- i.   1. Yes  ☐
- ii.   2. No  ☐
- iii.   3. I don't know  ☐

Q.20. if **"Yes"**, what are the findings of **evaluation** with regards to trainings

# QUEST/ 004

## Background:

**Age Group (Code)**
>  n=15
>
>  15 officers/officials of the IPP project-VII were given this questionnaire, 6 of them were in the "*30+ to 40 years age*" group; 7 were between "*40+ to 50 years of age*" whereas only 2 were "*50+ to 60 years of age*",

|  | Response Score |
|---|---|
| 20+ to30 years of age | 0 |
| 30+ to 40 years of age | 6 |
| 40+ to 50 years of age | 7 |
| 50+ to 60 years of age | 2 |

## Gender (Code)
>  n= 283,
>
>  Out of 15 doctors who formed this study, 13 of them were "*Male*" and only 2 were "*Females*".

|  | Response Score |
|---|---|
| Male | 13 |
| Female | 2 |

Q:1-  n=15
>  To the question, 'Degree of autonomy under which the IPP functioned?': 4 replied that autonomy of the project was "*Complete*" , 7 said, "*Partial*" whereas 4 said, "*Not at all*".

|  | Response Score |
|---|---|
| Complete | 4 |
| Partial | 7 |
| Not at all | 4 |

Most of the respondents who chose either 2 or 3 were of the view that the project did not function as a 'project' i.e. it was not time bound. It functioned more as a government department, whereas, the World Bank wanted the project to go about as per its guidelines. The state government functionaries linked with the project, thought otherwise.

Q:2-  n=15

To the question, 'Are you satisfied with the in-service training being provided under the IPP?' 3 officials replied *"To a considerable extent"*, 9 said *"To some extent"* and 3 said *"To a very little extent"*. Nobody replied *"To a very great extent"* or *"Not at all"*.

| | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 3 |
| To some extent | 9 |
| To a very little extent | 3 |
| Not at all | 0 |

Q:3-  n=15

Regarding 'functions of the Training Advisory Committee?':

a/  'In co-ordinating various agencies involved in trainings': 5 replied that it was successful *"To a very little extent"* whereas 10 replied *"Not at all"* successful.

| | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 0 |
| To a very little extent | 5 |
| Not at all | 10 |

b/  'In developing and finalizing training modules': 1 said *"To some extent"*, 5 said *"To a very little extent"* and 9 opined *"Not at all"*.

| | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 1 |
| To a very little extent | 5 |
| Not at all | 9 |

c/  'In working out and finalizing detailed functions of training institutions': 1 said *"To some extent"*, 2 said *"To a very little extent"* whereas 12 said *"Not at all"* .

| | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 1 |
| To a very little extent | 2 |
| Not at all | 12 |

d/  'In monitoring the implementation of training activities and monitoring the impact of trainings': 7 said *"To a very little extent"* and 8 opined *"Not at all"*.

|  | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 0 |
| To a very little extent | 7 |
| Not at all | 8 |

Q:4 - n=15

Generally, everyone amongst the respondents thought that the Training Advisory Committee should have middle level officers instead of senior. Since the committee could not devote the requisite time for the purpose, as all were involved with other important matters of governance, especially controlling the militancy. Some of them wanted this revised committee to meet quarterly to review the trainings.

Q: 5- n=15

Opinion regarding 'achieving the project objectives, whether IPP establishment was successful in?':

a/  'Developing the training model': 2 said *"To some extent"*, 12 replied *"To a very little extent"* whereas 1 replied *"Not at all"*.

|  | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 2 |
| To a very little extent | 12 |
| Not at all | 1 |

b/  'Developing simple, effective, replicable and affordable methods': 2 said *"To some extent"*, 2 said *"To a very little extent"* whereas 11 replied *"Not at all"*.

|  | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 2 |
| To a very little extent | 2 |
| Not at all | 11 |

c/ 'Developing a project administration, training and human resources development cell (ATHRDC)': 2 said *"To some extent"*, 8 said *"To a very little extent"* whereas 5 said *"Not at all"*.

