

## *From Chairman's Desk*

"Drugs don't work in patients who don't take them."

– C. Everett Koop



This forms the basis of medication adherence concept. The Epidemiology of non-adherence to prescribed medication reported in the medication adherence project revealed that "50% of the US population is prescribed medication for chronic conditions and of those prescribed medication; only 50% are taking it as directed." Thus non-adherence to prescribed medication is a serious clinical and therapeutic limitation affecting outcomes of therapy and management of long term care. The scientific reason behind this is that unless a drug reaches the site of action and interacts with specific receptor pharmacological effect cannot be expected. This requirement for a drug is met by the design of dosage regimen which ensures adequate plasma concentration and appropriate pharmacokinetic profile of the drug. The consequences of non-adherence contribute in major ways to undesirable outcomes and escalate costs of therapy. Non-adherence is a patient specific issue, also a healthcare system issue and also depends upon the quality of caregivers' services. Patient adherence to prescribed medication need to be studied critically to find ways and means to overcome the factors influencing non-adherence. It is a major area in practice based research where clinical pharmacist contributes enormously and redirects therapeutic outcomes. Understanding of patient non-adherence and its consequences on outcomes of prescription drugs, their actions both beneficial and harmful and the associated economic impact are important in pharmacotherapeutics and pharmacoeconomics.

Practice based research directed at evaluating approaches to improve adherence, correlate outcomes of improved adherence into therapeutic benefits and devise patient counseling models for improving adherence as well as linking non-adherence to higher medical costs, new complications and health problems; are likely to benefit patients to a great extent. Such research have high impact and social value in improving quality of life.

Three elements of drug treatment: initiation, implementation, and termination need to be studied critically and analyzed intellectually to draw fine conclusions with long lasting effects. In the management of drug treatment, the causes of non-adherence, whether intentional or not, need to be identified and in the case of intentional non-adherence, reason behind such problem must be probed in depth in order to find out an everlasting solution. Main focus of any research is finding solutions for the existing problems, and this research cannot have a different goal. Once the hurdles of initiation of treatment are overcome implementation becomes easy because patient will be able to feel improvement and benefits of medication adherence become visible. This helps in continuation of therapy for the prescribed duration and finally termination as per prescribed guidelines.

The study needs large sample size to draw more convincing conclusions and most effective means to overcome the hurdle. This needs reliable data on patients' dosing histories to determine when dosing errors have occurred and how best it can be minimized as well as adverse consequences thereof. The study must compile each patient's understanding of the benefits and hazards of the medications prescribed so that they can realize the importance of medication adherence. The components of missed dose and the follow up action must be clearly studied, understood and remedied.

Every practice based researcher should endeavour to fill gaps in the information needed to support effective management of medication on top priority basis. Effective medication management is as important as accurate diagnosis and rational prescribing. Unless the dosage regimen is complied religiously, desired outcomes cannot be expected. This proves the important role of medication adherence and demands adequate research in this field to improve patient compliance and thus implement pharmaceutical care successfully. Every pharmacist must give his input to collaborative research in this field and raise robust data which will destine the fate and frame of therapy. This area cannot be neglected anymore because consequences of non-adherence are highly detrimental to health.

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