

**Brief Report****POOR PHARMACEUTICAL CARE AND SUBSTANDARD CLINICAL SERVICES AT PUNJAB INSTITUTE OF CARDIOLOGY, LAHORE, PAKISTAN****Taha Nazir<sup>1</sup>, Tahir Aziz Mughal<sup>2</sup>**

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**Keywords:** Pharmaceutical care, clinical services, Punjab Institute of Cardiology**Corresponding Author:** Taha Nazir B.Pharm., M.Phil., Ph.D., Research Associate, Biochemistry, Chemical Pathology, Molecular & Microbiology Research Group, University Medical & Research Centre, University of Sargodha, Sargodha 40100 Pakistan. C.: +92 321 222 0885; E.: [tahanazir@yahoo.com](mailto:tahanazir@yahoo.com)**Punjab Institute of Cardiology; sad demise of cardiac patients**

The demise of cardiac patients, registered to Punjab Institute of Cardiology, Lahore, in various hospitals due to therapeutical and pharmaceutical error is a grim concern, needs to be addressed on priority. Initially; as per newspapers, there are two types of reports; use of expired or spurious drugs, supplied by the free pharmacy of the hospital that has been closed after the incidences, and Drugs Testing Laboratory's reports rejecting the claim of expiry or spuriousness. Such conflicting reports necessitate a multi-level – clinical, medicine, pharmaceutical care and drug analysis - enquiry to avoid such grave prevalence in future because it is well documented that prescribing errors, dispensing errors and irrational use of drugs have killed more people than any disease.

Thus; eventually a breakthrough occurred by a press conference on Wednesday, Chief Minister Shahbaz Sharif revealed that Isotab tablets, which are meant for heart patients, had been contaminated with an anti-malarial chemical, which resulted in fatalities to patients who used it daily. The medicine was given free of cost to patients of the Punjab Institute of Cardiology (PIC). There were dangerous quantities of Pyrimethamine, in Isotab added by mistake during manufacturing process in industry [1]. Pyrimethamine is also found in Fansidar, an antimalarial drug. That reduces folic acid, responsible for production of body and cell components in living organisms [2]. Isotab is given to heart patients twice daily to lessen the burden on their heart. The chemical found in Isotab, however, was equal to 10 tablets of Fansidar, which means those who used this medicine twice a day were effectively taking 20 tablets of Fansidar, which suppressed the bone marrow, disturbed blood production, and ultimately caused death. Isotab was not expect to be contaminated because it's manufactured by Efroze Chemical Industries, who have around 80 registered medicines in Pakistan.

**Clinical health services**

The clinical health facilities help to provide the appropriate care for patients. It minimizes the probability of wrong medication. Therefore; the proper evaluation of therapy plan, reviewing of prescription and correction of pharmaceutical services can assure the safety of patient's lives. Hence; the therapeutic drug monitoring and Pharmacovigilance work like a safety valve in health care system [3]. The concentration of potent drug's, in blood (particularly the drugs with narrow therapeutic index) are needed to be examined critically in to assure the safety. While; understanding, assessment, prevention and detection of adverse effects of medicines are valuable constraints in clinical practice. Those are employed to alleviate the therapeutical problems. Furthermore; partnership with patients, better

financial models, enhancement of pharmacy practice, evidence based practices, sufficient workforce and assurance of competency also contribute to minimize the health vulnerability of admitted patients.

These clinical factors are designed in collaboration of World Health Organization, UNESCO, Regional Pharmaceutical Forums, World Health Professions Alliance and other partners. Thus; we should consider the drug's delivery channels to provide excellent clinical care. The government organizations, health experts and judiciary should have to enforce the pharmaceutical services, therapeutical drug monitoring, drug rules, prescription review, phramcovigilance and clinical evaluation. The clinical hospital setting of Pakistan need urgent and forceful implementation of biosafety, drug informations, aseptic dispensary to accomplished the health standards. The pharmaceutical services related to must be elaborated to enhance the awareness in public.

### **Pharmaceutical care**

Clinical and pharmaceutical care demands the elaboration of certain pharmaceutical and clinical concerns; medication errors, investigational faults, health hazards, and laboratory negligence's. The health care professional; pharmacists, physicians, and paramedical staff have to fulfil their standard pharmacotherapeutical responsibilities collectively to assure rational therapy. The pharmaceutical care has to fulfil the requirements of international standards of hospital pharmacy practice. The drugs should be reviewed and delivered through the pharmacy staff with proper procedure. The formal informations (name, license number, prescription detail etc) along with the patient's data (medical history, social background, personal profile etc) should be collected, envisaged and retrieved for clinical purpose. Moreover; scientifically the prescription is a health care program to governs and implement for patient. Thus; the procedure of prescription, dispensing and treatment should be applied to avoid any misinterpretation or ambiguity in actual medical practice.

### **Quality control test procedure**

In the current situation, the medicines should be tested, chemically using more than one type of tests and biologically using animals. Medicine contains active as well as inactive components and both the types need to be investigated equally. It is worth mentioning that Drug Testing Laboratory (DTL) usually relies on percentage contents of active components as a test of qualitywhile ignoring in active ingredients. It is suggested that one should not rely on just UV analysis because absolutely different drugs or metabolites of drug may have similar chemical behaviour. And if such methods of drug testing are known to suppliers, there are chances for the replacement of drug which cannot be ruled out particularly in bulk supplies. On the other hand, the drugs need to dispensed with full pharmaceutical care and pharmacovigilance- detection, assessment [4], understanding and prevention of adverse effects, particularly long term and short term side effects of medicines - under the supervision of pharmacist registered in category-A, becausethese are the tools to achieve the required clinical or therapeutic outcome. In Pakistan, unfortunately, this important and internationally well recognised component is being ignored in healthcare system. It may be surprising to know that there are only two private hospitals in the country that have well established pharmaceutical care for better health outcome, whereas the biggest proportion of the population is deprived of this basic right.

### **Conclusion**

No doubt; the correct medication, right dose, proper route in exact time is key important in patients in clinical and pharmaceutical practice. But; enforcement of clinical components is also important in current scenario of Pakistan. It requires a collective effort of judiciary, leadership and society to enforce the rules (especially the Punjab drug rule 2007), design policies, and introduce the health care system to assure the safety of innocent patients.

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