|  | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 2 |
| To a very little extent | 8 |
| Not at all | 5 |

d/ 'Involving and internalising the health and family welfare system': 4 replied successful *"To a very little extent"* whereas 11 said *"Not at all"*.

|  | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 0 |
| To a very little extent | 4 |
| Not at all | 11 |

Q:6- n=15

To the question 'Whether they were satisfied with the available competencies of the trainers in the state?': 7 said *"Yes"*, 3 said "No" whereas 5 replied *"I don't know"*.

|  | Response Score |
|---|---|
| Yes | 7 |
| No | 3 |
| I don't Know | 5 |

Q:7- n=15

Nearly everybody replied that they did not know what happened to the recommendations, which were forwarded to the Administrative Department. Two respondents informed that the trainers/course directors did not want the consultants to join. It was their influence with the Govt., which sabotaged the recommendations.

Q: 8- n=15

Regarding 'Availability of a definite policy statement for the J&K Health Services on trainings?': 12 said *"No"* whereas 3 said "I don't know".

|  | Response Score |
|---|---|
| Yes | 0 |
| No | 12 |
| I don't Know | 3 |

Q: 9-  n=15

To the question, 'Is the training policy in the form of written document?' 3 said "I *don't know*" whereas 12 said "*N.A*".

|  | Response Score |
|---|---|
| Yes | 0 |
| No | 0 |
| I don't Know | 3 |
| N.A | 12 |

Q:10-  n=15

To the question 'Whether such a document should be documented and have a mission statement as well as objectives clearly stated for all in the department to know?': All the 15 replied "Y*es*".

|  | Response Score |
|---|---|
| Yes | 15 |
| No | 0 |
| N.A | 0 |

Q:11-  n=15

To the question, 'Have we been successful to develop training materials, manuals and teaching aids as per the local needs?': 12 replied "To *a very little extent*" whereas 3 said "*Not at all*".

|  | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 0 |
| To a very little extent | 12 |
| Not at all | 3 |

Q:12-  n=15

To the question, 'Have we been successful in promoting innovations to sustain and support the qualitative improved Health Delivery System in the state?': 4 said "*To a very little extent*" whereas 11 said "*Not at all*".

|  | Response Score |
|---|---|
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 0 |
| To a very little extent | 4 |
| Not at all | 11 |

Q:13 - n=15

To the question, 'Whether the government will appoint faculty (for training) before the project ends?': 2 replied "*Yes*", 2 replied "*No*" whereas 11 replied "*I don't know*".

|  | Response Score |
|---|---|
| Yes | 2 |
| No | 2 |
| I don't Know | 11 |

Q:14- n=15

To the question, 'Whether the State Government has made adequate provisions to honour its legal commitment to finance and support the training infrastructure developed under this project before June 98, when the present project completes its term?': 3 said "*No*" whereas 12 said "*I don't know*".

|  | Response Score |
|---|---|
| Yes | 0 |
| No | 3 |
| I don't Know | 12 |

Q:15- n=15

Govt. of J&K was not serious about the Project or the bureaucrats did not understand the importance of implementing the project in letter and spirit. Many were of the view that there should be a Directorate of Projects under which all the new projects should function.

Q:16- n=15

To the question, 'Should the staff deputed to project have been left in place until completion of project?': 12 said "*Yes*" where as 3 said "*Makes no difference*".

|  | Response Score |
|---|---|
| Yes | 12 |
| No | 0 |
| Makes no difference | 3 |

**Reasons thereof:**

i)   Those who were in favour of the project staff staying the full period of the project believe that shifting out of the staff deputed reduces the momentum of the progress.

ii)  Others opposing the view believe that the staff should move out after two years. One benefit would be that others will get a chance to work and also inherent characteristics of the being non serious "work attitudes' does not take over.

