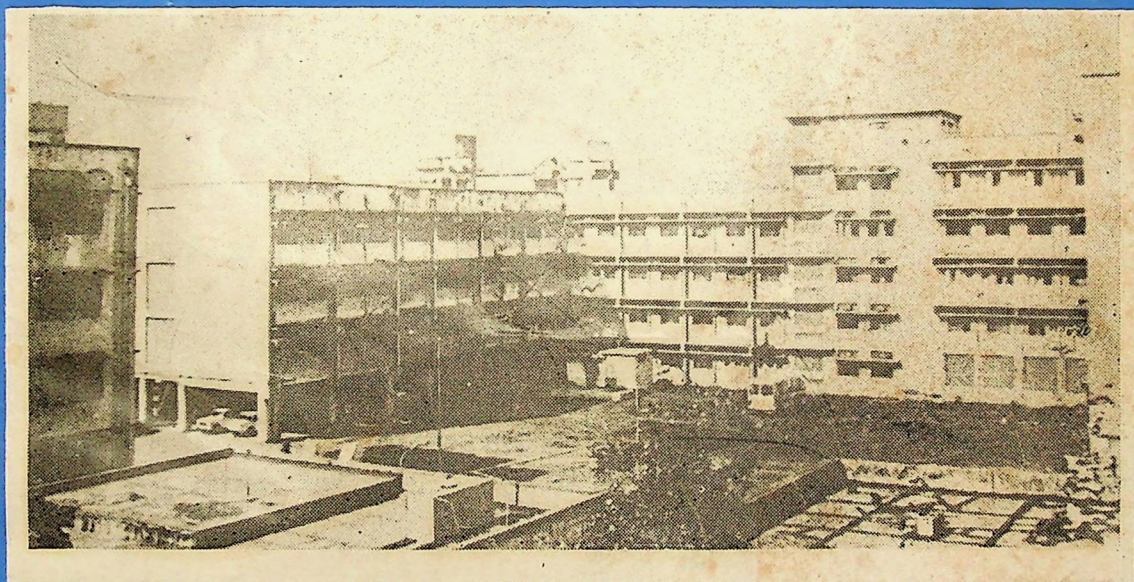


**THE INDIAN ASSOCIATION
FOR
ADVANCEMENT
OF MEDICAL EDUCATION
(I A A M E)**

**XXXIST
ANNUAL CONFERENCE**



Venue :

L. T. M. Medical College,

Sion, Bombay - 400 022.

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January 27th - 29th 1992

XXXIST ANNUAL CONFERENCE

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PROGRAMME FOR THE
XXXI ANNUAL CONFERENCE OF THE I.A.A.M.E., BOMBAY

JAN 27, 1992

0900-1000 REGISTRATION

1000-115 INAUGURAL SESSION

1115-1215 **Theme-I: New Educational
Technologies in Health Sciences.**

Chairpersons:
- Prof. G. Ram Reddy
- Prof. J. S. Bajaj

Keynote Address

**Dr. V.C. Kulindai
Swamy (IGNOU)**

Subtopics:-

- a) Computer assisted/
activated learning
- b) Distance learning
- c) Health manpower
management : principles and
practice

Dr. R.D. Lele
(Bombay)

Dr. A.W. Khan
(IGNOU)

Dr. P.V. Sathe
(Bombay)

1215-1315 **Theme-II: Research Strategies in
Education in Health Sciences**

Chairpersons :
- Dr. V.C. Kulindai
Swamy (IGNOU)
- Dr. P. Siva Reddy

Keynote Address

**Dr. P. Abeykoon
(WHO)**

Subtopics:-

- a) Research strategies in
medical education
- b) Research strategies in
dental education
- c) Research strategies in
nursing education
- d) Research strategies in
para-professional
education

Dr. L. Suryanarayan
(Vijayawada)

Dr. D.R. Shahani
(Bombay)

Dr. Mrs. Naina Potdar
(Bombay)

Dr. (Mrs.) Bharati Bellare
(Bombay)

1315-1400

LUNCH

1400-1515

Theme-III : Issues amenable to further research in Students' Selection to professional and para-professional courses.

Chairpersons :
- Dr. B. Ramamurthy
- Dr. Haribhai Patel

Keynote Address :

**Dr. S. N. Deshmukh
(Bombay)**

Subtopics:-

- a) Examination system for Students' selection at State level for Pvt. colleges/Govt. colleges.
- b) All India Entrance Examination for undergradute and postgraduate medical courses :
format, content, evaluation.
- c) All India Examination for non-formal stream of postgraduate studies
Monitoring and Review mechanisms
- d) Role of nominations in students' selection & their performance

Dr. A. Zachariah
(Ludhiana)

Dr. Sridhar Sharma
(New Delhi)

Dr. V. Natrajan &
Prof. J.S. Bajaj
(New Delhi)

Dr. Haribhai Patel
(Ahmedabad)

1515-1530

TEA

1530-1630

Theme-IV : Research Strategies in in curricular Development

Chairpersons :
- ~~Dr. Lalita Kameswaran~~
- Dr. C. Anand

Keynote Address

**Dr. (Mrs.) S. S. Deshmukh
(Bombay)**

Subtopics -

- a) Medical Education
- b) Dental Education
- c) Nursing & Para-professional Education

Dr. Praveena Shah
(Bombay)

Dr. R.K. Bali
(New Delhi)

Dr.(Ms.) Sally A. Bisch
(WHO)

1630-1715

**Dr. Sir A. Lakshmanaswamy
Mudaliar Oration (1992)**

Chairpersons :
Prof. J. S. Bajaj
Dr. B.K. Maini

Subject : Progress in Medical Education through the times & life of Sir A. Mudaliar

**Dr. A. Venugopal
(Madras)**

JAN 28, 1992

0900-1000 Dr. P.N. Wahi Lectureship
Oration (1992)

Chairpersons :
- P.B. Desai
- B.S. Raheja

**Subject : National Health Planning :
Perceptions and Perspectives**

**Prof. J.S. Bajaj
President, IAAME**

1000-1100 **Theme-V : Problem Based, Community
Oriented Learning : Conceptual
and Operational Issues**

Chairpersons :
- Prof. U. K. Sheth
- Dr. P. C. Reddy

Keynote address

Dr. C. Anand
~~Dr. Lalita Kameshwaran~~
(Madras) (New Delhi)

Subtopics -

~~a) Medical Education~~

~~Dr. C. Anand~~
(New Delhi)

~~a) Dental Education~~

Dr. Jakhi
(Bombay)

b) Nursing Education

d) Para-professional education

Prof. Manik Shahani
(Bombay)

1100-1115

TEA

1115-1200 Dr. N.G. Gadekar Oration

Chairpersons :
- Prof. J.S. Bajaj
- Dr. Mrs. S. Grover

**Subject : The Role of Education in
Cancer Control Programme**

**Dr. Jayasree Roy Chaudhary
(Calcutta)**

1200-1245 **Theme-VI : Interlinkages between
Education in Health Sciences and
Delivery of Health Care.**

Chairpersons :-
- Dr. N.H. Antia
- Dr. R.A. Bhalerao

Keynote Address

**Dr. J.P. Gupta
New Delhi**

Subtopics -

a) Health Management
Information System(s)

Dr. N. Seshagiri
(New Delhi)
&

b) Performance evaluation and Methods
of feedback into education system for
remedial action.

Dr. G. Bose
(NIC, New Delhi)

Evaluation of professional
Competencies

Dr. K.R. Manelkar
(Bombay)

Evaluation of basic competencies

Mrs. M. R. Chaukar
(Bombay)

1245-1330 Dr. K.L. Wig Oration

Chairpersons :
- Prof. J.S. Bajaj
- Dr. Vidya Acharya

Subject : Current Status of Renal
Transplantation

Dr. K.S. Chugh
(Chandigarh)

1330-1415

LUNCH

1415-1500 Dr. K.N. Rao Oration

Chairpersons :
- Prof. J.S. Bajaj
- Dr. L.H. Hiranandani

Subject : Scientific Temper In
Medical Education

Dr. B. Mukhopadhyaya
(Patna)

1500-1515

TEA/COFFEE

1515-1715 Preferred papers including free papers
(Selection of best paper for
Prof. J.S. Bajaj Award)

Chairpersons :
Dr. P. K. Khosla
Dr. Shridhar Sharma

1745-1930 Business Committee Meetings of I.A.A.M.E.

