

**Address by The Vice-Chancellor, University of Mumbai, Dr. Vijay Khole
at the 44th Annual Conference of NAMS, April 30, 2005, Mumbai**

Dr. P.K. Dave, President, National Academy of Medical Sciences, Prof. J.S. Bajaj, Guest of Honour on this occasion, Prof. Bajaj must have been an extremely good teacher as he succeeded in putting me in a difficult situation by giving a historical account, Padma Vibhushan Dr. B.K. Goyal, Chairman of this 44th Annual Conference of National Academy of Medical Sciences, Dr. (Mrs.) Snehalata Deshmukh, former Vice-Chancellor of University of Mumbai and also the past President of the Academy, Dr. Neelima Kshirsagar, Dean, Seth G.S. Medical College & K.E.M. Hospital, distinguished Members and Fellows who are being conferred special status by the Academy, Emeritus Fellows, Emeritus Professors, Members distinguished invitees, fellow delegates, the organizing Secretaries, Ladies and Gentlemen,

I am elated to be with you at this annual meeting of the National Academy of Medical Sciences. I thank the Organizing Committee to have thought of me on this joyous occasion. Before I present my view, let me heartily congratulate and extend my very best wishes to the newly elected Fellows and the awardees.

The National Academy of Medical Sciences now has an all pervasive role in directing and co-ordinating teaching and researches in the field of medical sciences. The Academy has truly risen to glorious heights comparable to its counterpart Indian National Science Academy. The Academy has been consistently promoting continuing medical education, establishing centers for continuing medical education, instituting prestigious orations, organizing various seminars and symposia, projecting various dimensions of medical education and profession. Two of its objectives that revolve around research findings to subserve public needs and interactions to meaningfully address the basic needs of the health sector are of vital importance.

Today, no field can boast of its protected domains and no field can afford to remain in isolation. Advances in areas of molecular biology, biophysics, biotechnology, stem cell research, imaging techniques, robotics, computing techniques, drug designing, bio-nanotechnology have opened up promising horizons in the field of medical sciences. Applications of these and other related newer technologies in health care, I gather, have been extensively discussed in the pre-conference CME. However, it is pertinent to add a few comments on some of these exciting developments.

Beginning of 3rd Millennium is marked with a near total transformation of biology into data rich information science owing to successful completion of sequencing of the human genome. Genome analysis including the critical analysis of its comparative aspects is expected to help not only basic research but will also reveal the applied potential. This would help identify candidates for designing vaccines and anti viral drugs. For example, designing and development of a synthetic peptide vaccine against Japanese encephalitis virus, is a possibility.

Another exciting application that could be cited is understanding of neural networks and their mechanisms. This information could be useful for:

- a. Evaluation of immunological status in HIV seropositive patients
- b. Diagnosis of heart attack
- c. Classification of breast cancer cells
- d. Cost effective and timely diagnosis of diseases

Another exciting area on the horizon that offers lot of promise for health care technologies are proteomics and functional genomics. For example using proteomics quick and accurate serum based diagnosis of several diseases is not too far away.

All these modern technologies that we are talking of also need to be made available in our medical schools/hospitals. I strongly feel that our medical curriculum also needs to be revised to incorporate all these technological advances. It may also be necessary and if possible, could be made mandatory

to include atleast an introductory 3 months module on hands on training for all the medical graduates in these modern technologies. I may even go a step further and state that University of Mumbai would be too happy to recognize such a certificate course in these technologies at any of its affiliated research institutes who could have the necessary expertise and infrastructure to conduct such a programme.

Health and medical education constitute important strategies for human welfare and development. In turn, they also serve as catalysts for socio-economic development. Today, medical education covers a wide range of clinical subjects including the superspecialities. The number of medical colleges has alarmingly increased. It is necessary to see that the students have access to enough of patient material to develop necessary skills, besides of course the other academic and physical infrastructure facilities.

Animals are indispensable for bio-medical researches. New regulations have imposed several restrictions on their indiscriminate use. However, somewhere, a feeling appears to persist, especially in medical research establishments that these measures have also brought about certain limitations on their research work. Though, alternate models in the form of cell lines, wherever possible, are being used the Academy may also look into such issues and play the role of a facilitator.

Continuing medical education, now has a new dimension. Distance learning format, tele-education are the new tools that could be put on priority mode to educate and update the medical fraternity. Open University systems available in the country are eagerly awaiting to pick up and develop such promising areas. In Maharashtra, the Yashwantrao Chavan Maharashtra Open University and the Maharashtra University of Health Sciences both, fortunately being at Nashik are in the process of developing such synergical relations. Other Medical Colleges and Research Institutions can also think on these lines. If these programmes are to be of post graduate levels, University of Mumbai again would be too happy to recognize these and grant the necessary affiliations.

Changing life styles, changed work conditions, additional occupational stress and strains, problems of old age crave for attention. These new orders of the day need to be analyzed and addressed. Physician, as a health care taker has to respond to such complexities. He has the additional responsibility of understanding the intricate social backdrop to such changed situations. The Academy may have to share its expertise with the policy making authorities to provide some meaningful solutions.

Can we have a doctor as a friend, as a guide and as a philosopher? He could remind us of the traditional wisdom of Indian society, our culture, our way of life. He could advise us on diet in tune with our seasons and normal habits. He could be our grand mother with a pouch full of common sense for distribution. Our physician both by precept and persuasion should be in a position to bring about the necessary behavioural changes in those who seek his advice and counseling.

I wish National Academy of Medical Sciences all the success in its future endeavor. I am grateful to the organizers to have provide me this opportunity to interact with you and I thank you for the patient hearing.