Priorities in Pharmaceutical Research

The main focus of pharmaceutical research should be catering to the needs of pharmaceutical industries so that safe and effective medicines are made available at affordable price to every patient. In the ever escalating cost scenario in healthcare, pharmaco economics plays an important role. Research in the field of pharmaco economics may bring new hope to healthcare seekers. Generic medicine is a useful alternative to economize the therapy. The quality of generic medicine determines quantitative success of therapy. Promotion of generic medicine needs extensive research backing so that product is bioequivalent to established branded product in terms of efficacy and safety. The pharmaceutical factors which may influence the overall performance of a medicinal product need to be thoroughly researched, optimized and validated so that dosage form of consistent quality and performance can be produced. The process of formulation development of generic products needs extensive research with respect to all such variables. Evaluation of the new formulation in terms of quality, efficacy and safety also needs extensive research to ensure that there is no compromise in therapeutic outcome. In order to promote pharmaceutical industry, generic formulation development will prove highly useful. This can be achieved through collaborative research between industry and academic. Research base collaboration between industry and academic is definitely useful to both and can address the challenges, very effectively. The industry can identify the product it wants to develop from among the drugs which will be out of patent protection within another one to two years. The academic researchers can develop the product, scale up to industrial scale, and develop SOP for production and quality assurance. Industry sponsored such projects can be highly effective and useful to both parties. The industry will not need an expensive Research and Development set up and academic facilities can be effectively utilized for value based research. It will also help in better training of human resource. Partnership research has always helped pharmaceutical industry a lot. This also ensures that academic research directly benefits society.

The issue of "Bridging the Innovation Gap between Academia and Industry," is much discussed at most of the Research and Innovation deliberations. It is realized that the probability of a promising research being translated into a marketable product is always very higher by bridging this gap. This is a process to bring research to market. However, there are stumble blocks also as the goal of academia and industry are divergent in terms of protection of intellectual property, accessibility of research data and interlinking of award of degree to research.

In a paper published in Journal of Economic Behavior and Organization “Academic science and the birth of industrial research laboratories in the U.S. pharmaceutical industry” Jeffrey L. Furman, et al. reported that the growth of industrial pharmaceutical laboratories is positively and significantly correlated with the extent of local university research. They further suggested that although the industrial facilities helped shape the direction of university research programs; university research also supported growth of pharmaceutical research laboratories in the first half of the twentieth century in the United States.

Developing nations should focus more attention to research based growth of their industries and policy makers should devise models for industry-academia partnership.

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