JAN 29, 1992

0900-1000 Annual General Body Meeting of I.A.A.M.E.

1000-1015 TEA/COFFEE

1015-1200 Students' Debate: "The quality of medical education in India will not improve till teachers
function on a full time basis."

Moderators : Dr. G. B. Parulkar & Dr. (Mrs.) S.S. Deshmukh

1200-1300 Valedictory Session

1200-1215 Conference Resume & Recommendations

Dr.(Mrs.) S.S. Deshmukh

1215-1220 Award of Prizes

Dr. B.S. Raheja

1220-1240 Valedictory Address

Dr. R.K. Gandhi

1240-1245 Vote of thanks

Dr. (Mrs.) S.A. Nanivadekar.

overcome the plague and make our citizens literate faster than what is achieved today. No longer can our teachers and students on whom large sums of national money are invested ignore this task.

The Speaker then referred to the Health Survey and the Planning Committee Report of Dr. Mudaliar and traces the achievements of the Government of India during the Seventh Plan period. To achieve the goal, let the Govt. institutions, private and voluntary organisations co-ordinate to play an important role in the health care delivery in India. With the financial constraints, the Speaker feels that Govt. should invite all private medical colleges, private hospitals, institutions and general practitioners in each district, taluka and rural areas to give a helping hand to improve the health status of the Indian masses. There is not enough medical manpower in the Govt. medical institutions to tackle this massive problem. The Govt. must invite arts, sciences and engineering colleges, medical institutions, medical practitioners and specialists to give a helping hand at the district, taluka and primary health centres level on a honorary basis to combat the difficulties and drawbacks which are proving to be an hindrance to the formulation and implementation of the new and comprehensive health and education programmes that are being drawn for the 8th Plan period.

The Speaker then sums up that the plan investment on health has increased from Rs.65.20 crores in the 1st Plan to Rs.6449 crores in the 7th Plan. But the present investment on health has totally decreased. Failure to achieve the targets during the past four decades is mainly due to inadequate allotment of funds. Atleast during the 8th Plan, the health care package must be given due importance.

Dr. K. N. Rao Oration (1992)

SCIENTIFIC TEMPER IN MEDICAL EDUCATION

By DR. B. MUKHOPADHAYA,
F.R.C.S.(Eng.), M.Ch.Orth.(L.Pool), F.A.M.S.

Abstract

Medicine is as old as recorded history. It has little justification except as practice. All traditional systems of medicine served society in their own times.

Practice of medicine embodies two purposes. Hygia, the Greek Goddess represent the preventive aspects of health care. Aesculapius represent curative health care. They have their counterparts in traditional Indian medicine also.

What distinguishes all ancient system of medicine from modern medicines is the introduction of knowledge derived from fundamental sciences and their by-product, i.e., technology, in the practice of the art of medicine both for prevention and for care and cure of patients.

Medicine serves society in reducing the quantum of sufferings. It cannot eliminate suffering or death.

To appreciate the role which science-based medicine can play one must realise that both the profession and the public has to develop a scientific outlook. Such outlook towards medicine can only be achieved through the educational process which prospective entrants to the profession has to undergo.

How little do we realise that licensing of practice after adequate and appropriate educational experience is the means by which society tries to ensure that practitioners conform to rules and regulations prescribed by society.

Thus society indirectly controls both medical education and practice. In this process there is a dynamic but some-what conflicting relationship between society and the profession. These aspects are to be discussed in this presentation.

INVITED LECTURES (ABSTRACTS)

1. GRASSROOT LEVEL FUNCTIONARIES IN REHABILITATION

MRINALINI A. CHAUKAR

(REGIONAL REHABILITATION TRAINING CENTRE,
BOMBAY - 400 034.)

Our National health care programme has reached to the grassroot level through a network of District hospitals, Primary health centres and community health workers. Rehabilitation, though an integral part of the health care has not yet reached the grassroot level.

District Rehabilitation centre scheme which has been launched by Ministry of Welfare is an attempt to decentralise the services of rehabilitation so as to reach to the Doorstep of the disabled. In this experimental scheme three levels of Multipurpose workers were locally selected and trained in various disciplines of rehabilitation. Anganwadi workers and community health workers were also trained. The multipurpose workers were placed at primary health centre rehabilitation units and to give them professional support fully equipped District Rehabilitation Centres were established. The paper discusses about the various training programmes conducted for paraprofessionals in the field of rehabilitation and their performance.

2. PERFORMANCE EVALUATION AND METHODS OF FEEDBACK INTO EDUCATION SYSTEM FOR REMEDIAL ACTION.

K. R. MANELKAR.

(K. E. M. HOSPITAL & G. S. MEDICAL COLLEGE, PAREL,
BOMBAY - 400 012.)

Any medical center must value its human resources and believe that all doctors deserve to receive an objective and timely performance appraisal. The development of its human resources is the dynamic element that will shape the future of medical centers in this country. Performance ap-

praisal should be the preliminary step in a process of "Performance Management" that should encompass skills assessment, individual career discussions, performance planning and overall career development. The performance management process should enhance career growth for each individual so that all can benefit personally as they help the institution to achieve its goals.

The basic duties of a doctor in Medical College & Hospital consist of clinical care, medical education and medical research. Performance appraisal involves, in the first instance, a clear and unequivocal consensus on the job components and job performance standards. This may be arrived at by the employer alone (employee must be made to understand and accept these) or after a joint discussion between the employee and employer. Performance standards may be behaviour-based or achievement-based and must incorporate the four dimensions of job-knowledge, quantity of work, quality of work and customer service orientation. Evaluation of research performance, especially, should have well-defined norms for weightage to different publications, presentations, lectures, symposia, workshops etc. The performance standards should be realistic and achievable, slightly above average, subject to the change and indicative of a fully trained and competent incumbent. At the 12 month point, the actual performance appraisal takes place. The employee is allowed to "Self-assess" his performance. This self-assessment can be a vehicle for discussion along with the supervisor's assessment and differences in the two can be reviewed. The appraisal should be graded as (1) does not meet standards (2) partially meets standards (3) meets standards (4) occasionally exceeds standards (5) consistently exceeds standards. The appraisal should be followed by the "Performance Discussion" wherein goals for the next review should be established together by employee and supervisor. Four types of goals should be addressed for the employee viz. (1) goals to build on current skills, knowledge and abilities (2) goals to improve in areas of inadequate performance (3) goals linked to departmental goals/projects (4) goals related to career development.

Outstanding performers may be targeted to develop them for future assignments so that the employer has a pool of developed resources to meet the department's objectives.

Thus, performance evaluation is a scientific and serious process which can reap rich dividends for a medical institution by establishing and perpetuating high standards of health care, teaching and research.

3. RESEARCH STRATEGIES IN PARAPROFES- SIONAL EDUCATION - PHYSICAL THERAPY.

BHARTI BELLARE

(SCHOOL OF PHYSICAL THERAPY FOR GRADUATE AND POST
GRADUATE DEGREE COURSES, L. T. M. MEDICAL COLLEGE,
SION, BOMBAY - 400 022.)

Today, as such the Physical Therapy profession is no more considered as paramedical profession. It is recognised as an independent profession among other allied Medical or health sciences or Alternate Medicines.

Since Physical Therapy plays a role in practically all the possible disciplines of Medicine, there is no limit for research. However, following are some of the major aspects in which there is a tremendous scope for research.

