## **ABSTRACT**

Medications, vaccinations and medical procedures are the fundamental tool to combat diseases. The usage, handling, storage and distribution form an integral part of the healthcare system. Mishandling of drugs turn them into life damaging tools (Butt et al., 2005). The gravity of mishandling problem is critical and serious in the developing countries. The situation in developing countries is grave due to poor governance, inefficient public health care system, high and fragile regulatory system accompanied with frequent privatization has increased unrestricted access of medicines through private pharmacies. Due to low literacy rate and high inflation retail pharmacy are the first and most economical point of healthcare for general public.

Pakistan Pharmacy Act 1967 reads that pharmacy and drug stores should ensure that prescriptions and sales of medicines should be under supervision of the trained personnel, the authority to regulate pre-conditions of sales and sales of drugs is the provincial subject (Government of Pakistan, 1976). The Sindh Drug rule 1979, 2010 is specifically an Act to regulate the export, storage, manufacture, import, distribution, sales and purchase of drugs. However, the previous studies suggest that pharmacies and retail store are operating in 19.3% of the retail pharmacies, retail stores and compromised conditions. Only distributors are licensed (Shah et al., 2016). Similar is the case with the pharmacists and managing personnel. only 12-22% were found to be sufficiently educated (Hussain & Ibrahim, 2011). The operations, storage, regulatory compliance and supply chain management is inadequate. Therefore, this research study was aimed to identify the constraints and suggest recommendations for implementation of drug rules in retail pharmacy operations and to optimize the supply chain of the industry. Following objected were set, to study the retail pharmacy operations and compare the existing condition with

Sindh drug rules 1979. To identify constraints in implementation of drug rules and to Find mitigating measures towards the optimization of retail pharmacy supply chain management.

From the results it was revealed that only 4% of the pharmacies have the qualified staff. The number of educated staff was however far better in three cities. On average the staff acquired medicine knowledge through job experience. 39% had the pharmaceutical sells license, many of them had expired license. Mostly pharmacies selling narcotics without Form-9 License, buying medicine without prescription was not problematic for customer. Many of the stores were selling vaccine without refrigerator. 90% of the stores have the direct exposure of sun. Results revealed that in comparison to the Shaheed Benazirabad and Mirpurkhas the retail operations in the pharmacy market of Hyderabad are far better. All the cities lack behind in recruiting qualified staff, temperature maintenance, sun exposer, storage facility and cleanliness

The highlighted constraints were classified in three categories, Financial, Institutional, and social. High Input cost, Unaffordability and Low Investment of retail pharmacy come into the ambit of the financial constraints. Rent seeking behavior of the regulator is causing corruption and red tapism in the license issuance and processing, corruption also causes the low inspection rates resultantly the retail pharmacy does not operate as per the rule. The market of retail pharmacy has three main actors' distributor, regulator and retailer. Inappropriate operations of retailer in not only due to regulator but distributor as well. Producer/distributor due to their policies can also peruse retailer to implement drug rules. Similarly, lower customer awareness level hinders the implementation. Mitigating

measures towards the optimization of retail pharmacy supply chain management were suggested at the end.

**Key Words:** Constraints, Drug Regulatory Authority, Health Care System, Optimization, Retail Pharmacy Operations