

Faculty Portfolio

Dr. Md Sayeed Akhtar

Assitant Professor
Department of Clinical Pharmacy
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Education:

Year of Graduation	Qualifications (Specializations if any)	University/College, Country
2016	PhD (Pharmacology)	Faculty of pharmacy, Jamia Hamdard, New Delhi (India)
2008	M. Pharm (Pharmacy practice)	Faculty of pharmacy, Jamia Hamdard, New Delhi (India)
2006	B. Pharm	Faculty of pharmacy, Jamia Hamdard, New Delhi (India)

Professional experience:

Year	Positions	University/College, Country
28/08/2018	Assistant pharmacy (Clinical Pharmacy)	Department of Clinical Pharmacy, College of Pharmacy, King Khalid University, Abha, Kingdom of Saudi Arabia
25/10/2017–02/07/2018	Assistant professor (Clinical Pharmacy)	Department of Pharmacology (Pharmacy), Ambo University, Ambo, Ethiopia
11/04/2016 – 24/10/2017	Assistant professor (Clinical Pharmacology)	Department of Pharmacology, School of Allied Health Sciences, Sharda University, Greater Noida, India
08/2011-03/2016	Senior research fellow (Pharmacology)	Department of Pharmacology, Jamia Hamdard, New Delhi, India
08/2008-10-2010	Lecturer (Pharmacology)	Advanced institute of pharmacy, PT. BD Sharma University of Health Sciences, Rohtak, Haryana, India

Community service activities

Year	Positions & Name of the Project	University/Company, Country
2023	Participants, OTC Medications	College of pharmacy, KSA

Academic/research awards:

Year/Duration of Award	Name of the Award	University/Company, Country
04/2012- 03/ 2016	Maulana Azad National Fellowship	University Grants Commission (UGC), Govt. of India
2011-2012	Senior Research Fellowship	Central Council for Research in Unani Medicine (CCRUM), Ministry of AYUSH, Govt. of India
April 2, 2011	Research Award	National Conference of the Indian Pharmacy Graduates' Association
2007-2009	Graduate Aptitude test in Engineering (GATE) fellowship	Indian Institute of Technology, India

Workshops/ Trainings:

Year	Title	University/Company, Country
October 2022	NLeCer 103: Scientific Writing in Health Research	ICMR-National Institute of Epidemiology, India
May 14-16, 2022	Research methodology and survey data analysis	MVN University, India
March 16, 2021	Self-Study Report and Self Evaluation Scales	King Khalid University, KSA
November 5, 2021	Reducing antimicrobial resistance of treatable sexually transmitted infections in antenatal care	World Health Organisation
November 23 to December 18, 2020	Workshop on Advance biostatistics and research methodology	Institute of applied statistics, India
October 21-24, 2016	Physiological and Pharmacological aspects-Tracking to molecules	AIIMS, India
October 29-31, 2015	New Paradigms in Atherosclerosis & Cardiovascular Disorders (ISARCON 2015)	Jamia Hamdard, India

Research interests:

- Health related Quality of life assessment
- Cardiovascular pharmacology

Teaching experience:

- Teaching Research methodology, Medical literature evaluation and hospital pharmacy at King Khalid University, Saudi Arabia 28/08/2018-Present
- Teaching Cardiovascular pharmaco-therapeutics at Ambo University, Ethiopia 25/10/2017–02/07/2018
- Teaching Clinical pharmacology course at Sharda University, India 11/04/2016–24/10/2017

Professional membership:

Year	Name of the professional Body	Role
2023-2024	Saudi Society for Medical Education	Member
Lifetime membership	Delhi Pharmacy Council	Registered pharmacist
Lifetime membership	India Pharmacy Graduates' Association	Member
2008-2012	Institutional animal ethics committee	Biological Scientist

Research grants:

Year/Duration of Grant	Title of the Project	Awarding Body
2023-2024	Large Research group project (RGP.2/207/44)	Deanship of Scientific Research, King Khalid University, KSA
2022-2023	Small Research group project (RGP.1/242/43)	Deanship of Scientific Research, King Khalid University, KSA
2021-2022	General Program Project (GRP/190/42)	Deanship of Scientific Research, King Khalid University, KSA