1. Research based on basic / foundation subjects:
 - (A) Applied Anatomy - particularly the kinesiology and Biomechanics.
 - (B) Applied Physiology - (i) Exercise physiology, on which the therapeutic exercise is based.
(ii) Neurophysiology- Research can be done on various neurophysiology principles on which the therapeutic mode can be based for the management of neurologically handicapped patients. (c) Electro Physiology - In addition to electro diagnostic studies there is tremendous scope for research in this field for the analysis of objective studies of Kinesiological assessments such as gait analysis.
 - (C) Neuropsychology - A challenging field, because every patient seeking physical Therapy treatment for pain and physical handicaps needs psychological assessment in details.
2. Research in specialties/ superspecialities:

- A. Orthopedics - (a) Sports Medicine - This field is growing very fast and has tremendous scope for research. (b) Rehabilitation in (i) Hand (ii) Spine (iii) Foot.
- B. Geriatrics - This field is not very well established as a separate 'Health Care Unit' in India - Hence there is an excellent scope for research.
- C. Prosthetics & Orthotics.
- D. Acute Respiratory care - Today, Physio Therapist is recognised as an essential member in the team of Intensive Care Unit'.
- E. Research in cardiac respiratory rehabilitation - This field is new by developing by hence has tremendous scope.
- F. Rural Rehabilitation.
- G. Research in Assessment techniques - The Assessment done by the Physical Therapist is quite different from the Doctor, since it is based on 'Function'.
- H. Electro Therapeutics - This is the important mode of Physical Therapeutics, other than physical exercise. One can link this with the field of Technology (Medical Electronics which is as such included as a foundation subject in the undergraduate curriculum of Physical Therapy) for research, particularly for the objective assessment of some subjective parameters such as 'Pain', Hysterical loss of function, etc.
- I. Research on principles of Physical Therapeutics based on Yoga, Acupuncture/ Acupressure, etc.

4. RESEARCH STRATEGIES IN DENTAL EDUCATION IN INDIA

D. R. SHAHANI

(NAIR HOSPITAL DENTAL COLLEGE, BOMBAY - 400 008.)

As we look around us, we cannot help but realise that we are living in changing times. The pattern of life is changing.

society is changing, the expectations of life are rising and with the increase of health care, sanitation and relief from communicable diseases, relative improvement in general health shows glaring contrast to the deteriorating situation in the field of oral health and dental diseases. Health knowledge contributes to good health, but unless proper attitude, habits are developed and put into practice, little will be gained.

Dentistry today faces an environment that clearly requires changes in dental education. Future dentists must be prepared to deal with new patterns of dental disease, revised manpower requirements, and new developments in the nature of dental practice. The dental education system can best adapt to this situation by initiating a process of planned change. A well-developed literature in this area provides both a theoretical framework and a practical approach that the dental education system can follow in its planning process.

During early 20th century, Dentistry was entirely in the hands of unqualified dentists until a full-fledged dental college was started in 1920 at Calcutta and in 1933, Nair Hospital Dental College at Bombay. The Govt. of India in 1947, had appointed BHOORE Committee and based on their recommendations, a historic Dental Act, 1948, was introduced which remains as the turning point in the history of Dental Education in India. Dental practice and dental education are closely bound to each other and serve the needs of the society. Curriculum of the education requires constant evaluation. One factor of constant concern, review and argument is the competency of the dental education imparted and its relevance in Indian environment. One cannot just pick and choose from the western countries and push and wage their programmes into those of ours. A greatest challenge then in our country, is to design a system that is deeply rooted in the scientific method, yet is profoundly influenced by the local health problems as well as by the social, cultural and economic settings in which they arise. We need to develop methods and tools of instruction which have relevance to the resources and cultural pattern of each area.

That there is discontent with the present system of Dental education, its organisation, presentation and contents, not only in India but all over the world, is being borne out by a large number of conferences, symposia, institutes and seminars that have been held within last few years. The cause of this discontent could probably be that in the training of our doctors, we have been following an educational policy whose purpose has never been clearly defined, understood

or universally accepted by the educators, the students and the public. The accepted need for re-orientation of our educational programmes has been highlighted by the social change in the country during the last two decades, leading to demand for better medical care and preparedness of the future doctors to handle completely the medical/Dental problems created by ever increasing specialization of knowledge.

Research plays a very important role if the geometrical progress of curriculum enhancement is required. Balanced development of dental sciences requires continuous inputs of the best possible expertise, intensive research, and endeavours with the aid of latest scientific and technical facilities coupled with the application of requisite interdisciplinary advances. Western world has undergone a dynamic change in maintaining oral health and also in dental research strategies, hence it is important to evolve the research strategies in the practical aspect of dental curriculum and also to achieve health for all by 2000 A.D.

In research lies the key to all the problems and the curriculum development must gain its benefits. It is left to us to go out and determine the avenues of improvements. Goals of education in a developing country like ours, must be clearly defined at the outset.

In view of the widespread interest in health, and the rapidly changing scientific and social science of medicine, it has almost become obligatory on Dental educationists to define the attributes, responsibilities and educational needs of the Dental surgeon of the future.

5. RESEARCH STRATEGIES IN NURSING EDUCATION

DR. NAINA POTDAR

(L. T. COLLEGE OF NURSING, S. N. D. T., WOMEN'S
UNIVERSITY, CHURCHGATE, BOMBAY - 400 020)

INTRODUCTION

The ultimate goal of nursing profession is to establish a scientific base of knowledge, fundamental to the practice so that the standard of patient care improves and promotes quality care with a higher degree of excellence. Nursing research is concerned with systematic study and assess-

ment of nursing problems and finding ways to participate effectively in health care delivery system. The early focuses of research in nursing were in the areas of nursing education and administration. Attention is now being to nursing research in the field of nursing practice and it has implications for nurse educators, nurse administrators and nurse practitioners. Research is one of the primary means of documenting the efficiency and effectiveness of nursing education and nursing research

Importance of Research In Nursing Education

Research is needed as change in nursing practice is required by the introduction of new medicines, equipments and treatments related to care of people/patients. Research in nursing education is needed to discover new facts, to provide factual descriptive picture of the situation, uncover problems and investigate possible causes. Research in nursing education is imperative for evaluating changes and past achievements, an aid in showing the way for future progress.

Historical Background

Research in Nursing is as old as the profession itself. Florence Nightingale was described as a reformer, reactionary and researcher. Her research has influenced health care in general, and nursing more specifically. She is most noted for her data collection and statistical analyses during the Crimean War. She identified the need to gather data on the environment to determine the influence on patients health (1859).

Major advances were made in nursing research during 1950. Research got a high priority with the strong support of such nursing leaders as Henderson and Abdellah. Educational studies were conducted in the 1950's and 1960's that influenced nursing research. In 1953, as Institute of Research and Service in Nursing Education was established at Teacher's College, Columbia University, which provided learning experiences in research for doctoral students.

Miss Margaretta Craig, Principal of College of Nursing, Delhi University was determined to start nursing research activities in India from 1955. Dr. Edith M. Buchannan, Vice-Principal, College of Nursing, Delhi through WHO fellowship, completed her doctorate in Education degree programme from Columbia University, New York in 1953 and then she as a principal of the above college succeeded in

establishing the long cherished Master of Nursing degree programme in October, 1959. Today, this programme is offered in 8 institutions and the programme requires a research project to be completed by each candidate as a partial fulfillment towards the Masters degree in Nursing.

The Research Strategies In Nursing Education

The research approach in the area of nursing education may be as follows :-

- 1) Quasi - experimental research
- 2) Ex post - facto research
- 3) Historical research
- 4) Development research
- 5) Correlational research
- 6) Evaluative research
- 7) Action research

Above mentioned strategies may be used to conduct research in the area of nursing education and there are multidimensional aspects that can be studied. These aspects determine ultimately preparation of nurse practitioners. The education of nurses' has implications in the following are as:

1. Students

- Selection of students
- Curriculum development
- Teaching / learning process
- All round development of students / socio-cultural impact.
- Preparation and use of learning packages
- Evaluation and performance appraisal
- Records and reports

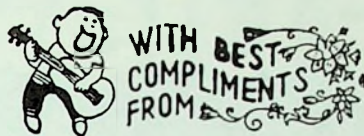
2. Faculty

- Recruitment, selection and placement
- Staff development programme
- Performance appraisal

- Higher education and research
 - Motivation & morale
3. Environment conducive to effective teaching
- Audio visual aids
 - Procurement and maintenance of equipment
 - Setting up of a laboratory
 - Selection of clinical field
 - Co-ordination with various organisations for students' all round development.
 - Institutional climate.
4. Evaluation and feedback on the training programme from
- Society
 - Hospital
 - Schools
 - Industries
 - Welfare Centres

There is an urgent need to prepare adequate nurse researchers to conduct research by using various strategies so that the standard of nursing education improves. The subject of Research Methodology is taught to nursing students at degree and post graduate level and this in turn will prepare nurses to carry out research and increase the relevance to nursing practice.

Tomorrow's nursing research will continue to emphasize studying the interaction of physiological and psycho-social mechanisms in human experiences of stress and coping, evaluations of nursing interventions, the transfer of research findings into textbooks and practice, a focus on high-risk and under-served group such as elderly and minorities and the creation of a body of scientific nursing knowledge.