iii) Those who chose 3 option believe that the basic stock is same. All are OK/ equivalent in their competence to do the job

Q:17- n=15

To the question, 'Whether positive feedback was received from the officials who were sent to the four states (Haryana, Punjab, Andhara and Gujrat) where IPP has been implemented successfully?': 3 replied "*To some extent*", 4 said "*To a very little extent*" whereas 8 replied "*Not at all*".

|  | Response Score |
| --- | --- |
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 3 |
| To a very little extent | 4 |
| Not at all | 8 |

Q:18- n=15

To the question, 'Whether the recommendations of the various officials of the project who were sent abroad were incorporated in the project?': 7 replied "*To a very little extent*" whereas 8 replied "*Not at all*".

|  | Response Score |
| --- | --- |
| To a very great extent | 0 |
| To a considerable extent | 0 |
| To some extent | 0 |
| To a very little extent | 7 |
| Not at all | 8 |

Q:19- n=15

To the question, 'Has there been an adequate evaluation and follow-up of these trainings by the authorities or some independent agency?': 3 replied "*Yes*" whereas 12 replied "*I don't know*".

|  | Response Score |
| --- | --- |
| Yes | 3 |
| No | 0 |
| I don't Know | 12 |

Q:20- n=15

The findings of both the mid-term and the end–line evaluations have been positive that within the constraints of shortages, both within the staff of the project and in the training infrastructure, achievements were there.

# 005

**DISTRICT CODE:** ☐       **BLOCK CODE:** ☐

| | |
|---|---|
| 1 for Jammu, | 1 for Ramgarh<br>2 for Bishnah |
| 2 for Kathua | 3 for Hiranagar<br>4 for Bilawar |
| 3 for Poonch, | 5 for Mandi<br>6 for Surankote |
| 4 for Rajouri | 7 for Sunderbani<br>8 for Darhal |
| 5 for Baramulla | 9 for Tangmarg<br>10 for Pattan |
| 6 for Anantnag | 11 for Bijbehara<br>12 for Qazigund |
| 7 for Budgam | 13 for Chadura<br>14 for Budgam |
| 8 for Leh | 15 for Leh<br>16 for Khalsi |

## Q005

Q.1. Age Group (Code)
a.  1 for 20 to 30 years of age
b.  2 for 30+ to 40 years of age
c.  3 for 40+ to 50 years of age
d.  4 for 50+ to 60 years age.

Q.2. Total service (in years) in health field? ☐
a.  1 for 1 to 5 years service
b.  2 for 5+ to 10 years service
c.  3 for 10+ to 15 years service
d.  4 for 15+ to 20 years service

Q.3. During the last two years did you receive any training under the India Population Project? ☐
a.  0 for Nil
b.  1 for 1
c.  2 for 2
d.  3 for 3 and more.

Q.4. In your opinion, should in-service training be a regular feature after joining service? ☐

a.  1 for Yes
b.  2 for No
c.  3 for I don't know

Q.5. In-Service trainings being provided to you are being taken seriously.
a.  1. To a very great extent ☐
b.  2. To a considerable extent ☐
c.  3. To some extent ☐
d.  4. To a very little extent ☐
e.  5. Not at all ☐

Q.6. How do you find solutions to job related problems? 1 for yes and 2 for No.
a. During monthly meetings with your BMO ☐
b. During the visit of your supervisor. ☐
c. By exercising the freedom to approach your BMO/MO/ Supervisor whenever you feel the need. ☐

Q.7. Any comments/suggestions with regards to your in-service training

Questionnaire 005. Confidential only for research.
(Tick the response you feel is the most appropriate)

**Background**:-The Questionnaire 005 was administered to 262 MPHW(F) working in 16 Blocks of 8 districts of Jammu And Kashmir State.

Out of 262 workers, 190 had received training organised by IPP during the preceding 2 years.