Publications:

Jahan, R. N., Khan, Z., Akhtar, M. S., Ansari, M. D., Solanki, P., Ahmad, F. J., Aqil, M., & Sultana, Y. (2023). Development of Bedaquiline-Loaded SNEDDS Using Quality by Design (QbD) Approach to Improve Biopharmaceutical Attributes for the Management of Multidrug-Resistant Tuberculosis (MDR-TB). *Antibiotics (Basel, Switzerland)*, 12(10), 1510.

Akhtar, M. S., Alavudeen, S. S., Raza, A., Imam, M. T., Almalki, Z. S., Tabassum, F., & Iqbal, M. J. (2023). Current understanding of structural and molecular changes in diabetic cardiomyopathy. *Life sciences*, 332, 122087.

Sharma, A. K., Bisht, P., Gupta, B., Sayeed Akhtar, M. D., Shaik Alavudeen, S., Afzal, O., & Sa Altamimi, A. (2023). Investigating miRNA subfamilies: Can they assist in the early diagnosis of acute myocardial infarction?. *Drug discovery today*, 28(10), 103695.

Virmani, T., Kumar, G., Sharma, A., Pathak, K., Akhtar, M. S., Afzal, O., & Altamimi, A. S. A. (2023). Amelioration of Cancer Employing Chitosan, Its Derivatives, and Chitosan-Based Nanoparticles: Recent Updates. *Polymers*, 15(13), 2928.

Alshaiban, A., Alavudeen, S. S., Alshahrani, I., Kardam, A. M., Alhasan, I. M., Alasiri, S. A., Imam, M. T., Almalki, Z. S., & Akhtar, M. S. (2023). Impact of Clinical Pharmacist Running Anticoagulation Clinic in Saudi Arabia. *Journal of clinical medicine*, 12(12), 3887.

Alavudeen, S. S., Easwaran, V., Khan, N. A., Venkatesan, K., Paulsamy, P., Mohammed Hussein, A. T., Imam, M. T., Almalki, Z. S., & Akhtar, M. S. (2023). Cardiovascular Disease-Related Health Promotion and Prevention Services by Pharmacists in Saudi Arabia: How Well Are They Prepared?. *Healthcare (Basel, Switzerland)*, 11(11), 1614.

Sharma, A. K., Sharma, A., Lal, S., Kumar, A., Yadav, N. K., Tabassum, F., Sayeed Akhtar, M., Tarique Imam, M., Saeed Almalki, Z., & Mukherjee, M. (2023). Dysbiosis versus diabetes: Pathological signaling and promising therapeutic strategies. *Drug discovery today*, 28(5), 103558.

Asif Raza, Fauzia Tabassum, Shazia Tabassum. Md Sayeed Akhtar, "Microbial vitamins in nutrition and healthcare In Microbial vitamins and carotenoids in food biotechnology: Novel source and potential applications" edited by Syed Amir Ashraf & Mohammed Kuddus, ELSEVIER Publishing Company. Under editing.

Md Sayeed Akhtar, Aisha Siddiqui, Asif Raza, Obaid Afzal, Abdulmalik S.A. Altamimi, Mir Javid Iqbal, Sirajudeen S Alavudeen, Shaktibala Datta, Fauzia Tabassum* Current understanding about structural and molecular changes in diabetic cardiomyopathy. *Life sciences*, 332, 122087. <https://doi.org/10.1016/j.lfs.2023.122087>.

Obaid Afzal, Abdulmalik S.A. Altamimi, Mubarak A. Alamri, Ali, Altharawi, Md Sayeed Akhtar, Fauzia Tabassum, Waleed H. Almalki, Tanuja Singh. Resveratrol-loaded chia seed oil-based nanogel as an anti-inflammatory in adjuvant-induced arthritis. *Gels (Basel, Switzerland)*, 9(2), 131.