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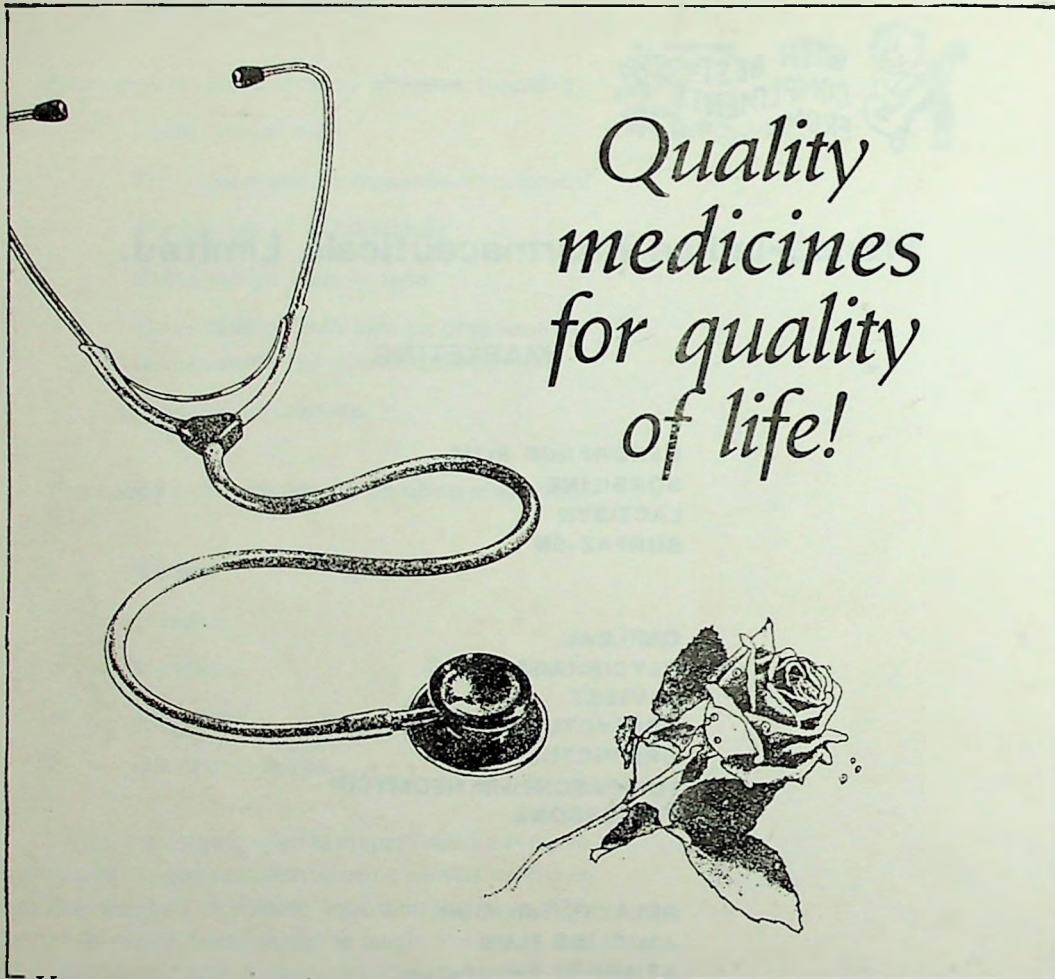
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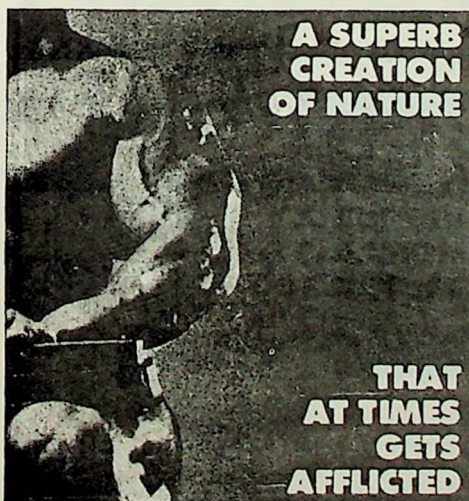


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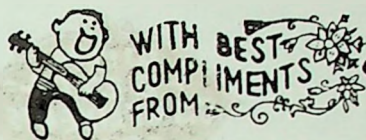
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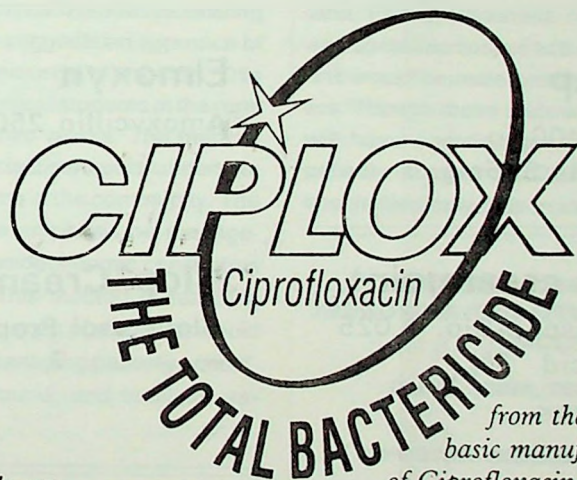
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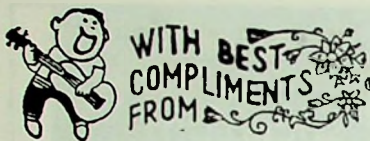
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FREE PAPERS : ABSTRACTS

1 COMMUNITY BASED CLINICAL TEACHING A WAY TO REORIENT MEDICAL EDUCATION

M. B. KHAMGAONKAR

(GOVT. MEDICAL COLLEGE, NANDED,
MAHARASHTRA 431 601.)

To increase the output of medical personnel teaching has to be relevant to existing health problems in a community. The quality of medical care provided in a community is directly related to the knowledge and skills of health manpower in dealing with common health problems existing in a community. The present paper suggests an approach of teaching clinical subjects with community orientation. This can be done by posting final year medical students at the rural field practice area for a period of two weeks. The medical teachers from various clinical specialties would undertake teaching of common clinical problems in the community. The clinical teaching should have more emphasis on management of problems within current socioeconomic constraints rather than a bookish approach. This method of teaching apart from increasing the clinical acumen of students, would also inculcate in them the habit of managing patients considering their socioeconomic background, and available resources.

2

HEALTH MANPOWER MANAGEMENT AT PRIMARY HEALTH CENTRE : A NEED FOR ORGANIZATIONAL RESTRUCTURING

M. B. KHAMGAONKAR

(GOVT. MEDICAL COLLEGE, NANDED,
MAHARASHTRA 431 601.)

Lack of proper management practices at primary health centre level, leads to inability in achieving stated objectives. The distribution of functions among health personnel is not clearly defined. The scope of activities are not clearly demarcated and job descriptions at various levels not clearly defined. The organization at this level usually lacks in basic principles of management such as authority, unity of

command, specialization, etc. The article proposes a modified organizational structure within the present manpower resources. The health manpower at PHC level can be divided into two independent units e.g. family welfare and public health. These units should have separate funding and will be headed by medical officers specialized in family welfare (obstetrics) and public health respectively. The family welfare unit would be responsible for implementing family welfare and maternal-child health activities. The incharge medical officer of this unit may be assisted by female health assistants and female health workers at sub-centre level.

The public health unit would be responsible for implementing various national programmes (Leprosy, Malaria, Filariasis, Blindness control, etc.), disease surveillance and epidemic control activities. The paramedical staff in this unit would be male health assistants and male health workers. Though these units will have separate functioning, they will have coordination for policy making, field visits and patient management. Disintegration of health manpower in to specialties may help in increasing the efficiency.

3 INVOKING HAWTHORNE EFFECT FOR IMPROVING QUALITY OF MEDICAL EDUCATION: CMCL EXPERIMENT.

DALJIT SINGH, TEJINDER SINGH, M. V. NATU,
ALEX ZACHARIAH

(CHRISTIAN MEDICAL COLLEGE, LUDHIANA 141 008)

There has been a widespread concern to improve the quality of medical education. Out of three components that go to form the teaching-learning system, i.e. student, teacher and curriculum, an attempt was made to induce behavioral and attitudinal changes among teachers at Christian Medical College, Ludhiana. It was attempted to invoke Hawthorne effect to attain this aim. This communication described the basis, methodology and results of our endeavour.

