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GOVERNMENT



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KHYBER PAKHTUNKHWA

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**GOVERNMENT OF KHYBER PAKHTUNKHWA
HEALTH DEPARTMENT**

NOTIFICATION

Peshawar Dated, the 11th November, 2025.

No. SO(Drugs)/HD/1-11/2025/Pharmacy: In pursuance of Rule 25(3) of the Khyber Pakhtunkhwa Government Rules of Business, 1985, the Provincial Cabinet of Khyber Pakhtunkhwa is pleased to approve the Policy for Integration of Pharmacy Services in Health Facilities which aims to strengthen and improve the Hospital and Clinical Service, Drug Control Administration, ensure the effective implementation of Drug Laws and Rules, standardize the Quality Assurance mechanisms for the continues availability of safe, effective and quality medicines and to rationalize and optimize the utilization of human recourses in an efficient manner, in the best public interest.

2. The detailed policy document in hereby published for general information. It is available on the official website of Health Department at www.healthkp.gov.pk.

**SECRETARY HEALTH
KHYBER PAKHTUNKHWA**

989

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LIST OF ABBREVIATIONS

ADRs	Adverse Drug Reaction
CPD	Continuous Professional Development
CDC	Center For Disease Control and Prevention
DC&PS	Directorate General of Drug Control & Pharmacy Services
DRAP	Drug Regulatory Authority of Pakistan
DHQ	District Headquarter Hospital
DTL	Drug Testing Laboratory
HR	Human Resource
HRH	Human Resource for Health
ICU	Intensive Care Unit
OPD	Outpatient Department
LASA	Look alike and sound alike
PTC	Pharmacy and Therapeutic Committee
PCP	Pharmacy Council of Pakistan
PQCB	Provincial Quality Control Board
THQH	Tehsil Headquarter Hospital
WHO	World Health Organization

PREFACE

- 1. INTRODUCTION**
 - 1.1 Background
 - 1.2 Objective
- 2. Services**
 - 2.1 Medication ordering and transcribing
 - 2.2 Prescription Review and Verification of Prescriber Order
 - 2.3 Medication Reconciliation
 - 2.4 Administration of Medication
 - 2.5 Monitoring of Medications Effects/Reporting of Adverse Drug Reactions/Pharmacovigilance
 - 2.6 Reporting of Medication Errors and Near Misses
 - 2.7 Unit Dose Drug Distribution System
 - 2.8 Stability of Multiple Dose Medications
 - 2.9 Automatic Stop Order
 - 2.10 High-alert Medications
 - 2.11 Look-Alike/Sound-Alike Medications (LASA)
 - 2.12 IV Admixture Policy
 - 2.13 Narcotic and Controlled Medications
 - 2.14 Storage of Medicine
 - 2.15 Cold Supply Chain for Medications
 - 2.16 Storage of Radioactive Medications
 - 2.17 Safe Handling of Cytotoxic Hazardous Drugs
 - 2.18 Storage and Handling of Drug Samples
 - 2.19 Expiry monitoring
 - 2.20 Crash Card management
 - 2.21 Pharmacy and Therapeutic Committee
 - 2.22 Drug Formulary management
 - 2.23 Non-Formulary Drugs
 - 2.24 Out of Stock Medications
 - 2.25 Drug Recall Policy
 - 2.26 Floor Stock Medications
 - 2.27 Antibiotics Stewardship Program
 - 2.28 Fair Price Pharmacies
 - 2.29 Drug Information and Poison Control Center
 - 2.30 Continuous Professional Development and Trainings
- 3. Drug Control**
 - 3.1 e-Drug Sale License
 - 3.1.1 Provisions of Law
 - 3.1.2 Powers of Inspectors
- 4. QUANTITY ASSURANCE AND DRUG TESTING LABORATORIES**
- 5. Regulations**
- 6. Human Resource**
- 7. Conclusion**
- 8. References**

PREFACE

Pakistan has a low density of essential /skilled health professional (physicians including specialists, nurses, pharmacists, etc) - density of 1.45 per 1,000 population against WHO's recommended minimum of 4.45 per 1,000 population necessary to achieve universal health coverage. Pakistan is striving to increase its critical workforce at par with World Health Organization (WHO) guidelines and as envisaged from the national human resource vision 2018-30 to achieve the Sustainable Developmental Goals. In KP, Essential Health Workforce density is 1.15 per 1,000 population. These numbers include public and private sector personnel. The health outcomes of the province need substantial improvement and present an uphill task in achieving the Sustainable Development Goals. The human resource strategy of Khyber Pakhtunkhwa also focuses on enhancing and capacity building of the health work force including pharmacists as health care worker.

In Khyber Pakhtunkhwa, many weaknesses and challenges have been identified in the current Health Sector Strategy (HSS), including poor access to and utilization of health services, low quality and effectiveness of care, limited managerial capacity and weak accountability at all levels, systematic underfunding of the public health system, inefficient and inequitable resource allocation, low financial protection, and fragmented and discontinued reform initiatives.

Health policy in Khyber Pakhtunkhwa is informed mostly by the Khyber Pakhtunkhwa HSS 2010–2017 and national health Vision 2016–2025. The provincial HSS 2010–2017 was extended until June 2018. Efforts are underway to update the strategy and align operational planning, midterm budgetary framework, and district-level health plans with this strategy. Furthermore, since 2011, more than 23 ordinances/acts and amendments about health care have been passed in Khyber Pakhtunkhwa. Some of these are novel and introduce new dimensions in terms of quality, access, and service delivery, while others, mostly amendments, seek to update the existing laws. The most critical of these laws include Khyber Pakhtunkhwa Health Care Commission (HCC) Act, 2015, which aims to regulate the health care in the province through sound technical knowledge; the Khyber Pakhtunkhwa Public Health (Surveillance and Response) Ordinance, 2017, the goal of which is to implement measures that help prevent and control diseases in the province; and the Khyber Pakhtunkhwa Medical Teaching Institutions Reforms Act, 2015, which seeks to provide autonomy to the government-owned medical teaching institutions and their affiliated teaching hospitals to improve their performance in and responsiveness to the provision of quality health care services. The establishment of Directorate of Drugs Control and Pharmacy Services with the aim to establish/improve the quality control, drug control administration, quality assurance and pharmacy services is also one of the initiatives of the Government of Khyber Pakhtunkhwa in Health sector.

All the referred policy gives similar importance to need of integration of pharmacy services in health care facilities and due involvement of pharmacists in healthcare team. There is extreme shortage of pharmacists in health care system, being an important and integral part of healthcare team. The role of pharmacist has direct impact on morbidity & mortality rate, length of hospital stay and cost of therapy. There is dire need to have a comprehensive policy regarding pharmacy services. This document is an addition to reforms agenda of the Provincial Government.