Farheen, Md Habban Akhter, Havagiray Chitme, Md Sayeed Akhtar, Fauzia Tabassum, Mariusz Jaremko, Abdul-Hamid Emwas Harnessing. Folate-Functionalized Nasal Delivery of Dox–Erlo-Loaded Biopolymeric Nanoparticles in Cancer Treatment: Development, Optimization, Characterization, and Biodistribution Analysis. *Pharmaceuticals*, 16(2), 207.

Arun K Sharma, Ashish Kumar, Gunjan Sharma, Fauzia Tabassum, Md Sayeed Akhtar. Preliminary Investigation on Impact of Intergenerational Treatment of Resveratrol Endorses the Development of ‘Super-Pups’ Life Sciences. 2023 1; 314:121322.

Md Sayeed Akhtar, Md Quamrul Hassan, Aisha Siddiqui, Sirajudeen S Alavudeen, Obaid Afzal, Abdulmalik S.A. Altamimi, Syed Obaidur Rahman, Mallika khurana, Mohamed Jawed Ahsan, Arun Kumar, Fauzia Tabassum. Levosimendan: Mechanistic insight and its diverse future aspects in cardiac care. *Acta Cardiologica*. 2022:1-18.

Md. Sayeed Akhtar, Md. Quamrul Hassan, Obaid Afzal, Abdulmalik S.A. Altamimi, Mohd. Zaheen Hassan, Arun Kumar, Asif Ansari Shaik Mohammad, Fauzia Tabassum. Comparative efficacy of levosimendan, ramipril, and sacubitril/valsartan in isoproterenol induced experimental heart failure: a hemodynamic and molecular approach. *Current Molecular Pharmacology*. 2022 Sep 19.

Sanusi Sani, Md Sayeed Akhtar, Prem Kapur, Gunjan Sharma, Fauzia Tabassum, Mohd Faiyaz Khan, Manju Sharma. Evaluation of prescribing pattern, therapeutic adherence, and occurrence of adverse drug reactions in patients with type 2 diabetes mellitus. *Current Drug Therapy*. 2022; 17(3):177-185.

Sirajudeen S Alavudeen, Anas Ali Asiri, Shatha Abdulrahman Fageeh, Ahmed Abdoh Aljarie, Mir Javid Iqbal, Noohu Abdulla Khan, Fauzia Tabassum and Md Sayeed Akhtar. Evaluation of rational drug use and antimicrobial resistance patterns in urinary tract related infectious diseases in paediatric patients. *Front. Pediatr*. 2021,9:740106.

Tabassum F, Jyoti C, Sinha HH, Dhar K, Akhtar MS. Impact of polycystic ovary syndrome on quality of life of women in correlation to age, basal metabolic index, education and marriage. *PLoS ONE*. 2021; 16(3): e0247486.

Siddiqui A, Akhtar MS, Shah Z, Othman I, Kumari Y. Inflammation Drives Alzheimer's Disease: Emphasis on 5-lipoxygenase pathways. *Current Neuropharmacology*. 2020 Sep 24.

Khurana M, Rahman SO, Najmi AK, Potttoo FH, Akhtar MS. Application of contemporary neuroproteomic techniques in unravelling neurological disorders. *Current Protein & Peptide Science*. 2020;21(12):1146-1163.

Ramsha Iqbal, Md. Sayeed Akhtar, Zeeba S. Jairajpuri, Md. Quamrul Hassan, Mohd. Akhtar, Abul Kalam Najmi. Pitavastatin ameliorates myocardial damage by preventing inflammation and collagen deposition via reduced free radical generation in isoproterenol induced cardiomyopathy. *Clinical and Experimental Pharmacology*. 2019;41(5):434-443.

Mohd Imran, Md Quamrul Hassan, Md, Sayeed Akhtar, Md Obaid rahman, Mohd Akhtar, Abul Kalam Najmi. Sacubitril and valsartan protect from experimental myocardial infarction by ameliorating oxidative damage in Wistar rats. *Clinical and Experimental Pharmacology*. 2018; 29: 1-8.