Simply stated, Hawthorne effect means that merely observing a person changes his behaviour.

The exercise was limited to entire teaching faculty of pre-and para-clinical sciences and invoked 33 teachers. The

Principal explained the purpose of the exercise to the faculty and assured them that the results will not be used for any administrative purpose. During second phase, the entire class consisting of 33 students for pre-clinical and 38 students for para-clinical departments, rated the teaching and counselling skills of teachers on a pre-validated Likert type scale. Based on their ratings, two indices, Students acceptability index (SAT) and Counselling ability index (CAI) were calculated.

The results were made known to the faculty without disclosing the identity of the teachers concerned. However, a provision was kept for making the individual deficiencies known to those who asked for it. No further input was provided at this stage.

The entire exercise was repeated after six months for the same set of teachers by the same batch of students. The SAT and CAI were demonstrated a significant improvement (0.05) over the previous results. This was true for all the teaching departments.

4

INNOVATIONS IN MEDICAL EDUCATION : CMC EXPERIMENT

ALEX ZACHARIAH, PREMA ZACHARIAH, TEJINDER SINGH,
DALJIT SINGH, M. V. NATU

(CHRISTIAN MEDICAL COLLEGE, LUDHIANA 141 008.)

Change is a very sensitive process. Managing change in any field can be a very tedious and difficult endeavour. For bringing about a lasting and functional change one has to rely on 'evolution' rather than on 'revolution'. Before attempting to change any system it is essential that we have a thorough knowledge of the existing components of the system and how these components interact with each other.

We have been working at CMC Ludhiana towards improving the quality of medical education. Our main areas of intervention have been the medical teacher and the instructional methodology.

The medical teachers have to be prepared for a change if these methods are to succeed. This communica-

tion describes our experiences with unfreezing - change - refreezing cycle of Lewin. Unfreezing was induced by a variety of techniques, some of which will be described. Having prepared the teachers for change an input was provided in the form of workshops on medical educational technology by our own faculty. Further inputs were provided to consolidate the change so induced. Evaluation was done at all levels by prevalidated instruments and statistical methods employed wherever needed.

In addition an attempt was made to develop a core group by providing them necessary training in various related aspects of education and management and the results obtained so far have been very encouraging.

5

COMMUNITY ORIENTED, ISSUE-BASED LEARNING ACTIVITIES (COIBLA) AND THE EFFECT ON STUDENTS ATTITUDES.

PREMA ZACHARIAH, ALEX ZACHARIAH,
TEJINDER SINGH, M. V. NATU

(CHRISTIAN MEDICAL COLLEGE, LUDHIANA 141 008)

A new paradigm, Community Oriented Issue Based Learning Activities (COIBLA) is proposed in place of Problem-Based Learning (PBL) pedagogy for Health Sciences education and curriculum, for developing countries like India. "An issue is an event, phenomenon, statement of problem about which there are differing points of view and which require decision and action." Health issues are multipolar and the term "Issue" may be more comprehensive and appropriate when applied to all complex communities. COIBLA combines Community Orientation with issue based learning activities and thus has a larger base and frame of reference.

The department of Social and Preventive Medicine CMC is presently field testing COIBLA in a six month feasibility study on child survival in an urban slum cluster as an educational experiment. The resulting effects of this activity on students attitudes have been methodically studied and shall be reported and discussed.

DISTANCE LEARNING : IS IT SUITABLE FOR MEDICAL EDUCATION?

TEJINDER SINGH AND ALEX ZACHARIAH

(CHRISTIAN MEDICAL COLLEGE, LUDHIANA 141 008.)

Distance education (DE) appeared on the educational scene as a wanton offspring of traditional education and its emergence was necessitated by the socio-cultural political compulsions. Beginning as 'Penny Tuitions' in 19th century it has made rapid strides and has established it as a cost-effective and useful mode of education. As compared to correspondence education, which relies only on print medium, Distance Education uses a multi-media approach.

In common usage DE is seen as a means of educating only failures or educational rejects. This is not true. We concur with the view of Wedemeyer (1976) who views DE as a means of independent study and stresses its suitability for the off-campus as well as for the on-campus learner.

For the off-campus learner DE has tremendous utility by way of continuing education. It has been well documented by research all over the world as well as at IGNOU, New Delhi, that it is possible not only to cover the cognitive issues but also psychomotor and affective issues. Establishment of Medical Open University will go a long way in fulfilling this need by employing a multi media mix as well as by establishing a network of regional and local centres.

The other equally important use of DE is for on-campus learner by allowing him autonomy. The learner can set his own educational goals and explore various alternatives for attaining them. This will also free the teachers from classroom duties allowing them more time for research and patient care.

DE has the potential to achieve the goals of educational system in a true way - by teaching the learner how to learn and to value learning for its own sake. Problem-based learning owes a lot to DE by utilising many of its underlying theories and principles but there is no reason why even traditional education can't make the same demands from DE.

MEDICAL EDUCATIONAL WORKSHOPS AND THE PARTICIPANT PROFILES

M. V. NATU

(CHRISTIAN MEDICAL COLLEGE, LUDHIANA 141 008)

Workshops on medical educational technology are being organised these days on local institutional, regional, national and international levels. In general such workshops create a good atmosphere for active learning and thinking about educational process and philosophy. Mostly workshops are concerned with necessary changes to be introduced in medical education and in the least provide a good change from the routine activities of medical education today.

The group of workshop participants project an interesting picture.

Some observations about the different types of personality profiles, e.g. :

1. The keen learners
2. The grudging admirals
3. The pundits and mahapundits
4. The space travellers
5. The cactus lovers

shall be presented and discussed.

Such observations may help in the development of better understanding among workshop organisers, faculty and participants. This would help to place matters in proper perspective, would also facilitate learning and make the task of workshop faculty easier and make the workshops more meaningful and cost effective.

SMALL GROUP LEARNING BY OBJECTIVES : (SGLO) - AN EXPERIMENT IN DISTANCE LEARNING FOR ON-CAMPUS STUDENTS

M. V. NATU, TEJINDER SINGH, DALJIT SINGH,

ALEX ZACHARIAH

(CHRISTIAN MEDICAL COLLEGE, LUDHIANA 141 008)

Distance learning encompasses within its fields not only education for the off-campus learners and educational rejects but also for the on-campus learners. An important component of this philosophy is the concept of autonomy to the individual learner (Wedemeyer 1976). The 'distance' does not refer to the spatial distance between the teacher and the learner - rather it is a function of degree of 'dialogue' and 'structure' (Moore 1978).

An attempt was made at CMC, Ludhiana, to introduce the concept of distance learning for regular students in the department of pharmacology and the methodology was termed 'Small Group Learning By Objectives' (SGLO). This involved completely doing away with lectures as the mode of imparting instructions. Rather, the students were provided a list of objectives and given the freedom to choose ways and means to attain those objectives. Teachers acted as mere facilitators.

The method was introduced mid-term so that the same batch of students has the experience of both methods - traditional and SGLO - by the same set of teachers. At the end of the year, reactions of the students were assessed on six basic themes by a prevalidated Likeart scale and included - better retention, development of study skills, autonomy in studying, interpersonal relationship, problem of weak students and degree of efforts involved. In addition, a score called the Motivational Potential Score (MPS) was also calculated for both methods.

SGLO was rated significantly higher on all six themes. MPS was also significantly more. There was no difference in the ratings of higher, middle or lower ability group students. Students in general rated SGLO as an effective method.

COMMUNITY HEALTH AWARENESS AMONG FRESH MEDICAL GRADUATES OF BOMBAY

SHEELA RANGAN AND MUKAND UPLEKAR

(FOUNDATION FOR RESEARCH IN COMMUNITY HEALTH,
84-A, R. G. THADANI MARG, WORLI, BOMBAY - 400 018.)

Against the background of the much discussed and well recognized need for reorientation of medical education, to make it more responsive to the health needs of the community, a study of 342 fresh medical graduates commencing their internship training in one government and two municipal medical colleges in Bombay was conducted. The objective was to assess a fresh intern's awareness about some essential aspects of community health care. A questionnaire was administered to probe into their knowledge about basic health information of the country, their perception of the concept of Primary Health Care and of some major public health problems, and their awareness about the practice of rational prescribing and use of essential drugs.