The Provincial Government has been on an ambitious mission to reform the health landscape through various legal and programmatic initiatives and this policy is a minor reflection of it.

1 INTRODUCTION

1.1 Background:

Pharmacy Practice is a fast-emerging field of Pharmacy Profession. The most significant development in the recent past is increased clinical contribution and involvement of pharmacist in direct patient care. This has not only proved to be cost-effective but had also shown to improve the patient's quality of life along with direct impact on morbidity or mortality. Pharmacist involvement is blessing when it comes to concept of pharmaceutical care, implementation of safe medication practices, identifying and curtailing adverse drug effects and drug-interactions, minimizing the irrational prescription and cost effectiveness through formulary management and active involvement in ward rounds.

The Drug Regulatory Authority of Pakistan Act, 2012 summarizes the Pharmacy Services as;

"Pharmacy Services" means services rendered by a pharmacist in pharmaceutical care, selection, posology, counseling, dispensing, use, administration, prescription monitoring, pharmacoepidemiology, therapeutic goods information and poison control, pharmacovigilance, pharmacoeconomics, storage, sales, procurement, forecasting, supply chain management, distribution, drug utilization evaluation, drug utilization review, formulary based drug utilization and managing therapeutic goods at all levels including pharmacy, clinic, medical store, hospital or medical institution;

Pharmacist is a healthcare provider who is accountable for optimal medication therapy in the prevention and treatment of disease. Clinical pharmacy coupled with (hospital) pharmacy services is a health science discipline in which pharmacists provide patient care that optimizes medication therapy and promotes health, wellness, and disease prevention. To achieve desired therapeutic goals, the clinical pharmacist applies evidence-based therapeutic guidelines, evolving sciences, emerging technologies, and relevant legal, ethical, social, cultural, economic, and professional principles. In accordance, clinical pharmacists assume responsibility and accountability for managing medication therapy in direct patient care settings, whether practicing independently or in consultation or collaboration with other healthcare professionals. Medication errors or adverse drug events is single aspects of the clinical pharmacy services. Medication errors cause at least one death every day and injure approximately 1.3 million people annually in the United States of America alone. Globally, the cost associated with medication errors has been estimated at US\$ 42 billion annually or almost 1% of total global health expenditure. Apart from the human cost, medication errors place an enormous and unnecessary strain on health budgets. Preventing errors saves money and saves lives.

The numbers of registered pharmacists in country are almost 63000 which are still low number as compared to density per population according to WHO. The pharmacy profession is multi disciplinary field. The pharmacist working in the hospital, drug control, analysis, community or pharmaceutical industry, aims on no compromise on the medicines' quality.

The availability of safest, effective and affordable medicines to the public is the key objective of the pharmacy profession. The Pakistan Human Resource for Health Vision (2018-30) also emphasizes are increasing the healthcare team including pharmacists, their professional development through continuous education programs and their utilization in healthcare team for achieving optimal results. Number of good national organization like Agha Khan University Hospital, Shaukat Khanum Memorial Cancer Hospital and Research Center, Shifa International Hospitals and others have utilized the services of pharmacists and have established pharmacy services that is playing pivotal role in the outstanding health services in those hospitals.

The Drug Control administration is another important aspect of the pharmacy profession where the field force is authorized and empowered for the implementation of the laws relating to the medicines business. Medicines quality control laboratories play a vital role in testing and verifying that finished pharmaceutical product continue to meet official standards of quality and safety. This role becomes more important when the finished product concerned are imported or produced locally for treating life-threatening diseases, or promoting maternal and child health, in vulnerable populations. But it can only be carried out successfully if the relevant Drug Testing Laboratory is operating at official recognized standards. The World Health Organization has issued detailed policy as “*WHO Good Practices for Quality Control Laboratories*”

The pharmacy services include the inpatients services, outpatients’ services and clinical pharmacy services carried out by skilled and qualified pharmacist. This policy document will further unabridged and fabricate the services that are offered by pharmacist with the evidence-based purpose and outcome.

1.2 Objective:

The purpose of this policy is to;

- a) To organize, monitor, and control medications use in hospitals including inpatients, outpatients, specialized areas and any area where medications are being used.
- b) To delineate the process for selection, purchasing, ordering and transcribing, preparing and dispensing, administration and monitoring of medication.
- c) To ensure the availability of quality, efficacious and cost-effective medicines to the patients.
- d) To establish Pharmacovigilance Centers and Drug Information Centers within the healthcare facilities
- e) To establish fair price pharmacies where cost effective and quality medicines for patients are available round the clock.
- f) To establish supply chain and ensuring the storage, rational distribution and optimal use of medicines in primary healthcare facilities
- g) To strengthen the drug control administration and drug testing and analysis for ensuring quality medicines in province and promoting culture free of spurious and fake drugs.

2 Services:-

2.1 Medication ordering and transcribing:-

Purpose:

Guidelines are formulated for all authorized prescribers on prescribing medication for patients to:

- a. Assure correct prescription.
- b. Prevent delay of medication dispensing.
- c. Provide pharmaceutical care in optimum time.

Statement:

- It describes the guidelines for physician's order in order to provide medication as prescribed.
- All medication orders shall be verified before dispensing to the patient for appropriateness (completeness, legibility, accuracy, and clearness) and patient specific information before administration.
- The pharmacist (except in emergency situations or in case the medication is part of a procedure) shall receive the physician's original order or a direct copy of the order before the drug is dispensed. The physician order shall be written clearly, legibly and completely. Illegible or improperly written orders shall not be processed until clarified or rewritten.
- Physicians, pharmacists, and nurses shall be well educated about this policy in correct ordering and prescribing.

Definitions:

Illegible prescription: a written order that is difficult to read and may lead to misinterpretation of the prescription, whether it is the drug, dose, frequency, route, duration or use of unapproved abbreviations.

2.2 Prescription Review and Verification of Prescriber Order: -

Medication Prescription/ Order Review: Is the revision of the prescription by licensed, professionally trained Pharmacists prior to dispensing to check the appropriateness of the prescription to make sure that the right patient is receiving the right drug for the right indication with the right dose.

Purpose:

To improve patient safety and reduce variations and medication errors.

Statement:

It describes the guidelines for pharmacists when reviewing medication orders and seeking verification of unclear prescriber orders.

2.3 Medication Reconciliation: -

Medication Reconciliation: is the comprehensive evaluation of a patient's medication regimen anytime there is a change in therapy in an effort to avoid medication errors such as omissions, duplications, dosing errors, or drug interactions, as well as to observe compliance and adherence patterns. This process shall include a comparison of the existing and previous medication regimens and shall occur at the time of patient admission.