### DISTRICTS          BLOCKS

| | |
|---|---|
| 1. Jammu = 52 | Ramgarh = 23<br>Bishnah = 29 |
| 2  Kathua = 46 | Hiranagar = 29<br>Bilawar = 17 |
| 3 for Poonch = 31 | Mandi = 31<br>Surankote = 0 |
| 4 for Rajouri = 37 | Sunderbani = 15<br>Darhal = 22 |
| 5 for Baramulla = 22 | Tangmarg = 11<br>Pattan = 11 |
| 6 for Anantnag = 29 | Bijbehara = 10<br>Qazigund = 19 |
| 7 for Budgam = 24 | Chadura = 15<br>Budgam = 9 |
| 8 for Leh = 21 | Leh = 11<br>Khalsi = 10 |

Q: 1- n=262, $\overline{X}$ =42.49, $s$ =9.30.

The agewise break-up of the workers who replied the questionnaire is as under:
22 were "*20+ to 30 years*", 92 were "*30+ to 40 years*", 70 were "*40+ to 50 years*" and 78 were "*50+ to 60 years*".

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| 20+ to30 years of age | 22 | 14 | 8 |
| 30+ to 40 years of age | 92 | 65 | 27 |
| 40+ to 50 years of age | 70 | 52 | 18 |
| 50+ to 60 years of age | 78 | 59 | 19 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained

$\chi^2$ = **1.523019**, the difference is statistically not significant at 5% level **(p>0.05)**.

Q: 2- $n=262$, $\overline{X}=8.63$, $s=6.98$.

Service of the workers who answered the questionnaire was: 96 were having service "*1+ to 5 years*", 100 had "*5+ to 10 years*", 38 were having service "*10+ to 15 years*" and 28 had "*15+ to 20 years*" service.

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| 1+ to 5 years of Service | 96 | 65 | 31 |
| 5+ to 10 years of Service | 100 | 76 | 24 |
| 10+ to 15 years of Service | 38 | 29 | 9 |
| 15+ to 20 years of Service | 28 | 20 | 8 |

**CHI-square test** carried out between the responses of those of Trained and Not-Trained

$\chi^2 = 2.014412$, the difference is statistically not significant at 5% level **(p>0.05)**.

Q: 3- $n=262$

To the question 'Of how many times they had received training during the last two years under the India Population Project?'; 138 received training "*Once*", 48 received "*Twice*" and 4 received training "*Thrice*" whereas 72 received "*Nil*".

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| Nil | 72 | 0 | 72 |
| 1 (once) | 138 | 138 | 0 |
| 2 (twice) | 48 | 48 | 0 |
| 3 (thrice) or more. | 4 | 4 | 0 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained

$\chi^2 = 262$, the difference is statistically significant at 5% level **(p<0.05)**.

Q: 4- $n=262$.

To the question, 'Should In-service training be a regular feature after joining service?'; 167 replied "*Yes*" while 10 of them said "*No*" and 85 replied "*I don't know*". Majority from both trained and untrained categories observed that such trainings should be a regular feature.

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| Yes | 167 | 100 | 67 |
| No | 10 | 5 | 5 |
| I don't know. | 85 | 85 | 0 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained

$\chi^2 = 48.14102$, the difference is statistically significant at 5% level **(p<0.05)**.

Q; 5 - n=262.

To the question, 'Whether the trainings being provided were being taken seriously?'; 149 were of the view that these were being taken seriously "*To a very great extent*", 77 replied "*To a considerable extent*", 26 replied "*To some extent*", 10 "*To a very little extent* and significantly nobody replied "*Not at all*".

There was not much difference in the percentage of both trained/untrained categories to the answer of this question.

| | Response Score | | |
| --- | --- | --- | --- |
| | Combined | Trained | Not Trained |
| To a very great extent | 149 | 114 | 35 |
| To a considerable extent | 77 | 60 | 17 |
| To some extent | 26 | 15 | 11 |
| To a very little extent | 10 | 1 | 9 |
| Not at all | 0 | 0 | 0 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$=24.7997, the difference is statistically significant at 5% level **(p<0.05)**.