The study highlights the apathy about the subject among the doctors in the making, gaps in the knowledge and awareness of some basic concepts of community health among the fresh interns, and the need not only to effect curricular changes but also to effectively assess whether curricular changes alone would facilitate making of a desirable doctor.

RESEARCH STRATEGIES IN MENTAL HEALTH CURRICULUM, SOME OBSERVATIONS

V. N. RAO

(NIMHANS, BANGALORE 560 029.)

In discussing the issues related to organizing mental health services in developing countries, the importance of research is highlighted (W.H.O.: 1975). Likewise in implementation of National Mental Health Programme of India, (NMHP : 1982), the importance of manpower training and research inputs are emphasized. In the education and training of mental health professionals - psychiatrists, psychologists, and social workers the focus on research is given high priority. In their academic programmes leading to the award of degrees of M.D., M. Phil-Psychology and M. Phil-Psychiatric Social Work, it is expected that trainees in the respective

disciplines select their topic of their interest and do a systematic investigation and report the findings in the form of thesis or dissertations, which are submitted to the Universities.

In order to understand the research focus as given by the post-graduate trainees, an attempt was made to make use of the technique of content analysis of the available research reports. The analysis mainly focus on the research methodology adopted by the trainees-areas of research sampling size, sampling strategies, tools used, methods of analysis- and allied aspects.

Based on this analysis suggestions are offered for the purpose of making the research efforts more appropriate and meaningful to the mental health needs and problems of the countries. It also covers the priorities of research components in the field of Mental Health in developing countries in general and India in particular.

11

HIPPOCRATIC OATH AND THE MEDICAL PROFESSIONALS

R. CHOUDHRY, S. KAKAR, A. TULI, & C. ANAND

(DEPARTMENT OF ANATOMY,
LADY HARDINGE MEDICAL COLLEGE, NEW DELHI)

The Hippocratic Oath is still taken in most medical colleges of India during convocation, after the completion of internship. It is an abbreviated version of this oath that is recited. In most instances the role of this traditional oath pertaining to ethics in medical professional is unclear. It is an unfamiliar ritualistic recitation the outcome of which is that little is retained by the residents.

Keeping in mind the importance of this sacred oath it was deemed fit to carry out the present study on the role of the Hippocratic oath. A total of 75 medical graduates were interviewed, of which 35 were residents, 30 faculty members and 10 general practitioners, to assess the knowledge interpretation and impressions of the oath. We tried to elicit the recall of Hippocratic Oath, its principles, utility in the present context and modifications suggested, if any, were noted. The question of whether the oath should be taken was reviewed. It was not surprising that most of the subjects could only recall a few words here and there. The principles could be vaguely and inadequately worked out. Most however did not want the

oath to be abandoned. Suggestions were made to holding of informal seminars on medical ethics, possibly at yearly interval, to familiarize graduates to this oath. A collective effort of the medical student educators as well as graduates is required for revival of meaning of this age old promise that a healer makes to the society.

12

DECLINING STANDARDS OF MEDICAL SKILLS DUE TO ENTRANCE EXAMINATION TO POST-GRADUATE COURSES

A. TULI, R. CHOUDRY, & C. ANAND

(DEPARTMENT OF ANATOMY, LADY HARDINGE MEDICAL
COLLEGE, NEW DELHI - 110 001)

India is facing a major crises in health care systems compounded by its vast population and general growing consciousness of the people. In 1968 with the Indo-Pak border crises the government decreased the time for medical studies by six months and were incorporated with internship. This coalition gave a greater time for the qualified doctor to interact with patients reach diagnosis counsell and advise about preventive and community medicine and treat. This was appropriate strategy but got marred by the diversion of interns and housemen to qualify for a series of post-graduate entrance examinations.

These tedious and exhausting but comprehensive examinations leave them with little time to learn clinical procedures and organisational and communication skills. These critical years are the beginning of a full time clinical contact and is associated with greater responsibility. In this period theoretical knowledge is transformed into practical work on live models which is the aim of the hard stressful educational programme.

Literature revealed that long hours of duty to be performed by the junior residents results in emotional stress resulting in "Pre-residency syndrome". Inadequate practical training to junior residents has resulted in lowered standards of patient care which can be improved by making innovations in medical curriculum of these clinical years. Defining the skills to be acquired by the conclusion of training period will ascertain that each resident has acquired the requisite skills which should be evaluated.

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ROLE OF RESEARCH ACTIVITIES IN CAREER DEVELOPMENT IN MEDICAL PROFESSION

B. K. DAS

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GRADUATE INSTITUTE OF MEDICAL SCIENCES,
RAEBARELI ROAD, P. B. NO. 375, LUCKNOW - 226 001.)

Due importance has been given to research activities in medical profession. In some countries, research has been made a part of the curriculum for pursuing an academic career. However, in recent times, due to stiff competition and scarcity of appropriate vacancies it has become increasingly difficult to maintain the sanctity and standard of activity. Under Indian conditions a large part of the research work has been of repetitive nature contributing no or little knowledge to the medical profession. The analysis of recent scientific publications from Indian Universities and Institutions has shown very poor citation rate. Only 3 to 4 institutions of India are recognized centres where good scientific work is done. A lot of time and resources are wasted in the name of research which is basically used as a means to enhance one's bio-data only. It is therefore, necessary to reflect whether the policy of research contribution in career development is helping the nation or a change should take place in this regard.

PROBLEM BASED LEARNING

C. ANAND

(LADY HARDINGE MEDICAL COLLEGE, NEW DELHI - 110 001)

It is a fact that the principal causes of morbidity and mortality today are quite different from those 50 years ago, because of radical changes in the disease patterns and life style of patients. The conventional education for health professionals is not therefore specifically related to community health needs, future clinical practice or prevailing disease patterns. While there is pressing need for doctors, nurses, dentists and paramedics to be involved in primary care, in rural practice, with interest in cost containment and disease prevention, our traditional training is continuously preparing them for careers in tertiary care, urban practice and curative

medicine, with no cost containment. To achieve the health objectives, we need to introduce Problem based learning at all levels. Unlike problem solving, problem based learning is not reviewing and synthesising information already obtained through lectures or specific subject pertaining to the problem. Here the problem is posed first and the learning areas are identified by the students themselves. Learning objectives are defined and teachers act only as facilitators. Students LEARN HOW TO LEARN AND STRUCTURE THEIR OWN LEARNING. Thereby they acquire tools for continuing their education.

Interdisciplinary collaboration is enhanced as every discipline is preparing and implementing material related to the same problem. There is no fixed allocation of student time because training is oriented on the relevance of contribution of any discipline/s for understanding the problem.

Evaluation of the P.B.L. too is different and encompasses all domains with emphasis on psychomotor skills and attitudes rather than simply recall.

Students and teachers work as one unit both knowing their objective clearly.

CURRICULUM CHANGE : BUILDING ON GRADUATE DOCTOR FEEDBACK OF PERIPHERAL HEALTH CARE EXPERIENCE - AN EXPLORATORY SURVEY.

NARAYAN THELMA, & NARAYAN RAVI.

(COMMUNITY HEALTH CELL, SOCIETY FOR COMMUNITY
HEALTH AWARENESS,
RESEARCH AND ACTION, BANGALORE 560 034.)

This paper is a preliminary report of a questionnaire survey of over 50 young graduates doctors. This survey was a component of a larger study entitled Strategies for greater Community Orientation and Social Relevance in Medical Education : Building on the Indian Experience undertaken by Community Health Cell.

There have been some attempts in recent years to build curriculum change and innovation through feedback of medical students and interns but this is probably the first survey which focuses on graduate doctors who had com-

pleted at least two years work experience in a peripheral health care institution in the 1980's. They were asked to reflect on medical education and how it could be made 'more supportive and relevant to present day peripheral hospital practice and community health action'.

The proforma sought ideas and feedback on 26 subjects in Medical Education which included (1) Anatomy (2) Physiology (3) Biochemistry and Biophysics (4) Biostatistics (5) Behavioural Sciences (6) Others (7) Pathology (8) Microbiology (9) Pharmacology (10) Forensic Medicine (11) Medicine (12) Surgery (13) Obs. & Gyn. (14) Pediatrics (15) PSM (16) Psychiatry (17) Dermatology (18) Ophthalmology (19) ENT (20) Radiology (21) Anesthesiology (22) Dentistry (23) Orthopedics (24) Medical Ethics (25) Other (specify) (26) Internship.