Purpose:

- Medication reconciliation is done to avoid medication errors such as omissions, duplications, dosing errors, or drug interactions.

Statement:

- This policy states how medication reconciliation is carried out by physician for every patient admitted as inpatient.

2.4 Administration of Medication -

Purpose:

- To ensure proper and safe administration of medication.
- To ensure complete and accurate recording of drug administration to the patient.

Statement:

- Medications shall be administered for patient according to specified policies and procedures to ensure patient safety, avoidance of medication errors, and high standards of delivery of healthcare services.
- Nursing Department in collaboration with the Pharmacy Department shall maintain an inpatient drug profile record for all patients.
- Medications administered during surgery, diagnostic or emergency therapeutic procedures may not be routinely documented on the inpatient drug profile. Where applicable, such medication administration shall be documented on special procedure documents unique to each service.

2.5 Monitoring of Medications Effects/ Reporting of Adverse Drug Reactions/ Pharmacovigilance: -

Adverse Drug Reaction (ADR) is any response to a drug which is noxious and unintended, and which occurs at doses normally used in for prophylaxis, diagnosis or therapy of disease or for the modification of physiological function.

Adverse Drug Reactions are one of the leading causes of morbidity and mortality in health care. According to Institute of Medicine, 44,000 to 98,000 deaths occur annually from medical errors and 7000 of this occurs due to ADRs. Other studies have suggested that ADRs are the 4th leading cause of deaths ahead of pulmonary disease, diabetes, AIDS, Pneumonia, accidents and automobile death in US.

Purpose:

- The purpose of medication effects monitoring is to evaluate the effectiveness of medication on the patient health, as well as on major health systems like blood count, renal function, liver function and other systems with selected medications, and accordingly evaluate the adverse effects of these medications.
- To develop a process to identify and report medication errors and near misses.
- To establish a process to monitor newly added medications to the hospital formulary.

Statement:

- This section describes the importance of monitoring medication effects to identify adverse drug reactions as well as allergic responses, unanticipated drug/drug interactions, or a change in the patient's equilibrium raising the risk of falls. Any adverse effects shall be observed, documented and reported.
- All adverse drug reactions shall be monitored and reported within 24 hours to the Pharmacy and Therapeutic Committee for analysis and documentation.
- All newly introduced medications to the hospital formulary shall be monitored and reported for a period of 6 months.
- The goals of the ADR reporting program in Healthcare Facilities are:
 - a. To encourage surveillance for ADR's.
 - b. To facilitate the documentation of ADR's.
 - c. To promote the reporting of ADR's.
 - d. To provide a mechanism for monitoring the safety of drug use in the hospital's patient population.
 - e. To stimulate the education of health professionals regarding potential ADR'.

The ADR Alert form shall be stocked in Nursing Units and can be ordered from the pharmacy department when more stock is needed.

2.6 Reporting of Medication Errors and Near Misses:-

Purpose:

- To prevent and/or control potential and actual medication errors in order to improve patient care and patient safety and decrease liability and hospital cost.
- To identify and document the cause of medication errors and near misses in order to develop a system that minimizes recurrence.
- Reporting of medication error and near miss shall be anonymous, non-punitive and strongly encouraged.
- To provide a mechanism for identifying trends and subsequently introducing recommendations for improvement.

2.7 Unit Dose Drug Distribution System: -

Purpose:

- To ensure patient's safety and correct use of drugs by having a pharmacist check the physician's order against the patient's medication profile for the following:
 - Indications and/or contra-indications.
 - Appropriateness of the drug, dose, frequency, and route of administration
 - Allergies.
 - Under dosage or over dosage according to patients' weight or other physiological parameters
 - Duplication of Drug Therapy
 - Drug- Drug interactions
 - Drug-Food interactions
- To enable the pharmacist to review the drug order against other drug monitoring criteria whenever indicated.
- The pharmacist shall review each prescription or order for medication for accuracy, appropriateness, and authenticity. Exception is made for situations in which a licensed independent practitioner with appropriate clinical privileges controls prescription or ordering, preparation and administration, as in endoscopies or cardiac catheterization, surgery or during cardiac arrest.
- To dispense medications in the most ready-to-administer form possible to minimize the risk for error during distribution and administration.
- To dispense medications accurately in a timely manner.
- To allow nursing staff more time for direct patient care by relieving them from drug preparation and related studies.

2.8 Stability of Multiple Dose Medications:-

Multi-Dose Medications are medications which cannot be pre-packed and/or dispensed in unit dose form and include:

- a. Topical ointments, creams, lotions and powders.
- b. Ophthalmic drops and ointments.
- c. Syrups and suspensions.
- d. Otic drops.
- e. Nasal drops and sprays.
- f. Oral Inhalers.
- g. Multiple dose vials.

Purpose:

- To provide guidelines for determining if an opened container is suitable for multiple uses.
- To provide guidelines for determining and applying appropriate expiration dates to the original multi-dose container.
- To prevent administration of deteriorated or contaminated medications to patients.
- To outline the procedure for safely preparing/drawing/storing medications through using multiple dose vials.

Statement:

- This policy outlines the procedure for safely preparing/ drawing medications through multiple dose vials and determining the expiration date of multi dose medications.

2.9 Automatic Stop Order:-

Automatic Stop Orders (ASO): Is a mechanism where orders for drugs with no specified durations are automatically stopped after a certain time frame after which the prescribing physician shall review the order and either discontinue the medication or re-order.

Purpose:

- The automatic stop mechanism is used to ensure that the review process occurs and stops any medications from being dispensed from the pharmacy until new order is raised by the physician.

Statement:

- To apply automatic stop orders in the unit dose drug distribution system.

2.10 High-alert Medications:-

Definition:

High-alert medications are drugs that bear a heightened risk of causing significant patient harm when they are used in error.

Although mistakes may or may not be more common with these drugs, the consequences of an error are clearly more devastating to patients. For this reason, special considerations are required. These medications often need to be packaged differently, stored differently, prescribed differently, and administered differently than others. Whenever possible, "forcing functions," methods that make it impossible for the drug to be given in a potentially lethal manner, should be developed and instituted.

Purpose:

- To provide guidance to staff members responsible for the safe handling and administration of medications designated as High Alert Medications.
- To increase awareness of High Alert Medications, thereby improving patient safety.

Statement:

A comprehensive list of High Alert Medications will be reflected in the policy and updated annually. All sites will identify individual medications considered high alert. All High Alert medications will be identified and labeled with a High Alert sticker and stored apart from other medications in a separate labeled bin. All staff will be educated on High Alert Medications and the procedure for use and storage.

