

Dr. Huma Rasheed

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Objectives: Development of policies and systems for provision of ethical, safe and rational use of drugs in Pakistan through practice of pharmacy; promotion of its education, research and training of professionals.

WORK HISTORY

Nov 2017- to date Feb 2009-Sept 2012 (Regular) Aug 2008- Feb 2009 (Contract)	Assistant Professor-Pharmaceutics Institute of Pharmaceutical Sciences, The University of Veterinary and Animal Sciences (IPS-UVAS), Lahore-Pakistan, Served as Director and founder of the Institute from Aug 2008-Sept 2009 Additional duties: Quality Assurance Officer, Bioequivalence Study Centre (BeSt centre) (Aug 2008-Aug 2012)- Carried out the documentation and necessary protocols for the conduct of clinical trials, leading to status of the first MoH approved Bioequivalence Study Centre in Pakistan
11 th Apr 2013- 5 th Nov 2017	Conducted the first National Workshop on the Bioequivalence studies in Pakistan with the collaboration of Ministry of Health and World Health Organization (Nov 2008)
Sept 2012-May 2013	Study leave for PhD in Germany under HEC scholarship Six months German Language course sponsored by Higher Education Commission of Pakistan conducted at Anne Marie Schimmel Haus, Lahore
Jan 2003- Aug 2008	Clinical Pharmacist /Deputy Chief Pharmacist , Department of Pharmaceutical Services, The Children's Hospital and The Institute of Child Health, Lahore, (See Annexure at the end for details)
Jan 2002- Jan 2003	Senior Pharmacist/ Branch Manager , Farmacia Chain Drug Stores, Shadman, Lahore.
Jun2001-Nov 2001	Assistant Co-ordinator, Health Section, Punjab Lok Sujag. <i>Punjab Lok Sujag</i> , a local community-based non- governmental organization.
May 1999-May 2001	Hospital Pharmacist. <i>The Children's Hospital & The Institute of Child Health, Health Department, Govt. Of Punjab, Lahore</i> (see additional details at the end of document)

EDUCATION

2019

PhD (Pharmacy)

Institute of Pharmacy and Food Chemistry, University of Wuerzburg, Am Hubland, Germany.

Supervisor: **Prof. Dr. Ulrike Holzgrabe**

Thesis title: *Development of simple and cost-effective High- Performance Liquid Chromatography methods for quality control of essential beta-lactam antibiotics in low- and middle-income countries*

2007

M. Phil -Pharmaceutics 1st Division 696/1000 70% marks

School of Pharmacy, University of the Punjab, Lahore

1998

Bachelor of Pharmacy 1st Position in University 2511/3700

(GOLD MEDALIST and Best Graduate) Faculty of Pharmacy, University of the Punjab.

1993

Intermediate (Pre-medical) 2nd in College (A-Grade) 72.27%

Govt. College for Women Wahdat Road, Lahore BISE, Lahore

1991

Secondary School Examination 1st in School 82.11% (A+ Grade)

Customs Public School for Girls BISE, Lahore

M.Phil. RESEARCH SUPERVISION

1. Muhammad Shahwar Rana-Evaluation of good pharmacy practices in drug sale outlets of urban areas of Lahore, (2011)
2. Muhammad Mubasher-Identification of potential drug-drug interaction in chain pharmacies of Lahore, (2011)
3. Khurram Wajih Khan-Pharmacokinetics of carvedilol after single dose administration in dogs (2011)
4. Sana Tariq-Quality evaluation of different brands of ceftriaxone using HPLC and bioassay (Minor member, designed research concept- 2012)
5. Muhammad Muaaz Munir-Population Pharmacokinetics of vancomycin in Pakistani Population (Major member, Thesis submitted-2018)
6. Fauzia Tajdin-Identification of etiological agents for bacterial meningitis in Pediatrics (Minor member, designed research concept-2012)
7. Sunaina Rafi -Quantification of availability of essential medicines in Pakistan and study of its clinical impact (On going)
8. Ammara Arif- Population pharmacokinetics of moxifloxacin in Pakistani patients