Beg MA, Shivangi, Afzal O, Akhtar MS, Altamimi ASA, Hussain A, Imam MA, Ahmad MN, Chopra S, Athar F. Potential Efficacy of β -Amyrin Targeting Mycobacterial Universal Stress Protein by In Vitro and In Silico Approach. *Molecules*. 2022 Jul 18;27(14):4581.

Md jawaid Akhtar, Ahsan Ahmad Khan, Zulphikar Ali, Rikeshwer Prasad Dewangan, Md Rafi, Md Quamrul Hassan, Md Sayeed Akhtar, Anees Ahmad Siddiqui, Sangh Partap, Santosh Pasha. Synthesis of stable benzimidazole derivatives bearing pyrazole as anticancer and EGFR receptor inhibitors. *Bioorganic Chemistry*. 2018; 78: 158-169.

Shaik Alavudeen S, Basharat V, Khaled Bahamdan A, Easwaran V, Khaled Bahamdan G, Akhtar MS, Alshahrani S, Alqahtani A, Venkatesan K. Knowledge, attitude and preparedness of healthcare students toward basic life support at King Khalid University, Abha, Kingdom of Saudi Arabia. *Clin Exp Hypertens*. 2022;44(7):634-640.

Yam Nath Paudel, Md Rahmat Ali, Sadia Shah, Mohammad Adil, Md. Sayeed Akhtar, Ravisha Wadhwa, Sandhya Bawa, Manju Sharma. 2-[(4-Chlorobenzyl) amino]-4-methyl-1,3-thiazole-5-carboxylic acid exhibits antidiabetic potential and raises insulin sensitivity via amelioration of oxidative enzymes and inflammatory cytokines in streptozotocin-induced diabetic rats. *Biomedicine & Pharmacotherapy* 2017; 89: 651–659.

Afzal O, Akhtar MS, Kumar S, Ali MR, Jaggi M, Bawa S. "Hit to lead optimization of a series of N-[4-(1,3-benzothiazol-2-yl) phenyl]acetamides as monoacylglycerol lipase

inhibitors with potential anticancer activity”. *European Journal of Medicinal Chemistry* 2016; 121: 318-30.

Akhtar MS, Pillai KK, Hassan MQ, Dhyani N, Ismail MV, Najmi AK. “Levosimendan reduces myocardial damage and improves cardiodynamics in streptozotocin induced diabetic cardiomyopathy via SERCA2a/NCX1 pathway”. *Life Sciences*. 2016; 153: 55-65.

Hassan MQ, Akhtar MS, Akhtar M, Ali J, Haque SE, Najmi AK. “Edaravone, a potent free radical scavenger and a calcium channel blocker attenuate isoproterenol induced myocardial infarction by suppressing oxidative stress, apoptotic signaling and ultrastructural damage”. *Therapeutic Advances in Cardiovascular Disease* 2016; 10(4): 214-23.

Akhtar MS, Pillai KK, Hassan Q, Ansari SH, Ali J, Akhtar M, Najmi AK. “Levosimendan suppresses oxidative injury, apoptotic signaling and mitochondrial degeneration in Streptozotocin-induced diabetic cardiomyopathy”. *Clinical and Experimental Hypertension* 2016; 38(1):10-22.

Hassan MQ, Akhtar MS, Akhtar M, Ansari SH, Ali J, Haque SE, Najmi AK. “Benidipine prevents oxidative stress, inflammatory changes and apoptosis related myofibril damage in isoproterenol-induced myocardial infarction in rats”. *Toxicology Mechanism and Methods*. 2015; 25(1):26-33.

Hassan MQ, Akhtar MS, Akhtar M, Ali J, Haque SE, Najmi AK. “Edaravone protects rats against oxidative stress and apoptosis in experimentally induced myocardial infarction: Biochemical and ultrastructural evidence”. *Redox Report*. 2015; 20(6): 275-81.

Akhtar MS, Vohora D, Pillai KK, Dubey K, Roy MS, Najmi AK, Khanam R. “Drug prescribing practices in paediatric department of a north Indian university teaching hospital”. *AJPCR*. 2012; 5 (1): 146-149.