2.11 Look-Alike/ Sound-Alike Medications (LASA) -

Look-Alike/ Sound-Alike Drugs (LASA): Are those drugs that are having names which are similar in spelling or sound to other drug names. Confusing drug names are a common system failure which may lead to potentially harmful medication errors.

Categories of “Look –Alike” “Sound- Alike” Medication Errors:

1. Similar medication name.
2. Same medication name, but different concentrations.
3. Same medication name, but different dosage forms.
4. Similar packaged drugs
5. Similar vial size and label color.
6. Similar unit dose packaging.
7. Similar IV solution packaging and labeling

Purpose:

- This section establishes a process whereby a list of specific look-alike, sound-alike drugs is identified and measures are implemented to prevent errors involving the interchange of these drugs. This is beneficial in:
 - a. Increasing patient safety by avoiding preventable injuries associated with look-alike and sound-alike drug labeling/packaging to the greatest extent possible.
 - b. Decreasing unnecessary costs associated with preventable adverse drug events.

Statement:

- It covers the pattern the hospital healthcare practitioners follow in dealing with drugs which look-alike and/or sound-alike.

2.12 IV Admixture Policy:-

Purpose:

- All IV products prepared and dispensed from the IV Admixture Service require specific labeling to ensure that the appropriate medication and solution is administered to the correct patient and in the prescribed manner.

Policy Statement:

This policy describes the guidelines for IV Admixture products.

2.13 Narcotic and Controlled Medications:-

Purpose:

- To identify the practice and procedures for the ordering, issuing, stock management, disposal and reporting requirements for narcotic and controlled medications in all Healthcare Facilities.

Statement:

- The usage, inventory management, and reporting of narcotic and controlled medications in all Healthcare Facilities shall comply with the applicable laws and regulations of the country.
- The pharmacist incharge shall direct the management of narcotics and controlled medications in Healthcare Facilities and assigning a pharmacist to be in charged for handling of Narcotics and controlled inside the Hospital.
- Narcotic and controlled medication shall be stored on inpatient units or the emergency room in a locked narcotic and controlled medications cupboard that is designated solely for their storage (Double locked double face anti fire lead) and will be stored in the Pharmacy in a separate locked room where it will be stored inside the safety cupboard.

- The most senior nurse on duty shall carry keys of the narcotic and controlled medications cupboard on the unit.
- The narcotics keys shall be separated from other keys on the unit.
- Narcotics shall be transported in a closed box only.
- The responsible nurse for the narcotics keys shall hand it over to another nurse once she/he will go break or needs to be away for some time. The hand-over time and nurse's signature shall be secured in the special handover sheet.
- Only privileged physicians or nurses may administer narcotic and controlled medications.
- The head nurses and the Narcotics and controlled Pharmacist In-Charge shall maintain and revise floor stock levels of narcotics and controlled medications to meet the needs of patients on their units.

2.14 Storage of Medications:-

Purpose:

- To ensure the safe and accurate storage of medications throughout the hospital.

Statement:

In all locations that medications are stored, the following shall be evident:

- a. Medications shall be stored under conditions suitable for product stability.
- b. Controlled substances shall be accurately accounted for according to applicable laws and regulations.
- c. Medications and chemicals used to prepare medications shall be accurately labeled with contents, expiration dates, and warnings, when applicable.
- d. Concentrated electrolytes are not stored in the wards unless clinically necessary. They are only stored in critical care areas, labeled in BLUE, separated from other medications, and locked.
- e. All medications storage areas shall be inspected monthly to ensure medications are stored properly.
- f. All medications in the hospital are kept locked at all times in the medication rooms.

The Hospital pharmacy store shall be headed by an incharge/Senior Pharmacist/Head of the pharmacy department and shall be responsible for forecasting and purchasing of all therapeutic goods. Computerized system for the management of Pharmacy store shall be made available.

2.15 Cold Supply Chain for Medications:-

Cold Chain or fridge lines: Is a temperature-controlled supply chain. An uninterrupted series of storage and distribution activities which maintain a given temperature range from the time of manufacture to shipping, warehousing, and storing before administration. It is used to help extend and ensure the shelf life of chemicals and refrigerated pharmaceutical drugs. Cold chain refers to the management of temperature-sensitive products as they move through the supply chain.

Storage Conditions as per US Pharmacopeia:

Freezer: the temperature at which the drugs are stored between -10 to -20°C.

Refrigerator: (cold condition): the temperature range is 2 – 8 °C.

Cool condition: the temperature range is 8 - 15°C

Controlled Room Temperature: the temperature range is 20 to 25°C (Excursions are allowed between 15 to 30°C).

Warm: the temperature range 30 – 40 °C

Purpose:

- It is to delineates steps to be taken by Pharmacy Services Department to ensure that cold chain supplies are handled appropriately during transports and storage inside and outside healthcare facilities according to recommended standards.
- To define procedures and corrective actions that should be followed to resolve cold chain failures resulting from improper shipping, transfer or storage.

Statement:

- Cold chain management across the supply chain shall include manufacturers, distributors, and transporters.
- Cold Chain Products shall continuously be stored, handled and transported under adequate environmental conditions (temperature controlled).
- Cold chain products should be packed in such a way as to ensure that the required temperatures are maintained throughout the journey and the medicines are transported in accordance with their labeling requirements to prevent jeopardizing their quality.
- Medicinal products need to be stored and shipped at lower than ambient temperatures to assure their quality and efficacy.

2.16 Storage of Radioactive Medications:-

Radioactive Medication: Is any substance that emits radiation. All radioactive medications are stored in a lead shield to prevent spreading of radiation.

Hot Lab: An area where all radioactive medications are stored and prepared. This area is a restricted area; only authorized persons are allowed inside. An area monitor is installed inside to detect any leakage.

Purpose:

To assure proper storage of high-risk medications such as radioactive and investigational medications for the safety of the patients as well as the staff.

Statement:

This section describes the guidelines for the storage of high-risk medications such as radioactive and investigational medications.

2.17 Safe Handling of Cytotoxic Hazardous Drugs:-

Purpose:

- This policy defines the guidelines and outlines the procedures used in the Safe Handling of Chemotherapy Drugs for the sake of the safety of those handling cytotoxic agents.
- These guidelines are applicable to all personnel who participate in the care and/or management of the patient receiving cytotoxic and/or hazardous agents. Cytotoxic agents shall only be handled by trained, qualified, professional Pharmacists.

Statement:

- This policy discusses the procedures for safe handling and spill management of cytotoxic hazardous agents.
- Only authorized, well trained Pharmacist shall receive, prepare, transport and administer cytotoxic hazardous drugs.

2.18 Storage and Handling of Drug Samples:-

Medical samples are medications; either formulary or non-formulary, provided by the vendors to the physicians and pharmacy staff and is strictly not for sale.