Feedback was also elicited on few additional skill areas which included (1) Basic Nursing Procedures (2) Communication (3) Management and (4) Training of Health Workers and Personnel and five aspects of Medical Education which included (1) Selection Process (2) Teaching Methodology (3) Curriculum Structure/Framework (4) Examination System (5) Other aspects of content, process, environment and base of teaching.

The respondents were also asked to give suggestions of methods/ experience that would enhance the social/emotional preparedness of graduates for such work.

The survey is being analysed presently. This preliminary communication highlights the key findings.

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STRATEGIES FOR GREATER COMMUNITY ORIENTATION AND SOCIAL RELEVANCE IN MEDICAL EDUCATION : BUILDING ON THE INDIAN EXPERIENCE

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The Indian experience of innovation and reorientation of medical education can be built up from a study of ideas/experiments from four sources.

- (i) Recommendations of Expert Committees from Bhore (1946) to Bajaj (1989).

- (ii) Experiments within medical colleges/ departments.
- (iii) Alternative training experiments in Community Health / Development in the voluntary sector.
- (iv) Reflections of graduate doctors who have worked in Primary Health Care / Community Health Situations.

The Community Health Cell, a policy research group in the voluntary sector has just completed an eighteen month exploratory and interactive study covering all the four sources. The aim was to build a reference manual on the Indian experience for faculty of medical colleges exploring innovation in the 1990's. This paper is a preliminary report and gives an overview of the study process and findings.

The study included a communication to all deans/principals and professors of PSM of 125 medical colleges in India with two reminders; interactive field visits and discussions with staff/interns of some medical colleges; a questionnaire survey of over 50 young graduates with work experience in peripheral health institutions; communication and dialogue with health and development trainers in the voluntary sector; and a comprehensive literature review.

The manual to be ready later this year will include -

- (i) Lessons from History and Tradition
- (ii) Exhorting Change - Key policy recommendations
- (iii) A situation Analysis
- (iv) Exploring medical college experiences
- (v) Key innovations/experiments for the 1990's
- (vi) Building on rural experience (graduate survey)
- (vii) Laying alternative foundation (NGO training experience)
- (viii) Exploring new horizons/areas in medical education
- (ix) Medical Education and Society (Linkages)
- (x) Resources and Key to Change

MEDICAL ETHICS IN UNDERGRADUATE CURRICULUM

S. K. SINGHAL, V. Y. KAWADE, ASHOK PATIL,
& N. S. MHASKE

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MAHARASHTRA - 413736.)

The relationship between a physician and a patient, in a wider sense, has been a peculiar one; of one absolute blind faith bordering on worship to complete mistrust and hostility. Both the responses are understandable and justified. Certain codes were laid down since ancient times which governed relationship, based on correct perspectives, with a view to protect the interests of the patients as well as safeguard the legitimate interests of the physicians.

Ethical consideration have a bearing in most disciplines of medical practice, including, research on human beings, therapy on children, mental aberrants, geriatric patients and all other groups. A 20 hour teaching programme at undergraduate level and intern level is recommended, which may be incorporated in the existing curriculum.

PROBLEM BASED LEARNING - A CONCEPT FOR FUTURE

S. K. SINGHAL, V. Y. KAWADE, ASHOK PATIL, N. S. MHASKE

(RURAL MEDICAL COLLEGE, PMT LONI,
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However strong the logic for change, medical colleges are unlikely to abandon their comfortable status quo until a climate of opinion has been formed that is strong enough to precipitate change. If change in medical education is to be truly beneficial and, indeed effective in terms of improved health care towards better health of populations, the complex relationship between health, manpower, the health care system and the social, economic and political realities of a country must be taken into account. These in turn are influenced by political, economic, demographic and environmental crisis that faces our world and call for our orientation of the professions wider responsibilities and potential changes in the role of individual doctor in the next century. Such considerations lead us to have a new view of medical education, a curriculum which has a progressive process

of maturation in professional capability - competences that are generally needed by all doctors throughout their professional life.

To bring about this change there is required a change in the education system and problem based learning, it is a method to combat the crisis confronting our world.

PHC VISITS - A TOOL FOR COMMUNITY ORIENTED MEDICAL EDUCATION

V. Y. KAWADE, S. K. SINGHAL, ASHOK PATIL, &
N. S. MHASKE

(RURAL MEDICAL COLLEGE, PMT LONI,
MAHARASHTRA 413 736.)

Efforts to reorient medical education must address community health needs and provide research activities that will feed back to the educational programme as well as allow periodic testing of innovative community health services programmes. Primary Health Centre (PHC) concept for delivering the health care to the community and implementing the community oriented medical education is well suited to India. The Primary Health Centre which is the first point of contact for the community with the organisational component of the health care system, should be properly utilised to train the medical graduates to evolve problem solving community based approach.

The importance of regular PHC visits should be emphasised and due priority should be given in the curriculum design to graduate level medical education. The regular PHC visits of students alongwith faculty members combined with "Expert visits" will provide expert facility to the community at the PHC level and learning facility to the students.

SELECTION & RESERVATION CRITERIA FOR ADMISSION OF MEDICAL STUDENTS

PARAG SHAH

(LOKMANYA TILAK MEDICAL COLLEGE, SION,
BOMBAY - 400 022.)

I suggest that admissions to under graduate medical courses should be according to the following guidelines :-

1. 50% of seats should be reserved for local candidates on merit of HSC with academic year starting after the HSC results.

2. 20% of seats should be reserved for candidates coming from rural areas, on the basis of merit at HSC with academic year starting after HSC results.
3. 30% of seats to be filled by an All India competitive examination. The academic year to start six months after the HSC results. A ceiling of minimum number of marks and a maximum number of attempts for eligibility to the All India pre-medical test would make the conduct of such an examination more practical.

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**A PLEA FOR AN INITIAL ORIENTATION
PROGRAMME FOR THE NEW-ENTRANTS IN
UNDERGRADUATE MEDICAL PROGRAMME
TOWARDS LIVING HUMAN BODY
(LIVING ANATOMY)**

J. C. SAHA

(CHRISTIAN MEDICAL COLLEGE, LUDHIANA - 141 008)

Teaching/learning of human anatomy have been cadaver-based from the very beginning. With the passage of time along with knowledge-explosions more details have crept into the curriculum and technological advancement has brought in newer concepts and methods of learning. Non-availability of adequate supply of cadavers in good condition and time constraint for the coverage of the discipline have been a chronic problem. Strict compartmentalisation of medical education have compelled the subject-experts to compete for the 'supremacy' of respective discipline in undergraduate teaching/learning programme - which is perhaps an ongoing process even today. In the competition for supremacy as well as survival, Anatomists, enjoying immunity from arbitrary decision on curriculum details, attempted to expand the scope of the discipline including its various subdivisions so much that a FEAR PSYCHOSIS has developed amongst the learners in the undergraduate programme on the magnitude and irrelevancy of the details. Moreover, to make the situation worse, cadaver-based training became cadaver oriented if not dependent, ignoring other approaches. The obsession with cadaver training has developed to such an extent that anatomy and cadaver seem to be synonymous.

The trend is unfortunate particularly when this attitude seems to prevail predominantly in the medical profession. It is sad that the cumulative effect of all these have resulted in a CRISIS OF ATTITUDE affecting teachers, learners, educators and administrators equally.

There is a need for a change in this attitude for the better and it is desirable to protect the new entrants to medical profession from this infections spread. The aim should be to stress upon the fact that it is the living human body (not the cadavers) is to be dealt with in health and health related problems.

A good beginning may be made with the new-entrants in the initial period following admission. During this period covering 6-8 weeks, the learners are not exposed to cadaver but are encouraged to concentrate on their own bodies for learning anatomy. Besides recapitulating facts learnt during schooling and premedical years, understanding of the frame, form, regions and parts of the human body; position, significance of directional terms and planes; various levels of structural organisation and systems of the human body and man as a living entity are taken up. These are followed by discussion on life on earth, man of earth, growth pattern, significance of height, weight, age changes from the new born to old age, etc.