SCIENTIFIC PUBLICATIONS

1. **Rasheed H**, Hollein L, Bukhari KS, Holzgrabe U. Regulatory framework in Pakistan: situation analysis of medicine quality and future recommendations. *J Pharm Policy Pract* 2019 (*In press*) [*PhD research work*]
2. **Rasheed H**, Hollein L, Holzgrabe U. Future Information Technology Tools for Fighting Substandard and Falsified Medicines in Low- and Middle-Income Countries. *Front Pharmacol.* 2018; 9:995 [*PhD research work*]
3. **Rasheed H**, Usman M, Ahmed W, Bacha MH, Zafar A, Bukhari KS. A Shift from Logistic Software to Service Model: A Case Study of New Service-Driven-Software for Management of Emergency Supplies During Disasters and Emergency Conditions by WHO. *Front. Pharmacol.* 2019;10(473).
4. Nawaz HA, Masood MI, Abbass M, Muhammad U, Khan AM, **Rasheed H**, Riffat S. Evaluation of gender difference in pharmacokinetics of candesartan cilexetil in the fasted state by RP-HPLC: A single dose comparative study. *Pak J Pharm Sci.* 2019; Vol.32, 3:1019-1024.
5. Safdar Z, Muhammad U, **Rasheed H.**, Sherazi SSH, Shahwar D. In Vitro interaction study of diclofenac sodium and acetaminophen with herbal agents. *Lat Am J Pharm.* 2018, 37 (10): 1993-6.
6. Tajdin F, Rasheed MA, Ashraf M, **Rasheed H**, Ejaz H, Khan GJ. Antibiotic therapy in pyogenic meningitis in paediatric patients. *J Coll Physicians Surg Pak.* 2013;23(10):703-7.

BOOK CHAPTERS

1. **Rasheed H**, Ibrahim MMI, Babar Z-U-D., (2019) Evidence-based Pharmacy Practice Research in Low- and Middle-Income Countries: Issues, challenges and synthesis, Encyclopaedia of Pharmacy Practice and Clinical Pharmacy, Babar, Z-U-D (2019). ISBN: 9780128127353
2. Usman M, **Rasheed H**, Population Pharmacokinetic and clinical decision making, Encyclopaedia of Pharmacy Practice and Clinical Pharmacy, Babar, Z-U-D (2019). ISBN: 9780128127353
3. Usman M, **Rasheed H**, Clinical pharmacokinetics and therapeutic drug monitoring, Encyclopaedia of Pharmacy Practice and Clinical Pharmacy, Babar, Z-U-D (2019). ISBN: 9780128127353
4. **Rasheed H**, Nawaz MA, Usman M, Anjum SM, Epilepsy-role of pharmacist in management and control, Encyclopaedia of Pharmacy Practice and Clinical Pharmacy, Babar, Z-U-D (2019). ISBN: 9780128127353
5. **Rasheed H**, Nawaz MA, Bacha H, Rao AZ, Bukhari SKS, Role of pharmacist in management of Humanitarian Crisis, Encyclopaedia of Pharmacy Practice and Clinical Pharmacy, Babar, Z-U-D (2019). ISBN: 9780128127353

POSTER PRESENTATION

1. Evaluation of Drug Regulatory Authority of Pakistan using WHO Global Benchmarking Tool,

Poster presentation accepted and presented in Pharmaceutical sciences: Regulatory sciences (Abstract No: FIPSUB-2564) of FIP World Congress 2018 at Glasgow, UK (2nd -6th September, 2018)

2. Risk register-a proposal for risk-based post marketing surveillance tool for quality of medicines

Poster presentation accepted and presented in Pharmaceutical sciences: Regulatory sciences (Abstract No: FIPSUB-2546) of FIP World Congress 2018 at Glasgow, UK (2nd -6th September, 2018)

3. Evaluation of good pharmacy practice in drug sale outlets of urban Lahore, Pakistan.

Poster presentation accepted for Pharmaceutical sciences: Pharmacy practice: Community pharmacy (Abstract No: FIPSUB-2545) of FIP World Congress 2018 at Glasgow, UK (2nd -6th September, 2018)

4. Improved access to Hepatitis C treatment in Pakistan-a success story

Poster presentation accepted for Pharmaceutical sciences: Pharmacy practice: Community pharmacy (Abstract No: FIPSUB-2549) of FIP World Congress 2018 at Glasgow, UK (2nd -6th September, 2018)