Sales representatives are communicators between healthcare professionals and pharmaceutical companies through the pharmacy department.

Purpose:

- To provide maximum cost-effective drug-therapy and if possible free drug therapy to all Healthcare facilities staff when needed.
- To control the relations between pharmaceutical companies and healthcare professionals, for the benefits of the patients.

Statement:

- This section describes the responsibilities of the Healthcare facilities pharmacy services division for handling drug samples from vendor.

2.19 Expiry monitoring:-

Expired Medication: The date that the manufacturer guarantees the full potency and safety of the drug providing that optimal storage conditions (temperature, moisture, light etc.) are met.

Expiration Date: **Expiry:** month/year e.g.: Jan/2016: This notification shall be interpreted as good as the last day of the month. **Expiry:** day/month/year e.g.: 07/Jan/2016: This is considered to be expired on the specified date of that month.

Expiry Date of Compounded Items: All compounded items shall have expiration date affixed to the container to ensure proper potency and stability. The date shall be determined by current pharmaceutical data. No compounded item shall have an expiration date exceeding the manufacturer's expiration date.

Dose Repackaged Items: All unit dose repackaged items shall have NO MORE than 1 year expiration date from the time of repackaging, or the remaining manufacturer's shelf-life (whichever is less), unless otherwise specified by the manufacturer.

Purpose:

- To ensure that safe drug practices are complied with and to avoid any potential hazards related to administration of drugs with expired shelf life.

Statement:

- This section describes the policy and procedure regarding monitoring the expiration dates of all medications available throughout the hospital.

2.20 Crash Cart Management:-

Crash Cart: Is a lifesaving medical trolley equipped with all necessary items and vital components of cardio-pulmonary resuscitation such as medications, supplies and machines.

Code Blue: Is the term used over the public address system to summon assistance for patient in full or impending cardiac arrest.

Expiration Date: If an actual day is not provided by the manufacturer, the expiration date for injections is considered the last day of the mentioned month.

Purpose:

- To ensure immediate and easy access to the emergency medications, equipment and items in response to cardiopulmonary arrest.
- To ensure standardization and control of crash cart contents and ensure their protection from loss and theft.

Statement:

- This section describes the standard guidelines including the availability, monitoring, storage and control of the use of crash cart medications.

2.21 Pharmacy and Therapeutic Committee:-

In order to facilitate pharmacy services, Pharmacy and Therapeutic Committee (PTC) shall be constituted, comprising of;

i. Head of Medicine	Chairman
ii. Incharge Pharmacist	Secretary
iii. Representative of Surgery	Member
iv. Representative of Nursing	Member
v. Co-opt member of healthcare team	Member

Purpose/Role of Committee;

- To oversee the medication management and use.
- To review the process of selection and procurement of medications.
- To overview the storage of medications in the organization.
- To ensure safe practices in ordering, prescribing, preparation and dispensing.
- Develop, maintain, and review hospital's existing, additions, or deletions to drug Formularies.
- Define and review all reportable adverse drug reactions potentially serious to the patients resulting from the administration of drugs. The P & T committee shall nominate a focal person in the Pharmacy staff for reporting the adverse drug reactions as per DRAP guidelines. Head of department of each specialty shall communicate all the adverse drug reactions of their respective departments through their internal focal person with the focal person of the Pharmacy.
- Develop "High-Alert Medications" lists and monitor its usage.
- Review, investigate, evaluate reports, and recommend monitoring and controls, initiate Corrective action/s, as necessary on the reported adverse drug reaction and medication Errors, Prescribing practices and malpractices.
- To develop the SOP's regarding medication management and use in hospital.

2.22 Drug Formulary management:-

Formulary: The formulary is a continually revised compilation of drug products or pharmaceuticals and is the nucleus of what is known as the Formulary System.

Formulary System: This system is a method whereby the medical staff, pharmacy staff and nursing staff evaluates, appraises, and selects medicinal products and dosage forms that are considered most useful in-patient care. The formulary system provides a technical mechanism for the procuring, prescribing, dispensing and administering of drugs. These products are then routinely available for use within healthcare facilities.

Pharmacy and Therapeutic Committee “P & T Committee”: This is a multi-disciplinary committee. One of the functions of Pharmacy and Therapeutic Committee “P & T Committee” is overseeing the effective and efficient operation of the formulary system and providing the integrity to the formulary system by assuring that drugs designated as “formulary”, drugs stocked in the pharmacy and current prescribing practices are consistent. The multiplicity of drugs available today, makes it mandatory that an organized program of activity be developed within the hospital to ensure that patients receive the benefits of Rational Drug Therapy. The formulary system is operated under the guidance of the Pharmacy and Therapeutic Committee to serve as a reference for those drugs which have been reviewed and approved for use in the hospital.

Purpose:

- To outline the process for suggested additions, deletions, substitutions, and restricted drugs management to the hospital formulary.

Statement:

- It includes the establishing, maintaining and reviewing the drug formulary.
- Every Healthcare facility shall have a complete list of stocked or available medications in the pharmacy.
- The decision to add or to remove medications from the formulary is guided by the following criteria:
 - a. Indication for use
 - b. Effectiveness
 - c. Risks
 - d. Costs

2.23 Non-Formulary Drug:-

Non-formulary Medications: Drugs or dosage forms which are not currently approved by the Pharmacy and Therapeutic Committee to be available in the hospital's drug formulary for use in the Hospital, but are FDA approved, registered or non-registered (available in Pakistan legally through importation license issued by DRAP) and available in Pakistan.

Purpose:

To establish an acceptable response pattern for the hospital physicians and pharmacists to follow in dealing with non-formulary medications, in order to control the use of non-formulary medications.

Statement:

This policy describes the mechanism for prescribing, approving, procuring and dispensing non-formulary medications.

2.24 Out of Stock Medications:-

Out of Stock Medication: Due to some circumstances, such as delay of delivery, national shortages or any other reasons, some drugs may become out of stock for a certain period of time, whether short or long. Out of stock medication is any medication which is not available in all pharmacy dispensing areas and pharmacy warehouse.

Purpose:

To establish an acceptable response pattern for the pharmacists to follow in dealing with "out of stock" medications situations to assure delivery of medications to the patients in the shortest possible time frame. The response of the pharmacy shall differ based on the severity of the situation. For such medicine local purchase policy will be followed.

Statement:

This section details the pattern hospital pharmacists follow in dealing with "out of stock medications". The response of the pharmacy shall differ based on the severity of the situation.

2.25 Drug Recall Policy:-

Purpose:

- To ensure that defective drug products are removed from pharmacy stock and recalled from patients.
- To protect patients from defective, sub-standard drug products.

Statement:

This section describes the drug recall procedure applied to inpatient, outpatient and various storage and dispensing areas throughout the hospital.