Tabassum F, Dhar K, Sinha HH, Jyoti C, Akhtar MS, Chopra VS. Polycystic ovary syndrome affects age-associated health-related quality of life among young age women in the urban-rural population. *Current Women's Health Reviews*. 2020 1;16(3):244-50.

Tabassum F, Sinha HH, Dhar K, Jyoti C, Akhtar MS, Chopra VS. Assessment of psycho-emotional distress due to age, body mass index, and marital status in polycystic ovary syndrome in north Indian population. *IJWHR*. 2020; 4:368-375.

Priyanka Sharma, Md Sayeed Akhtar, Fauzia Tabassum, Nimisha Tandon, Anshu Nanda. Quality of life assessment in heart failure patients taking standard medical care in teaching hospital. AJPCR. 2019 12; 12:166-9.

Mohamed Jawed Ahsan, Mohd. Zaheen Hassan, Surender Singh Jadav, Mohammed H. Geesi, Mohammed Afroz Bakht, Yassine Riadi, Salahudiin, Md. Sayeed Akhtar, Mohammad Nasar Mallick and Habban Akhter. Synthesis and Biological Potentials of 5-aryl-N-[4(Trifluoromethyl)Phenyl]-1,3,4-Oxadiazol-2-Amines. Letters in Organicchemistry. 2019; 16. In press.

Sadia Shah, Md. Sayeed Akhtar, Md. Quamrul. Hassan, Mohd. Akhtar, Yam Nath Paudel, Abul Kalam Najmi. EGFR tyrosine kinase inhibition decreases collagen deposition and ameliorates SERCA2a/NCX1 in C57/BL6 mice against diabetic cardiomyopathy. Life Science. 2018; 210: 29-39.

Nimisha Tandon, Madhuri Kulkarni, Sowmya GS, Fauzia Tabassum, Md Sayeed Akhtar. Prevalence of inducible clindamycin resistance in clinical isolates of methicillin-resistant staphylococcus aureus mediated through gene ermC expression. AJPCR . 2018; 11(9):106-109.

Bhatia J, Tabassum F, Sharma AK, Bharti S, Golechhaa M, Akhtar MS, Srivastava AK, Arya DS. "Emblica officinalis exerts antihypertensive effect in a rat model of DOCA-salt-induced hypertension: role of (p) eNOS, NO and oxidative stress". Cardiovascular Toxicology 2011;11(3):272-279.

Parvez N. Garg A, Akhtar MS, Rana A, Abida A. Comparative study between Retrospective and Prospective Drug Use Pattern Conducted in Referral Teaching Hospital, New Delhi, India." Journal of Hospital and Clinical Pharmacy, 2008. 2,8.

Conference attendance/presentations:

Presented abstract on "**Improved patients' outcome in clinical pharmacist managed anticoagulation clinic during cardiac intervention in tertiary care hospital**" in Health professions education forum 2023 organized by **Saudi Society for Medical Education**, King Khalid University, Abha, Kingdom of Saudi Arabia.

- ◆ International Conference on “**Cardiovascular Research Convergence**” Feb 17-18, 2012, jointly organized by the Departments of Pharmacology and Cardiology, AIIMS, New Delhi, India
- ◆ 26th Annual conference of the Indian Pharmacy Graduate's Association (IPGA) '**Pharma opportunities and challenges in the new decade**', Apr 2, 2011, New Delhi, India
- ◆ AICTE/ISTE (Indian Society for Technical Education) sponsored STTP (Staff Teaching Program) on **Recent Advances in Drug Discovery and Design**, Mar 16-20, 2009, Advance Institute of Pharmacy, Palwal, India
- ◆ Academia Industry Synergy Continuum Symposium on **Promotion of Pharmacovigilance in India**, Department of Pharmacology, AIIMS, New Delhi & Johnson & Johnson Ltd., Mar 15, 2007, AIIMS, New Delhi, India
- ◆ Workshop on “**Pharmacovigilance awareness and Pharmacovigilance, Better Coordination: A Key to Success**”, Mar 23-24, 2007, Lady Harding Medical College & Smt. S. K. Hospital, New Delhi, India