Q : 6 - To the question 'regarding finding solutions to job related problems?'; 242 workers were of the view that the problems should be raised at the "*During monthly meetings with the BMO*", 147 "*During the visit of the Supervisors*" and 104 "*By exercising the freedom to approach their BMO/MO/Supervisor whenever they felt the need*".

[In this question, the FMPWS' (answering the Questionnaire) have given mote than one option(s)]

a) n=262
"During monthly meetings with your BMO".

| | Response Score | | |
| --- | --- | --- | --- |
| | Combined | Trained | Not Trained |
| Yes | 242 | 175 | 67 |
| No | 20 | 15 | 5 |

**CHI-square test** carried out between the responses of ThoseTrained and Not-Trained $\chi^2$ =0.066874, the difference is statistically not significant at 5% level **(p>0.05)**.

b) n=262.

"During the visit of your supervisor".

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| Yes | 147 | 114 | 33 |
| No | 115 | 76 | 39 |

**CHI-square test** carried out between the responses of Trained and Not-Trained $\chi^2$ =**4.255078**, the difference is statistically significant at 5% level (**p<0.05**).

c) n=262.

"By exercising the freedom to approach your BMO/MO/Supervisor when ever you feel the need".

| | Response Score | | |
|---|---|---|---|
| | Combined | Trained | Not Trained |
| Yes | 104 | 83 | 21 |
| No | 158 | 107 | 51 |

**CHI-square test** carried out between the responses of those Trained and Not-Trained $\chi^2$ =**13.68435**, the difference is statistically significant at 5% level (**p<0.05**).

Q : 7 - Comments to the question with regard to their in-service trainings are listed to make in-service training more meaningful.

    i.     Less of theory and more of practicals.

    ii.    Most of them wanted to be trained in the conduction of I.U.D insertion.

    iii.   Many of them feel that they require training to deliver a normal baby. Since they have not yet been trained for the same either during their pre-service training and also in-service.

    iv.   Clinical skill training should be provided only at hospitals where they can demonstrate the skill to their trainer at least 2 to 3 times so that they gain confidence.

    v.    Other trainings, preferably should be given at the place of work.

    vi.   Our workload should be in proportion to the time available.

# RESULTS OF CHI-SQUARE TESTS

1   Same question, 'In-service trainings are taken seriously by them?' was asked from two different groups mainly Doctors and Multipurpose Workers (F).

|  | Response Score | |
|---|---|---|
|  | Q10 of 003 | Q5 of 005 |
| To a very great extent | 4 | 149 |
| To a considerable extent | 0 | 77 |
| To some extent | 256 | 26 |
| To a very little extent | 23 | 10 |
| Not at all | 0 | 0 |

CHI-square test carried out between their responses, $\chi^2$ =406.9232, indicated that the difference is statistically significant at 5% level (p<0.05)

2   Same question, 'Do you recommend external peer review?' was asked from two different groups mainly Policy makers and Doctors.

|  | Response Score | |
|---|---|---|
|  | Q15 of 001 | 12/003 |
| Yes | 16 | 30 |
| No | 9 | 253 |

CHI-square test carried out between their responses $\chi^2$ =51.55717, indicated that the difference is statistically significant at 5% level (p<0.05).

3   Same question, 'Learning organisation is one that creates an environment where the behaviours and practices involved in continuous development are encouraged?' was asked from three different groups mainly Policy makers, Trainers & Doctors.

|  | Response Score | | |
|---|---|---|---|
|  | Q3 of 001 | Q3 of 002 | Q15 of 003 |
| To a very great extent | 0 | 0 | 0 |
| To a considerable extent | 0 | 0 | 0 |
| To some extent | 11 | 7 | 17 |
| To a very little extent | 10 | 15 | 94 |
| Not at all | 4 | 17 | 172 |

CHI-square test carried out between their responses $\chi^2$ =45.52078, indicated that the difference is statistically significant at 5% level (p<0.05).