Drug recall:

The process, by which a medication is declared contaminated, mislabeled or dangerous by a manufacturer or a National/International Drug Control Body, is retrieved from various storage and dispensing areas throughout the hospital, both inpatient and ambulatory patient care areas. Recalled lot shall be classified according to F.D.A. criteria as follows:

- a. Class I:** When the use of, or exposure to a violated health product may cause permanent or irreversible adverse health consequences or even death.
- b. Class II:** When the use of, or exposure to a violated health product may cause temporary or medically reversible adverse health consequences or where the probability of serious adverse consequences is remote.
- c. Class III:** When the use of, or exposure to a violated health product is not likely to cause adverse health consequences.

Defects in Medications include, but are not limited to the following:

- a. Inadequate or faulty packaging of containers.
- b. Inadequate or confusing labeling.
- c. Deteriorated or contaminated drugs.
- d. Drugs professionally considered being defective or undesirable.

Pharmacy stock includes pharmacy warehouse stock, pharmacy store area, stock kept in pharmacy dispensing area, inpatient pharmacy, user units and all other stocks kept in healthcare facilities.

2.26 Floor Stock Medications:-

Floor Stock Medications: are medications stocked in the nursing units. Since the pharmacy is open 24 hours 7 days a week, and since the unit dose distribution system is designed to provide a 24-hour supply of medications prescribed for hospitalized patients, the hospital management does not encourage availability of floor stock medications in regular patient care units. Certain floor stock items (emergency items and part of procedure medications) are maintained in critical care units. The most important aspect of stocking medications as floor stock is to ensure availability of such items that may be needed at the spur of the moment.

Emergency Medications: are drugs which require immediate administration within minutes post or during a medical emergency. Medicines which have the potential to sustain life and/or prevent further complications.

Purpose:

- To describe the process for ensuring adequate and efficient usage of floor stock medications.
- To ensure proper control and storage of all medications provided as floor stock in the inpatient care units.

Statement:

- It describes how floor stock medications are maintained, stored and controlled in critical care units and OPD clinics.
- Floor stock medications list shall be reviewed yearly in the Pharmacy Therapeutic Committee meeting, for any deletion or addition according to the consumption for every unit.

2.27 Antibiotics Stewardship Program:-

According to Center for Disease Control and Prevention (CDC), more than half of antibiotic prescribing for selected events in hospitals was not consistent with recommended prescribing practices. Antibiotic prescribing was not supported in: 79% of patients with community acquired pneumonia, 77% of patients with urinary tract infections, 47% of patients prescribed fluoroquinolone treatment, and 27% of patients prescribed intravenous vancomycin antibiotic.

Hospital prescriber and pharmacists can improve antibiotic prescribing by optimizing antibiotic selection, re-assessing antibiotic treatment when results of diagnostic testing are available, and using the shortest effective duration of therapy.

CDC estimates that 23,000 people die each year as a direct result of antibiotic resistant infections. Thus, the economic burden created by antibiotic resistance in the U.S. is estimated at \$55bn out of which \$20 billion in health services cost and \$35 billion in lost productivity per year

Purpose:

- To rationalize the use of restricted antibiotics throughout the healthcare facilities and reduce drug cost.
- To optimize patient's outcome through effective treatment of infections.
- To minimize emergence of resistant organisms in hospital with subsequent reduction of development of healthcare-associated infections.

Statement:

It describes guidelines for the use of antibiotics in Healthcare facilities.

2.28 Fair Price Pharmacies:-

The hospital pharmacy is responsible and authentic source of quality on affordable prices. These pharmacies are run on discounted rates and to generate revenue to meet its own expenses as well as reasonable/appropriate profit to institute vis a vis extending financial benefits to the patients by not only acquiring medicines of known quality but on discounted prices. These pharmacies are to be managed by Directorate General Drug Control and Pharmacy Services through dedicated focal person(s) by maintaining separate account. Seed money in the shape of endowment fund/revolving fund or any other fund are to be allocated on the basis of health facilities as per below listed table.

Purpose: To provide quality and affordable medicines to all the patients approaching these pharmacies.

Statement:

The hospital fair price pharmacy will run on no profit no loss/ Discounted rates basis.

Quality and affordable medicines will be available round the clock for all the patients (indoor/outdoor).

Table 2.1: Minimum Requirements for Establishing Fair Price Pharmacy

S#	Facility	Total No	HR/Shift	Funds/Facility	Total
1.	DHQs (Cat A, B)	29	01 Pharmacist, 03 technician & 01 helper	10 Million	10 X 29 = 290 Million
2.	THQ (Cat, C)	30	01 Pharmacist, 03 technician & 01 helper	07 Million	07 X 30 = 210 Million
					500 Million

2.29 Drug Information and Poison Control Center:-

Drug Information and Poison Control Center is a source of authentic accurate unbiased and reliable source of information about drugs and poisons to health care professionals and common masses.

The epidemiological data on poisoning is very limited in Pakistan, as there is a scarcity of poison surveillance. The studies done in Pakistan are generally case series, based on experiences in a single medical center or intensive care unit (ICU). In a national health survey of Pakistan, poisoning was the second commonest cause of unintentional injuries after fall in people aged five years and above. A hospital-based case series in Karachi, Pakistan reviewed 1900 ICU records and found 40% of them were related to poisoning. The overall mortality was 5.6% and organophosphates were found to be the leading cause of death.

Purpose:

- To provide independent, unbiased, authentic, accurate and objective drug information to assist health professionals in rational prescribing to optimize patient care.
- **To advise general public regarding safe, effective and economic use of medicines.**

Statement:

Services offered by the Drug Information and Poison Control Center includes;

Choice of Therapy.

Medicine Dose.

Duration of Therapy.

Drug Identification.

Therapeutic Alternatives.

Drug Interactions & Their Management.

Drug Contraindicated in Pregnancy, During Lactation.

Dose Adjustment in Hepatic and Renal Impairment.

Drug Updates, Withdrawals, ADRs, Antibiotic Resistance, Novel Dosage Forms and Delivery Systems.

Information on Reconstitution, Dilution, Stabilities and Rate Calculations of Parenterals.

Mode of Drug Administration.

Special Drug Related Precautions/Warnings.

Poisoning Prevention Strategies.

Poison Management Information (Identification, Diagnostic Tests, Absorption Minimizing Techniques, Elimination Enhancement Techniques, Antidotes Availability and Administration)

S#	Items Required	Numbers	Costing
1.	Laptops	03	0.9 Million
2.	Printers	02	0.2 Million
3.	Power back UPS	01	0.3 Million
4.	Toll Free Number		As per NTC/PTCL rates
5.	Internet Facilities		10,000/per month
6.	Online reference/ data basis		1.2 Million/annum
7.	Refernce books		0.5 Million
8.	Furniture/Fixture		0.8 million
9.	HR/Internees		As per Requirement

2.30 Continuous Professional Development and Trainings:-

It is structured educational activity designed or intended to support the continuing development of pharmacists/undergraduate/postgraduate students to maintain and enhance their competence.