The methodologies used are self learning, small group learning with audio-visual aids like, diagrams, models, slides, etc. and the use of the learner's own body as may be applicable. The knowledge is also imparted on common community health problems, prevailing health care-delivery system, concept of a team-work, integrated and problem-based learning etc.

The above programme is designed to equip the learners adequately for the subsequent training in Anatomy involving dissection/prosection etc. besides creating a sense of awareness to apply knowledge on living body. With our limited experience for the last 2 years, we may say that a desirable change and an enthusiastic response have been noted both in the learners and the teachers.

PREScription WRITING FOR COMMON CONDITIONS - CLINICAL PHARMACOLOGY EXERCISE.

VEENA S. JAGUSTE, SAVITA SHAHANI & D. A. JOSEPH

(DEPTT. OF PHARMACOLOGY, L. T. M. MEDICAL COLLEGE, SION, BOMBAY - 400 022.)

Selecting the right drug from several thousand possibilities is not an easy task, specially for young medical graduates. Unfortunately the existing stereotyped nature of the exercise in Pharmacology Practical examination does not offer the opportunity to the students to critically evaluate and select the appropriate drug. To improve this drawback and to allow them the opportunity to correlate the theory with actual clinical practice to interact with clinicians, we designed this special exercise in prescription writing as a part of clinical pharmacology training.

Eight students who had secured 70% or more marks in Pharmacology theory in terminal exams were selected for the exercise. Every student was given a specific condition commonly encountered in clinical practice for e.g., hypertension, peptic ulcer, migraine etc. They were asked to prepare different prescriptions for their respective condition depending on the varying situation based on the specific points given by us. They included pharmacological and trade name of the drug, dosage and administration, rationale, important adverse effects and interactions. Special emphasis was given on the fact that these prescriptions were not to be written from textbooks alone, but students should actually see the prescriptions for these conditions in wards, discuss them with clinicians before writing their own prescriptions.

After the students were ready, they were asked to present their prescriptions in front of class and judges from staff members of medicine and pharmacology. Audience asked questions and justification on their prescriptions. A questionnaire was given to each student in the audience and to all the judges, from which three students with best performance were selected. The students were also asked to rate the usefulness of this special exercise on a four point scale.

Results of this exercise will be discussed alongwith presentation of two prescriptions by the students.

COMPUTED TOMOGRAM AS A TEACHING AID

PRITHA S. BHUIYAN, M. L. KOTHARI, LOPA A. MEHTA

(DEPT. OF ANATOMY, SETH G. S. MEDICAL COLLEGE & KEM HOSPITAL, PAREL, BOMBAY - 400 012.)

It is being globally recognized that the newer modalities of imaging have allowed medical man the gift of "Divyachakshu" - the faculty of visualizing the nooks and cervices of the human body in health and disease, without any invasion as little as by even a needle prick. The visual access to the live human body is both static and dynamic, both recordable on a video tape. The role of computer in this regard has been so great as to recently earn a Nobel prize for the pioneers. The paper to be presented deals with the simple technique of teaching to the first M.B.B.S. students anatomy by a combination of serial 'cuts' of the body through C.T. seen and compare those with similarly cut sections of the gross cadavers. Needless to say the scan adds to the appreciation of the gross section and vice versa.

The above technique has already been tried out on a preliminary basis with rewarding results. The presentation will include C.T. scans, corresponding cadaveric sections and the correlation between the two.

CLINICAL ANATOMY FOR UNDERGRADUATES

M. N. MAHENDRAKAR

(SETH G. S. MEDICAL COLLEGE, PAREL, BOMBAY - 400 012.)

Learning and teaching of Anatomy has to keep pace with the advancement of other branches of medicine. The necessity of the knowledge of Clinical Anatomy is felt in recent times by many teachers of Anatomy.

The post-graduate students in surgical branches feel that they should have learnt and should have taught surgical anatomy during undergraduate period. With the personal experience of teaching surgical anatomy to postgraduate students in various surgical branches for many years, it was felt that not only surgical anatomy but also clinical anatomy concerned with all other branches of medicine should be taught to undergraduates.

Second and third terms of I.M.B.B.S. and first and second terms of III M.B.B.S. are suitable period for teaching clinical anatomy. The use of slides with clinical photographs and demonstration of anatomy in clinical subjects are generously done. What, when and how to teach Clinical Anatomy is discussed.

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YOGA IN MEDICAL EDUCATION

S. J. KASHALIKAR, J. A. BHATT

(DEPT. OF PHYSIOLOGY, SETH G. S. MEDICAL COLLEGE,
PAREL, BOMBAY - 400 012.)

The paper presents the scope and application of yoga in medical education. Today's education in general and medical education in particular does not pay adequate attention to the systematic nurturing of the healthy intellectual, psychological and physical developments of students, teachers, researchers, policy makers and policy implementers.

Yoga, a disciplined way of life, brings about evolutionary transformation in an individual in such a way that the individual loses petty identity, gives up petty selfish motivations, develops objective and penetrating intellect and resilient and strong personality, and acquires sound physique.

The process of yoga or yoga sadhana is a prerequisite, a means and a way towards higher and nobler consciousness. Siddhi or adeptness in yoga is an ideal goal that ensures universal welfare. The edifice of education - particularly medical education - cannot be safe, personally fulfilling or socially meaningful without the cement of yoga.

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MANDATORY WARD PROCEDURAL PROGRAMME (MWPP)

S. S. HATTANGADI, M. L. KOTHARI, L. A. MEHTA

(DEPT. OF ANATOMY, SETH G. S. MEDICAL COLLEGE, PAREL,
BOMBAY - 400 012.)

It is observed that a fresh medical graduate after completing 4.5 years of medical education and a year of internship is not ripe and trained enough to provide first aid during emergency or to treat patients with common illnesses on his/her own confidently and perfectly. The reason for this is that during his/her study period the training is essentially

theoretical. The students are not expected to carry out routine ward procedures. The students usually do not participate actively on their own. This leaves a major lacuna in the training in the medical course unlike the one for undergraduate course for dentistry or nursing where concurrent practical work is imperative before a student is given degree certificate. One year of rotating internship does not fulfil the requirement for developing necessary skill in attending to the patient. This results in less practical training for medical student which is much better for dental and nursing students.

To overcome this deficiency in training an undergraduate medical student during his clinical terms a student should be required to maintain a M.W.P.P. Card (Mandatory Ward Procedure Programme Card) for each term. In this record, a list of various procedures should be made, which are mandatory for a student to carry out before certification is granted for completion of the term. There should be a column against each procedure for the number performed by the student. Basic procedures should be made compulsory during the junior terms and the procedures required for treating patients on an OPD basis should be obligatory during the senior term under supervision of senior staff members.

Students must be granted the term only if MWPP requirements are met with.

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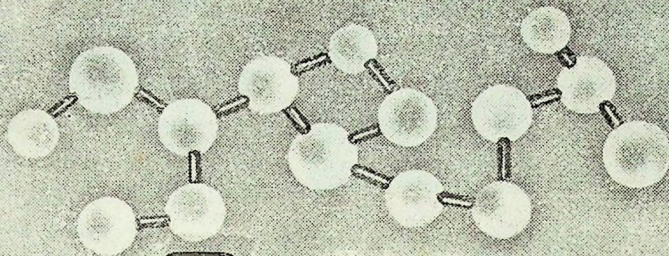
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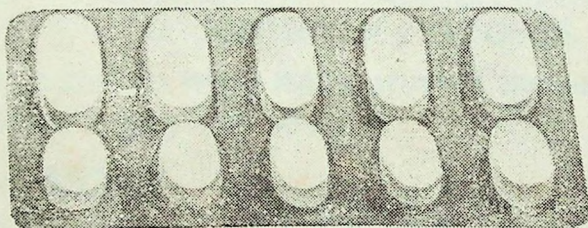
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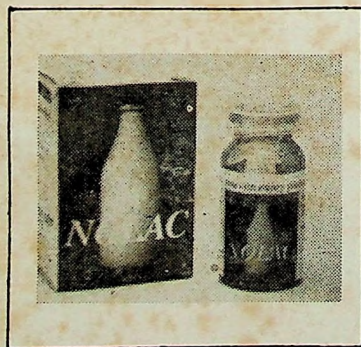
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References: 1 Nutrition Abstracts & Reviews in Clinical Nutrition-Series A, 1984, Vol. 54, No. 8
2 Merck Manual, 17th Edition, 1987, pg. 796.

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