

SPEECH BY THE PRESIDENT OF INDIA, SHRI PRANAB MUKHERJEE ON THE OCCASION OF INAUGURATION OF THE INSTITUTE OF NEUROSCIENCES

KOLKATA, WEST BENGAL: NOVEMBER 28, 2014

1. It is a joyous occasion for me to be here this evening to inaugurate the Institute of Neurosciences, which is a state-of-the-art facility for Neurology, Neuro-surgery, Neuro-rehabilitation and Neuro-psychiatry. At the beginning, let me compliment the collaborators of this project – the Department of Health and Family Welfare, Government of West Bengal; Kolkata Municipal Corporation; and Neurosciences Foundation Bengal (NFB) – for having undertaken this difficult task of developing a super-specialty hospital for Neurosciences in Kolkata. I particularly applaud the Non-Resident Indian doctors of Bengali origin - Doctors Robin Sengupta, Chandranath Sen, Abhijit Guha and others - who have worked tirelessly and with vision under the aegis of NFB.
2. This Institute started out-patient services in 2009. It began in-patient services with 50 beds, a year later. Today, it has become a 150-bed hospital, alongside facilities for post-graduate education and research. I am happy to learn that neuro-scientists at this Institute are engaged in a collaborative effort with the Institute of Neurosciences, University of Newcastle, UK, to find solutions for Parkinson's disease, motor neuron disease, gait disorders and dystonia.

Ladies and Gentlemen:

3. Neuroscience is one of the important disciplines in biological and behavioural sciences. Its scope has vastly increased to include experimental and theoretical analyses of the nervous system. The last few decades has seen substantial work being carried out to grasp the brain mechanisms at the cellular and molecular levels. Speaking about the need for a much deeper knowledge of the brain, Late Rita Levi-Montalcini, the 1986 Nobel Prize Winner in Medicine had said and I quote: *“Scientific and technological research, from molecular to behavioural levels, have been carried out in many different places but they have not been developed in a really inter-disciplinary way. Research should be based on the convergence of different inter-connected scientific sectors”* (unquote).
4. Neuroscience today is a distinct medical subject comprising basic neuroscience streams like neuro-anatomy, neuro-physiology, neuro-chemistry, neuro-pharmacology and neuro-pathology, as well as specialties like neuro-imaging, neuro-endocrinology, neuro-oncology and neuro-immunology. This holistic approach to neuroscience is

essential to establish a credible healing system in a world-wide scenario of rising neurological disorders.

5. Demographic change from youthful to an older population has taken place on account of increased life expectancy and reduced fertility. The resultant ageing of the population has caused a rise in neurological disorders like dementia and Parkinson's disease that are pre-dominantly associated with the aged. Globally, about one billion people are affected by neurological disorders and the number is only going to swell in the years to come.
6. Neurological disorders contribute to 6.3 percent of the global burden of disease. *Disability-adjusted life years*, which indicate the loss in future stream of healthy life due to incidence of disease, is a metric to comprehend this burden. The burden of neurological disorders, which was 92 million *disability-adjusted life years* in 2005 and estimated at 95 million in 2015, is projected to rise to 103 million by 2030. If comprehensive action is not initiated with due seriousness, the burden of neurological disorders will continue to increase and pose an even greater challenge for public health managers in the future.

Ladies and Gentlemen:

7. Neurological disorders lead to long-term disability and cause emotional suffering. Due to lack of social understanding, there is sometimes a stigma that is unfortunately associated with such incidences. This dissuades sufferers from seeking treatment. Efforts have to be made to preserve the dignity of patients and prevent their isolation through social integration. For that, public education and awareness campaigns involving all stakeholders are necessary.
8. In some neurological disorders, care revolves around the family support system. For instance in India, where the incidence of dementia over the age of 60 years is about 1.9 percent, 50 percent of the carers are spouses. At the same time with socio-economic change taking place, family structures have evolved from joint to nuclear system resulting in greater dependence on private medical care, thereby leading to higher out-of-pocket expenses. The health insurance system has to be revamped to take care of the special needs of the aged.
9. Immunization programme has been found to be an effective intervention for preventing neuro-infections. For that to really happen though, mobilization through public awareness and sensitization through grassroots health functionaries are necessary. Neurological disorders sometimes result in disability. This has to be addressed through suitable

rehabilitation policies and programmes in wide-ranging sectors like education, employment and social development.

Ladies and Gentlemen:

10. Many neurological disorders are responsive to inexpensive yet effective treatment. Such interventions could thus be managed on a mass scale through the primary healthcare system. As per a report, 70 percent of epileptic patients could become seizure free with the drug *Phenobarbital*. In reality though, 80 percent epileptic patients in low income countries remain untreated on account of lack of drugs and trained personnel. A robust primary health service aided by secondary and tertiary health sectors, with specialists to diagnose and suggest remedial action, is necessary.
11. It is estimated that there are about 1,100 qualified clinical neurologists in our country of which 36 percent work in the four metropolitan cities leaving many areas dependent on single neurologists. It is incumbent on our health sector to create adequate capacity in our medical colleges to churn out more specialists and perform cutting-edge research; and expand infrastructure in our hospitals and healthcare centres for investigation and treatment.
12. Faculty is the custodian of knowledge. Advances in medical sciences occur at lightning speed today. It is important that our medical schools undertake faculty development, up-grade the syllabi and review the horizon of their research activities.

Ladies and Gentlemen:

13. A thought that should seriously engage our attention today is the nature of health system that we ought to have in our country - a commercial, profit-driven system or a system conversant with the socio-economic conditions prevailing in our society. I feel medical institutions like yours have a pivotal role to guide our health sector. You have a responsibility to inculcate a humanistic approach in the minds of the young doctors and health professionals and orient them towards a value-based career in medicine. There are doctors who are desirous of undergoing higher studies in premier institutions abroad to acquire greater expertise. They should be encouraged. Yet at the same time, they have to remember that the nation has invested in their education. Wherever they go, they have to retain the sacred bond with their motherland. They have to be fired by the spirit of patriotism and a sense of social responsibility.
14. I hope that your institution would lead by example and infuse the higher objective of selfless service to society in the rest. I once again compliment everyone associated with this noble venture and wish them the very best for the future. Let me conclude in the words of Mahatma Gandhi:

“A small body of determined spirits fired by an unquenchable faith in their mission can alter the course of history”

Thank you.
Jai Hind.