List of Poster presentations accepted for FIP World Congress 2019 at Abu Dhabi (22nd-26th September 2019)

5. Survey to Assess Availability Of Essential Medicines In Pakistan. (Abstract No: FIPSUB-2078). Pharmaceutical Sciences: Regulatory sciences

6. Initiation of Hospital Pharmacy Services and Response of Patients and Healthcare Providers. (Abstract No: FIPSUB-1321). for Pharmaceutical Sciences: Hospital Pharmacy)

7. Case Studies on Rational Dosing of Antibiotics In Tertiary Care Hospitals Of Lahore, Poster presentation accepted in Hospital pharmacy (FIPSUB-1323). Pharmaceutical Sciences: Hospital Pharmacy

8. Evaluation of Knowledge of Pharmacy Sales Staff On Drug Interaction of OTC Medicines In Pakistan (Abstract No: FIPSUB-1325). Pharmacy practice: Community pharmacy

9. Translation of cautionary & advisory labels in Urdu and its impact at local health care Unit (Abstract No: FIPSUB-1328). Pharmaceutical Sciences: Community Pharmacy

10. Importance of literacy and demographic in designing pharmacy services for low-income group (FIPSUB-1330). Pharmaceutical

practice: Social and administrative pharmacy

11. Knowledge of pharmacy sale staff on exclusive breastfeeding (EBF) and its benefits, (FIPSUB-1330). Pharmaceutical practice: Social and administrative pharmacy

12. Assessment of Tuberculosis (TB) treatment protocol in National TB Program for safe use of medicines (FIPSUB-1331). Pharmaceutical practice: Social and Administrative pharmacy

13. Evaluation of Knowledge for standard treatment guidelines for Diarrhoea in Pakistan (Abstract No: FIPSUB-1332). Pharmacy practice: Social and Administrative Pharmacy

14. Communicating evidence to prescribers and public on safe use of antihistamines and decongestants (FIPSUB-1333). Pharmacy practice: Social and Administrative Pharmacy

15. Importance of literacy and demographic data in designing pharmacy services for Low- and Middle-Income groups (FIPSUB-1334). Pharmacy practice: Social and Administrative Pharmacy

16. Drug-Drug Interaction in Prescriptions Dispensed by Community Pharmacies In Lahore, (FIPSUB-1994). Pharmaceutical practice: Community pharmacy

13 Poster presentations are accepted a FIP 2019, Abu Dhabi on various research and advocacy topics related to pharmaceutical policy and medication safety carried out by undergraduate students under my supervision. This will be first time Pakistan will be represented in FIP congress in such a large number. This work is carried out by the students with their personal efforts as volunteers and health activists.

OTHER RESEARCH PROJECTS

1. The Clinical Evaluation of The Different Brands of IV ceftriaxone in Pediatric Bacterial Meningitis submitted to Punjab University (2007)-*M.Phil. Research*
2. Effect of deregulation on the drug pricing in Pakistan (a two-decade survey 1988-2000), 2001. *Drug Bulletin by The Network for Rational Use of Drugs, Pakistan* (The Network for Consumer Protection)
3. UNICEF funded research project undertaken by Punjab Lok Sujag- Prevalence of iodine deficiency disorders in 27 villages of Depalpur using urinary iodine levels of school going children (Design, conduct and training of volunteers on sampling, 2001)
4. Orphan Drugs-The dilemma of missing essential drugs in Pakistan (2001, revised 2005)

ORAL PRESENTATIONS

1. Role of specialized pharmacy services in pediatric care. Annual Symposium of The Children's Hospital, Lahore. 2007
2. Spine bifida and use of folic Acid for its prevention. 28th November 2007 at The Children's Hospital Lahore (CHAP 2007)
3. Orphan Drugs-The delimita of missing essential drugs in Pakistan. NIH, Islamabad NSW 2006
4. Proper handling of pharmaceuticals. NIH, Islamabad NSW 2006
5. Pharmacy profession: defining new roles in public health service in Pakistan- an experience of five years at the Children's Hospital & the Institute of Child Health, Lahore. 13th International Pharmaceutical Conference, Lahore
6. The extemporaneous preparations an initial experience of five years in the Children's Hospital & the Institute of Child Health, Lahore. 13th International Pharmaceutical Conference, Lahore
7. The role of total parenteral nutrition in paediatric practice and the importance of pharmacist in its provision and clinical care- a three years experience at the Children's Hospital & the Institute of Child Health, Lahore. 13th International Pharmaceutical Conference, Lahore
8. Orphan drugs- The dilemma of missing essential drugs in Pakistan (2001-2005). 13th International Pharmaceutical Conference, Lahore and 2nd Annual Symposium of The Children's Hospital, Lahore
9. Orphan drugs- The dilemma of missing essential drugs in Pakistan (2001-2005). Symposium on Infectious Diseases held in Lahore organized by the Society of Infectious Diseases, Pakistan (poster presentation)

