EDITORIAL

Research in Orthopaedics: Indian Scenario

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In India, research in Orthopedics when compared to that of the rest of the world is pitiable at best. What are the reasons for such a situation? Is it lack of talent, lack of attitude or some other reason?

During the British rule, India saw a few brilliant physicists, mathematicians and other scientists who could enrich the scientific world by their contributions, but contribution to medical research was sparse. After independence as a nation we had immense problems, like abject poverty, illiteracy, lack of communication, lack of health care facilities and many others which clogged our progress as a nation. Under these circumstances, institutions were forced to render only basic services and research became ornamental. Thus we are heavily dependent on foreign institutions and foreign materials for any future development. One important basic reason for lack of research appears to be the lack of government policies for up-gradation of medical education and creation of sources for research facilities.

Excepting some minor contributions our country could do nothing in any field which can be referred to as major contribution in the world of orthopedics. After obtaining degree a postgraduate in our country may opt for independent practice, may undertake training for attaining skill and working knowledge for surgical practice, or he may opt for medical education where promotion is time based and requires a certain number of published papers. Naturally these publications are not always the best, and not of much academic value. If we go back to the history of our country no treatise after Vedas can be found. In contrast Hippocrates at least tried to identify the illness and tried to study their natural histories and described some treatment. Other names are Aristotle, Galen, Oribasius and last important figure was Paul of Aegina, after whom Europe fell in dark ages for about thousand years.

There was a dearth of qualified medical practitioners in Mogul India, and Francois Bernier a French physician, family physician to Dara Suko was probably the pioneer in documenting medical practice in India. He was probably one of the first to critically compare the western to Indian health system. Dark age in Europe ushered into the age of renaissance when Europeans became mad discovering, inventing and creating. Development in one field of science promoted development in other fields. A flow was created which is still continuing worldwide. In fact huge institutions have been created and funded to maintain this flow of progress. While per capita health expenditure is about USD 32 in India, it is around USD 4590 in rich countries³.

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Medicine started to flourish in the hands of some great people who were not only intuitive, recognizing subtle change of illness but also prolific writers, recording everything they encountered. For the last one hundred years medical research as in any other field of science has attained tremendous progress. This revolution started in western world. In the last century in the western world there was also individual approach. The difference of mindset of western people to ours is that they documented volumes of work. They were both surgeons and prolific writers. The experience attained were analyzed by future generation, which were again critically reanalyzed, thereby the subject of interest attained a precise and refined form.

This was a brave new world where surgeons started to use advancements in other branches of science, technology took over adding to skill, and brave races volunteered as recipients of these new techniques, showing the dawn to these new surgeries. Some other groups of surgeons were really creative and brought about new hypotheses, tested them and created and recreated surgical principles and techniques. When this flow of knowledge and progress was flooding the world, we were sitting in darkness, shackled. After achieving freedom we are still in the process of nation building. The world looks towards us as economic super power, but the country still not ready to waste money on research, except on space perhaps.

But at the same time it is also a question whether government should spend money on medical research. When in a small world technology and knowledge are spreading like fire and import is cheaper than development keeping in mind that we don't produce even a war plane or even a big gun. Is it not right that field of priority should be alleviation of poverty, spread of education, water and electricity supply, roads and jobs and in medical field, lowering maternal and infant mortality rates. But at least the government can do simple things like collecting medical data and statistical analysis so that medical treatment can be made uniform everywhere reducing complication rates and slowly elevating the standard.

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- 3. According to *WHO* report.

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