Purpose:

- To ensure pharmacist competence and performance and patient health outcomes.
- To train undergraduate students for their professional training as part of curriculum.
- To offer internship to the pharmacy graduates/postgraduates students at the Directorate General Drug Control & Pharmacy Services Khyber Pakhtunkhwa.

Statement:

- The CPD shall be knowledge-based, application-based, and practice-based.
- The CPD approach shall be as a requirement for pharmacist re-licensure through pharmacy councils.
- A through structured, practice base training/internship for the undergraduate/graduates /postgraduates pharmacy students as part of their curriculum and/or professional development.
- More robust measures for continuing education outcomes must be developed and/or implemented
- Each program must be accredited by the Council for the Pharmacist in order to receive credit for participation.

3 Drug Control:

It is constitutional right of the public to have access to quality medicines and it can be ensured through stringent regulations and strong enforcement teams. Currently total fifty three drug inspectors are carrying out this unmanageable task of keeping check on thousands of medical stores in the province. The task is impossible to be carried out by such a small number of drug inspectors, results in the growth of unlicensed businesses. Such un-control business becomes source of quackery and hub for substandard/spurious medicines. Despite of meager resources the drug control team performs their duties to best of their abilities. In addition to the primary task, the Drug Control has collected fines of approx. 30 Million in last three years apart of similar revenue in category of drug sale licenses to Government treasury. A drug inspector has not only to inspect medical store but after sending the drug for testing, drug inspector has to process and plead the case in the Provincial Quality Control Board and Drug Court. However, they do not have enough resources for effective monitoring and observance of the regulations in the market. In order to control the menace of spurious and substandard drugs, there is need to increase the strength of drug inspectors.

3.1 e-Drug Sale License:

The Health Department initiated the issuance of e-drug sale license as per vision and directives of Prime Minister, from its own resources with no additional budget. The Health Department is the pioneer in implementing this initiative. This initiative on one side enabled the citizen to apply for drug sale license at their door stop and on the other hand ensure the transparency, availability of valid record and better services delivery within stipulated time.

3.2 Provisions of Law:-

The drug inspector performs its duty under the Drug Act, 1976.

3.2.1 Powers of Inspectors:-

(1) Subject to the provisions of section 19 of the Drugs Act, 1976, and of any rules made in this behalf, an Inspector may, within the local limits for which he is appointed, and in any other area within the permission of the licensing authority,-

(a) inspect any premises-wherein any drug is manufactured, the plant and process of manufacture, the means employed for standardizing and testing the drugs and all relevant records and registers;

(b) inspect any premises wherein any drug is sold or is stocked or exhibited for sale or is distributed, the storage arrangements and all relevant records and registers;

(c) take samples of any drug which is being manufactured, or being sold or is stocked or exhibited for sale or is being distributed;

(d) enter and search, with such assistance, if any, as he considers necessary, any building, vessel or place, in which he has reason to believe that an offence under this Act or any rules has been or is being committed or may continue to be committed;

(e) call any person to be present as witness in the course of search or seizure or in connection with any other matter where the presence of witnesses is necessary;

(f) seize such drug and all materials used in the manufacture thereof and any other articles, including registers, cash memos, invoices and bills, which he has reason to believe may furnish evidence of the commission of an offence punishable under this Act or any rules:

[Provided that where the contravention is such which can be remedied, the stocks shall not be seized upon undertaking in writing of the person not to sell drug without remedying the defect, under intimation to the Board concerned]

(g) require any person to appear before him at any reasonable time and place to give statement, assistance or information relating to or in connection with the investigation of an offence under this Act or the rules:

Provided that the exemptions under Sections 132 and 133 of the Code of Civil Procedure, 1908 (Act V of 1908), shall be applicable to requisitions for attendance under this Clause;

(h) lock and seal any factory, laboratory, shop, building, store -house or godown, or a part thereof, where any drug is or is being manufactured, stored, sold or exhibited for sale in contravention of any of the provisions of this Act or the rules;

(i) forbid for a reasonable period, not exceeding [two] weeks or such further period, which shall not be more than three months, as the Inspector may, with. The approval of the Provincial Quality Control Board, the Central Licensing Board, the Registration Board, or the licensing authority, as the case may be, specify, any person in charge of any premises from removing or dispensing of any drug, article or other thing likely to be used in evidence of the commission of an offence under this Act or the rules; and

(j) exercise such other powers as may be necessary for carrying out the purposes of this Act or any rules:

Provided that the powers under causes (f) to (j) shall be exercisable only by an Inspector specifically authorised in this behalf, by an order in writing, by the Government appointing him, subject to such conditions as may be specified in such order.

(2) The provisions of the Code of Criminal Procedure, 1898 (Act V of 1898), in so far as they are not inconsistent with the provisions of this Act, shall apply to searches and seizures made under this Act.

3.2.2 Procedure for Inspectors:

(1) Where an Inspector seizes any drug or any other article under Section 18; he shall tender a receipt therefore in the prescribed form.

(2) Where an Inspector takes a sample of a drug for the purpose of test or analysis, he shall intimate such purpose in writing in the prescribed form to the person from whom he takes it and, in the presence of such person unless he willfully absents himself, shall divide the sample into [five] portions and effectively seal and suitably mark the same and permit such persons to add his own seal, if any, and mark to all or any of the portions so sealed and marked:

Provided that, where the sample is taken from premises whereon the drug is being manufactured, it shall be necessary to divide the sample into three portions only:

Provided further that, where the drug is made up in containers of small volume, instead of dividing a sample as aforesaid, the Inspector may, and if the drug be such that it is likely to deteriorate or be otherwise damaged by exposure shall, take three or four, as the case may be, of the said containers after suitably marking the same and, where necessary, sealing them:

Provided further that if the contents of one container are insufficient for the laboratory test and analysis, the Inspector may increase the number of the containers in order to make the sample sufficient for this purpose.

(3) The Inspector shall restore one portion of a sample so divided or one container, as the case may be, to the person from whom he takes it, and shall retain the remainder and dispose of the same within seven days as follows :-(i) one portion of sample he shall send to the Government Analyst concerned for test and analysis;

(ii) the second he shall send to the chairman, Provincial Quality Control Board or the Central Licensing Board or the Registration Board, as the case may be;

(iii) the third, where taken, he shall send to the warrantor, if any, named under the proviso to sub-section (3) of Section 32; and

(iv) the fourth, where taken, he shall send to the person purporting to be its manufacturer or importer, as the case may be.