AWARDS & SCHOLARSHIPS

1. **Overseas Scholarship for PhD in Germany by Higher Education Commission Pakistan** in collaboration with DAAD. PhD Scholar in University of Würzburg, under the supervision of Professor Dr. Ulrike Holzgrabe. (April 2013-Feb 2019)
2. Nominated as principal candidate for **Fulbright scholarship 2013 for PhD in United States of America** (*Declined due to lack of responsibility shown by USEFP*)
3. Nominated as principal candidate for **Overseas Scholarship for PhD in Sweden by HEC in 2007. Admission secured in Karolinska Institute** (*Declined due to personal reasons*).
4. Recipient of STAR AWARD-2008 for the achievements and contributions in the area of health and education in category STAR WOMEN OF PAKISTAN.
5. Recipient of Dr. Mehboob Rabbani Gold Medal for standing First

in B. Pharmacy (1993-1998)

6. Best Graduate of B. Pharmacy Session 1993-98, Faculty of Pharmacy, University of The Punjab, Lahore-Pakistan
7. Recipient of President's Talent Award in 3rd professional of B. Pharmacy for standing first in University.
8. His Highness Sheikh Zayed Bin Sultan Al Nahyan Merit Scholarship (1993)
9. Kaukab Mir Memorial Welfare Trust Merit Scholarship for the 50 outstanding students all over Pakistan (1994)
10. Government merit scholarships from directorate of education, Lahore division on the basis of top ranking in admission to. B. Pharm. and Higher Secondary School (1993)

**WORKSHOPS AND
SEMINARS
CONDUCTED/ORG
ANIZED**

1. 1st National Workshop on Sterile Compounding and Aseptic Techniques-A Special Focus on Handling of Hazardous Medication (1st January, 2019), organizer and participant.
2. 1st National Workshop on Bioequivalence Studies in Pakistan with the collaboration of WHO and Ministry of Health (November 2008 at UVAS, Lahore)
3. Organized lecture by Saeed A Qureshi for the pharmaceutical industry, academia and related health professionals on the "Limitations of Dissolution Testing" held at Conference Hall UVAS in year 2008.
4. Organized Pakistan's First "OATH TAKING CEREMONEY" for fresh enrollments in pharmacy program 2008
5. Organized "Child Health Awareness Program (CHAP 2007) on the Spina bifida and Use of Folic Acid for its prevention", on 28h November 2007 at The Children's Hospital Lahore
6. Organized two days National Seminar & Workshop on Rational use of drugs (NSWR), Essential Drugs, Good prescribing Practices and Good Pharmacy Practices in collaboration with WHO, Ministry of Health and National Institute of Health at The Children's Hospital Lahore on 24th & 25th of February 2006 (NSWR 2006)
7. Training workshop for the doctors, nurses and pharmacists on the "Total Parenteral nutrition" at the Children's Hospital, Lahore, conducted twice at the Children's Hospital, Lahore (2005-2007).
8. Workshop on "Action Plan for Pharmacist's working in Hospitals" conducted at the 13th International Pharmaceutical Conference, Lahore 2006
9. Workshop on the "Antimicrobial resistance" conducted at the 13th International Pharmaceutical Conference, Lahore 2007

