

## Pharmacoeconomics – fourth dimension for drug evaluation in India

Empirically drug evaluation in India has a three-dimensional approach involving efficacy, safety and quality of drugs. The efficacy and safety of drugs are evaluated and established through randomized controlled trials, whereas quality dimension is evaluated and established by various drug regulations and standardizations according to good manufacturing practices followed by manufactures of medicines. Recently, some models have been proposed for drug innovation involving various public and private organizations to reduce the cost of drug discovery, which still need to be tried<sup>1</sup>. As medical care becomes more sophisticated due to newer drugs and technologies, willingness and ability to pay for the same becomes an important factor as the cost is always high.

The public spending on medicines is as low as one-fifth of all the medicines consumed in India<sup>2</sup>. The government justifies low public spending on medicines by putting a strong drug price control mechanism and by fixing the ceiling price of 348 drugs present in the National List of Essential Medicines according to the latest Drug Price Control Order. Private, i.e. out of pocket spending in India has always been on the higher side, exerting enormous economic burden on the society which is hard pressed for re-

sources. This necessitates one to consider an economist's point of view on drug evaluation, leaving the traditional three-dimensional approach which is incomplete in one sense.

Pharmacoeconomics is a part of health-care economics which identifies, measures and compares the cost and consequences of pharmaceutical product and service provision. Pharmacoeconomic evaluations done with societal and patient perspective would help in providing definite end-points for decision-making. Pharmacoeconomic evaluations are considered as the fourth dimension in many of the developed countries like the United Kingdom, Australia, Canada, the Netherlands, etc. in new drug evaluation and approval process, as public spending is very high in these countries.

As India is poised to embrace universal care coverage for all by the year 2020, it is of high priority for us to take the initiative for developing pharmacoeconomic guidelines for conducting evaluations<sup>3</sup>. The International Society for Pharmacoeconomics and Outcomes Research is one such not-for-profit organization, which has taken the initiative to develop pharmacoeconomic guidelines in India with the help of its regional chapters in the country<sup>4</sup>. Even though the challenges for their implementation

remain, when properly implemented, guidelines for pharmacoeconomic evaluations would generate evidence for cost-effective utilization of scarce health-care resources. This fourth dimension introduced in drug evaluation will truly help in health-care reimbursements, planning for future health-care resource spending and health-care policy-making. It will not only help policy-makers, but also health professionals in drug decision-making and the pharmaceutical industry to justify the increased price for a new drug.

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