(4) Where an Inspector seizes any drug containing any filthy or putrid substance, vermin, worm, rodent, insect or any foreign matter which is visible to the naked eye, and the sample is such that it cannot or need not be divided, he shall effectively seal and suitably mark the same and permit the person from whom he seizes the drug to add his own seal, if any, and mark to it and shall produce the same before the Drug Court or the Central Licensing Board or the Registration Board, as the case may be, before which proceedings are instituted or action is initiated in respect of the drug.

(5) Where an Inspector takes any action under section 18,--(a) he shall as soon as practicable ascertain whether or not the drug contravenes any of the provisions of this Act and, it is ascertained that the drug does not so contravene, he shall forthwith revoke the order passed under the said section or, as the case may be, take such action as may be necessary for the return of the stock seized and payment for the samples taken, under intimation to the Board concerned;

(b) if he seizes the stock of the drug he shall, as soon as may be inform the Board concerned and take its order as to the custody thereof:

Provided that where a Federal Inspectors not competent to take action under section 30, he shall as soon as may be, report the matter and hand over the stock, if any, to the Provincial Inspector for further action under this Act.

(6) The Provincial Inspector on finding any contravention of this Act shall, unless the Board otherwise directs, always refer the case to the Provincial Quality Control Board and seek orders as to the action to be taken in respect of such contravention.

(7) The Federal Inspector on finding any contravention of this Act for which he is authorized shall, unless otherwise directed, always refer the case to the Central Licensing Board or the Registration Board or any other authority as may be specified for the purpose and seek any further orders as to the action to be taken in respect of such contravention.

4 QUALITY ASSURANCE AND DRUG TESTING LABORATORIES:

The quality parameters of therapeutic goods as well as health and OTC are known as a huge global public health problem, especially with reference to low –middle income countries like Pakistan. Despite the fact that the country possesses a huge pharmaceutical industry, there is severe dearth of published literature and scientific evidence on the quality of medicines. The country is making efforts for availability of quality drugs and in the year 2018, Pakistan has acquired a full membership status to World Health Organization's (WHO) Programme for International Drug Monitoring (WHO-PIDM). With this, Pakistan will have access to the respective WHO database "VigiBase" and "VigilLyze" for performing signal detection and signal strengthening and for being able to access global data for evaluating national reports.

Pakistan has approximately 650 manufacturing units and approx; 6440 medicines were registered in the year of 2018, reported by the Drug Regulatory Authority of Pakistan, Islamabad. However the list of importers of finished pharmaceutical products including biological, vaccines, anticancer, contrast media etc., exceeds the number of pharmaceutical manufactures. The Province has got single Drug Testing Laboratory which is only organization for carrying out the testing of thousands of medicines. The Laboratory receives testing samples from all over the province in addition to the samples from Public Sector Hospitals. The Government is making efforts to remove the shortcomings and has recently approved two mobile labs to lessen and share the burden on single laboratory. The drug testing laboratory receives approx. 1000 samples each month; with the current Human other resources, it is impossible to carry out this unmanageable task. It is important to upgrade the Drug Testing Laboratories per guidelines and official standards in term of human resources & equipment. The Government shall take all necessary steps for establishing and upgrading the drug testing labs in accordance with the WHO Good Practices for Pharmaceutical Quality Control Laboratory.

5 Regulations:-

The Pharmacy profession and practice of Pharmacy is regulated through different legislations i.e., the Pharmacy Act 1967, The Drugs Act, 1976, DRAP Act, 2012 and rules made there under. The Pharmacy education is regulated under the Pharmacy Act 1967 being Federal Law, under which pharmacy councils are established. The sale, storage of drugs is mandate of the Provincial Government for which the drug rules were framed. There is also need of making the laws related to pharmacy sector more stringent with the passage of time. The Drug Act, 1976, and the Drug rules shall be updated in accordance with the need of the time and circumstances. This will enable the Provincial Government for streamlining the medicine business and profession in the province.

6 Human Resource: -

The pharmacy education is regulated by the Pharmacy Council of Pakistan Islamabad established under the Pharmacy Act, 1967. There are a dozens of pharmacy universities and colleges operating in public and private sector in Province duly accredited with the pharmacy council of Pakistan, producing a handsome number of pharmacy graduates per annum. Majority of these universities offer post graduate programs in M.Phil/PhD in the discipline of pharmacy. Despite the handsome number of pharmacy graduates passing per annum the ratio of pharmacist versus population is too low to perform and integrate the pharmacy services in public sector hospital as compared with the existing strength which is consistently decreasing due to less job opportunities. The pharmacists working in different capacities/settings whether as pharmacist, drug inspector or analyst are not sufficient to achieve the aim of access of quality medicines to all. The HRH Policies of Federal and Provincial Government and the Drug Regulatory Authority of Pakistan emphasize on the increase of pharmacists in country and their induction in health team as member.

The action plan conveyed by Federal Government on the direction of Supreme Courte of Pakistan desires to induct one pharmacist at the rate of per 50 beds, establishing model pharmacies and a drug inspector at tehsil level and to provide the environment of provision of quality medicines for its availability to every common person without any hindrance to assess the quality parameters the testing labs vis-à-vis required HR be put in place to avoid delay and testing of medicines/devices as and when drawn.

With the implementation of this policy the health department would be in a position to have wider scope to post the right person for the right job amongst the HR working in different disciplines. The WHO Global code of practice on international recruitment of health personnel, implementation strategy report codes to induct pharmacist with a ratio of one pharmacist to six doctors.

In order to achieve the goals as envisaged in this policy following is the minimum human resource for the integration Pharmacy Services in different disciplines;

Table.3.1: Minimum HR for the Integration of Pharmacy Services Policy

Staff	Facility	Proposed HR
Hospital Pharmacist	Category A Hospital (Non MTI)	08
	Category B Hospital	04
	Category C Hospital	02
	Category D Hospital	01
	District Health Officer Office	01
	RHC/BHU	01
	Specialized facilities (TB Centers, Burn & trauma, etc.	03
Drug Inspector	Each Tehsil	01
One Drug Testing Laboratory	Divisional Level	04 Analysts 04 Chemists 01 Microbiologist

7 Conclusion

This policy provides guidelines for establishment of pharmacy services to make effective, safe and affordable medicines available to meet needs of entire population. In order to ensure implementation of this Policy in Khyber Pakhtunkhwa, the Government will put in place mechanisms for effective oversight and facilitation of the process. This policy will help and augment the process of getting the ISO certification for the health care facilities and drug testing laboratory. The mission of “quality medicines for all” can be achieved by implementation of this policy in true spirit.

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