**OTHER
PROFESSIONAL
ACTIVITIES AND
SERVICES**

1. **President National Alliance for Women in Pharmacy (NAWP)** a gender equity and women leadership forum established under Pakistan Pharmacist Association (PPA). The organization works under the patronage and guidance from the global leaders in gender equity and work force intelligence in pharmacy profession with Ms Nadia Bukhari (PhD scholar on Women leadership in Pharmacy, Supervised by Prof. Dr. Catherine Duggan/CEO FIP, in University College of London, UK). Pakistan has been taken as a model country, with the launch of NAWP as a gender equity drive endorsed by the International Pharmaceutical Federation (FIP).
2. Examiner and paper setter for various Pharmacy Schools including Leeds Pharmacy College, Lahore Pharmacy College, Riphah Institute of Pharmaceutical Sciences, Islamabad.
3. **Council member from Pakistan** in the two days round table sessions at International Pharmaceutical Congress by FIP held in Dusseldorf, Germany in 2015
4. Official facilitator **World Health Organization** for training of Health Care Professionals in earthquake struck areas of NWFP and Azad Jammu Kashmir. Developed training materials and conducted multiple trainings in affected area as well as TOT sessions.
5. Official trainer for **Punjab Pharmacy Council** for training of newly hired pharmacists in Punjab since 1999-2013
6. Capacity building of community pharmacies and retail chain on the financial management, inventory control, human resource management and provision of essential pharmacy services.
7. Visiting faculty member and examiner for clinical pharmacy for various institutions including University of the Punjab.
8. Have served voluntarily (2003-2006) to design and conduct practical classes of clinical pharmacy at Children's hospital for more than 200 students/ year visiting in batches of two per day for 2-4 days a week from University of Punjab.

**EXTRA
CURRICULAR
ACTIVIITES**

1. Member of theatre for integration of refugees by Katholisches Hochshcule Gemeinschaft (KHG), WUerzburg, Germany under the name of *Überlebenden* (The Survivors), October 2016-17
2. Organizer of university end college events, member of literary society and editorial board of faculty magazine
3. Prominent debater and recipient of various awards in debates and declamation contests in college and university

LANGUAGES

Urdu and Punjabi (Mother-tongue); **English:** IELTS overall band 7.5; TOEFL: 105/120; **German:** B2 level.

GRE Scores

GRE –General (verbal147, quantitative 148, analytical 3.5)

Additional details

Experience and Achievements in the hospital and clinical pharmacy

Department of Pharmaceutical Services, The Children’s Hospital & The The Children’s Hospital and The Institute of Child Health, Lahore

Clinical Pharmacist /Deputy Chief Pharmacist/ Secretary Pharmacy Management Committee

Jan 2003-Aug 2008, Contract BPS-17

1. Establishment of modern pharmacy services in the hospital and co-ordinated research and academic development at the Department of Pharmaceutical Services
2. Training of pharmacists as well as other health care professional
3. Successfully operated **an access model through hospital-based Model Retail Pharmacy** which functions to provide maximum discounts to the patients by provision of formulary based approved medicines.
4. Active member of several prestigious committees of the hospital, including Pharmacy & Therapeutics Committee, Research & Ethics Committee, Infection Control Committee, Pharmacy Management Committee, Member-Asthma and TB Clinic.

Major achievements:

Initiated Aseptic Dispensing Services including Total Parenteral Nutrition services and unit dose dispensing for high cost injectables. Provision of extemporaneous preparation service for metabolic disorder patients.

Developed a concept of team work among health professionals. Established credibility of pharmacy professionals through sound, unbiased Drug Information Service and participation in clinical ward rounds resulting in involvement of pharmacist at all levels of clinical care.

Started undergraduate practical training program for Pharm.D. students for clinical pharmacy. Designed and conducted Pakistan's first residency program in Clinical Pharmacy for Lahore College for Women University graduates at the Children's Hospital Lahore.

Hospital Pharmacist

May 1999-May 2001-Contract BPS 17

Member Pharmacy & Therapeutic Committee worked for the development of hospital formulary and implementation of formulary based drug utilization system.

Manager Accident & Emergency Pharmacy

Developed 24 hours clinical pharmacy and Unit Dose Dispensing System (UDD) with compulsory ward rounds of pharmacists round the clock in accident and emergency pharmacy and ICUs. The project proved to be successful and establishment grounds for further expansion of pharmacy services in the hospital in later years.

Development of protocols for emergency management and developed channels for ready availability of pharmaceuticals that are in short supplies.

Trained and developed protocols for improvement in pharmaceutical handling and better prescription and administration record keeping.

Provision of drug information services and assisting the clinical team in crisis cases like that of poisonings and other acute conditions.