4    Same question, 'Do the Health Care Workers have appropriate pre-service training as per the requirements of providing primary health care in our state?' was asked from two different groups mainly Policy makers and Trainers.

a)    **Doctors:**

|  | Response Score | |
|---|---|---|
|  | Q2 of 001 | Q5 of 002 |
| To a very great extent | 0 | 0 |
| To a considerable extent | 6 | 7 |
| To some extent | 13 | 29 |
| To a very little extent | 6 | 3 |
| Not at all | 0 | 0 |

CHI-square test carried out between their responses $\chi^2$ =4.316198, indicated that the difference is statistically not significant at 5% level (p>0.05).

b)    **Paramedics:**

|  | Response Score | |
|---|---|---|
|  | Q2 of 001 | Q5 of 002 |
| To a very great extent | 0 | 0 |
| To a considerable extent | 4 | 11 |
| To some extent | 14 | 19 |
| To a very little extent | 7 | 9 |
| Not at all | 0 | 0 |

CHI-square test carried out between their responses $\chi^2$ =1.27264, indicated that the difference is statistically not significant at 5% level (p>0.05).

5    Same question, 'enumerate in order of priority (i to v) the five given choices as a means of achieving professional competence and to counter redundancy caused by growth of medical knowledge?' was asked from three different groups mainly Policy makers, Trainers & Doctors.

a)    'Compulsory renewal of registration every 5 years'.

|  | Response score | | | | |
|---|---|---|---|---|---|
|  | P1 | P2 | P3 | P4 | P5 |
| Q17 of 001 | 15 | 0 | 3 | 1 | 6 |
| Q22 of 002 | 20 | 0 | 0 | 2 | 17 |
| Q17 of 003 | 22 | 0 | 19 | 0 | 242 |

CHI-square test carried out between their responses $\chi^2$ =103.3944, indicated that the difference is statistically significant at 5% level (p<0.05).

b)      'Through program of self assessment'

|  | Response score | | | | |
| --- | --- | --- | --- | --- | --- |
|  | P1 | P2 | P3 | P4 | P5 |
| Q17 of 001 | 0 | 7 | 11 | 7 | 0 |
| Q22 of 002 | 0 | 0 | 19 | 19 | 1 |
| Q17 of 003 | 0 | 0 | 48 | 235 | 0 |

CHI-square test carried out between their $\chi^2 =132.34$, indicated that the difference is statistically significant at 5% level (p<0.05).

c)      'A monthly news letter'

|  | Response score | | | | |
| --- | --- | --- | --- | --- | --- |
|  | P1 | P2 | P3 | P4 | P5 |
| Q17 of 001 | 0 | 0 | 3 | 3 | 19 |
| Q22 of 002 | 0 | 0 | 0 | 18 | 21 |
| Q17 of 003 | 0 | 89 | 107 | 46 | 41 |

CHI-square test carried out between their responses $\chi^2 =110.246$, indicated that the difference is statistically significant at 5% level (p<0.05).

d)      'Time based refresher course(s)'

|  | Response score | | | | |
| --- | --- | --- | --- | --- | --- |
|  | P1 | P2 | P3 | P4 | P5 |
| Q17 of 001 | 2 | 16 | 7 | 0 | 0 |
| Q22 of 002 | 2 | 37 | 0 | 0 | 0 |
| Q17 of 003 | 175 | 86 | 22 | 0 | 0 |

CHI-square test carried out between their responses $\chi^2 =85.69137$, indicated that the difference is statistically significant at 5% level (p<0.05).

c)      'Monthly on the job modular training at the place of work. On this day, all the routine activities such as outpatients, clinics etc, are cancelled in order that department modular training activities can take place. Each module contains one topic and the topic title is circulated a week before the session'.

| | Response score | | | | |
|---|---|---|---|---|---|
| | P1 | P2 | P3 | P4 | P5 |
| Q17 of 001 | 8 | 2 | 1 | 14 | 0 |
| Q22 of 002 | 17 | 2 | 20 | 0 | 0 |
| Q17 of 003 | 86 | 108 | 87 | 2 | 0 |

CHI-square test carried out between their responses $\chi^2$ =183.7265, indicated that the difference is statistically significant at 5% level (p<0.05).

6      Same question, 'What should be the maximum duration of a training program?' was asked from two different groups mainly Policy makers and Trainers.

a)      'Multipurpose Health Workers'

| Response Score | | |
|---|---|---|
| | Q9 of 001 | Q23 of 002 |
| 06 working days | 0 | 0 |
| 10 working days | 8 | 22 |
| 15 working days | 17 | 17 |
| ? days | 0 | 0 |

CHI-square test carried out between the responses of question No.9 from 001 (responses) and question No.23 from 002 ( responses )
$\chi^2$ =3.645265, the difference is statistically not significant at 5% level (p>0.05).

b)      'Assistant Surgeons'

| Response Score | | |
|---|---|---|
| | Q9 of 001 | Q23 of 002 |
| 06 working days | 13 | 20 |
| 10 working days | 12 | 19 |
| 15 working days | 0 | 0 |
| ? days | 0 | 0 |

CHI-square test carried out between their responses $\chi^2$ =0.003144, indicated that the difference is statistically not significant at 5% level (p>0.05).

c)      'Dy. CMOs, BMOs, DIOs, DHOs'

| Response Score | Q9 of 001 | Q23 of 002 |
|---|---|---|
| 06 working days | 8 | 17 |
| 10 working days | 0 | 0 |
| 15 working days | 0 | 0 |
| ? days | 17 | 22 |

CHI-square test carried out between their responses $\chi^2$ =0.859662, indicated that the difference is statistically not significant at 5% level (p>0.05).

e)      'Directors, Dy. Directors, Asstt. Directors, Medical Suptd., CMOs, etc.'

| Response Score | Q9 of 001 | Q23 of 002 |
|---|---|---|
| 06 working days | 7 | 15 |
| 10 working days | 0 | 0 |
| 15 working days | 0 | 0 |
| ? days | 18 | 24 |

CHI-square test carried out between their responses $\chi^2$ = 0.739101, indicated that the difference is statistically not significant at 5% level (p>0.05).

7      Same question, 'In-service training in our state should be the responsibility of the Health Department, Department of Medical Education, an NGO pr any other?' was asked from two different groups mainly Policy makers and Doctors.

| Response Score | Q14 of 001 | Q11 of 003 |
|---|---|---|
| Health Department | 12 | 13 |
| Deptt. Of Medical Education | 0 | 1 |
| NGO | 0 | 151 |
| i + ii | 0 | 118 |
| i + ii + iii | 13 | 0 |

CHI-square test carried out between their responses $\chi^2$ = 77.17196, indicated that the difference is statistically significant at 5% level (p<0.05).

8    Same question, 'Should the annual increment be linked with some credit points in Continuing Medical Education or in-service training hours a doctor receives every year?' was asked from two different groups mainly Policy makers and Doctors.

| Response Score | | |
|---|---|---|
| | Q16 of 001 | Q13 of 003 |
| Yes | 7 | 8 |
| No | 18 | 275 |

CHI-square test carried out between their responses $\chi^2$ =31.41906, the difference is statistically significant at 5% level (p<0.05).

9    Same question, 'Is there any definite policy Statement available for J&K Health Services on trainings that indicates the commitment of top management to cater to the in-service training needs of its staff?' was asked from two different groups mainly Policy makers and Staff working in IPP.

| Response Score | | |
|---|---|---|
| | Q4 of 001 | Q8 of 004 |
| Yes | 0 | 0 |
| No | 18 | 12 |
| I don't know | 7 | 3 |

CHI-square test carried out between their responses $\chi^2$ =0.32, indicated that the difference is statistically not significant at 5% level (p>0.05)