Mohamed Mousnad Biodata

Summary

General:

> Academic Qualification:

- Awarded B. Pharm. (Hons), 1999.
- MSc. in Pharmacy Practice (Pharmacoeconomics and Pharmaco-epidemiology), 2006.
- PhD in Pharmaceutical Economics (Pharmacoeconomics), 2013.

Research and Publications

- Over 30 peer-reviewed journal publications; contributor to one Published Book chapter; 3 published abstract posters; 4 Published Technical Reports (Task Member).
- Served as a reviewer for numerous international journals, reviewing over 20 peer-reviewed articles. I reviewed research articles on pharmacy practice and public health from different countries.

Teaching

- Over ten years of teaching experience in Pharmacy Practice, Health Economics, Health Systems and Health Care Evaluation.
- Supervised three MSc theses by research at the International University of Africa (IUA) (completed).
- I supervised over 40 students' dissertations for master's in pharmacy practice and public health in many Sudanese universities.
- Served as an external examiner for M. Sc research in pharmacy practice and public health at many Sudanese universities.
- To enhance teaching practice, I attended training courses in Quality of Higher Education, Learning and Teaching Strategies, Measurement and Evaluation, Formulation of Learning Outcomes, Research Methodology and Publication of Scientific Research.

Professional Standing and Wider Engagement

- Fully licensed and Registered Pharmacist in 2002, certified Specialist in 2006 and Board-certified Consultant in 2014 by the Sudan Medical Council (SMC).
- Participated in over 25 national and international training courses (USA, France, Norway, Turkish, Italy, Cote d'Ivoire and Malaysia) covering topics such as Strategic Planning, Assessment and Planning Tools for Building Effective Health Systems, Project cycle Management, Web 2.0 for Public Health Practice.
- Served as a member of many national and international societies and bodies in Public and Health Economics.
- Served as Global Burden of Disease (GBD) Collaborator, Institute for Health Metrics and Evaluation, Washington, United States.

Curriculum Vitae

1. Personal Information:

• Full name: Mohamed Awad Abd Alaziz Mousnad

• Nationality: Sudanese

• Gender: Male

• Current role: Assistant Professor, Faculty of Pharmacy, International University of Africa (IUA), Khartoum, Sudan, September 2013 to Present.

• **E-mails**: mousnad@gmail.com; m_abdalaziz@yahoo.com; mousnadph@iua.edu.sd;

• Web of Science Researcher ID: https://www.webofscience.com/wos/author/record/J-1721-2019

• ORCID: 0000-0003-2680-2450 https://orcid.org/0000-0003-2680-2450

• Scopus Author ID: 55670477000 https://www.scopus.com/authid/detail.uri?authorld=55670477000

• Google Scholar: https://scholar.google.com/citations?user=Ss7FsAMAAAAJ&hl=en

• Research Gate: https://www.researchgate.net/profile/Mousnad-Awad-2

2. Academic Qualifications:

Academic Qualification	Institution	Discipline	Year
Doctor of Philosophy (PhD) Pharmacoeconomics.	School of Pharmaceutical Sciences, Universiti Sains Malaysia (USM).	Pharmacy Practice	2013
Master of Science (MSc.) Pharmacoeconomics & Pharmacoepidemiology	School of Pharmaceutical Sciences, Universiti Sains Malaysia (USM).	Pharmacy Practice	2006
Diploma in computer science, One year of computer studies.	University of Elimam Elmahadi, Kosti, Sudan.	Computer science	2002
Bachelor degree (Hon) in Pharmacy	Faculty of Pharmacy, University of Khartoum	Pharmacy	1999

- O **Master Thesis Title:** Pharmacoepidemiologic and Direct Medical Cost Evaluations of Type 2 Diabetes Mellitus in Universiti Sains Malaysia.
- O **Doctoral Thesis Title:** Medicines Utilization and Expenditures Determinants of Sudan National Health Insurance Fund.

3. Professional

Professional Qualification/Certificate	Institution	Year
Consultant	Sudan Medical Council, Sudan	2014
Specialist	Sudan Medical Council, Sudan	2006
Basic concepts of total quality management (TQM)	Moody International Training Scheme, Khartoum, Sudan	2003
Registered Pharmacist	Sudan Medical Council, Sudan	2002
Professional Marketing Diploma certificate	Co-Design international, Alexandria, Egypt,	2001

4. Current Appointment (S) at the University and Date (S)

*Assistant Professor, Faculty of Pharmacy, International University of Africa (IUA), Khartoum, Sudan, September 2013 to Present.

*Global Burden of Disease (GBD) Collaborator, Institute for Health Metrics and Evaluation, Washington, United States, March 2025 to Present. (Remote)

Collaborators play a critical role in the GBD study, including:

- 1. Strengthening the input data, methods, and estimates.
- 2. Collaborators participate in technical consultations, review estimates via early access before the completion of each GBD round and provide access to and knowledge of input data sources.
- 3. Collaborating on or leading scientific publications related to their areas of expertise. Collaborators provide critical and substantive feedback on manuscripts in development.
- 4. GBD Senior, Lead, and Principal Collaborators may also submit proposals to lead their own publications.
- 5. Disseminating and applying the GBD findings for a range of purposes, including further research, policy, and practice.

5. Previous Appointments:

- Member of the International University of Africa (IUA) Senate, representing pharmacy practice and clinical pharmacy department, Faculty of Pharmacy, from April 2023 to 2025
- Faculty Board member, Faculty of Pharmacy, (IUA), 2017 to Present.
- Head of the Department of Clinical Pharmacy and Pharmacy Practice, Faculty of Pharmacy,
 International University of Africa (IUA), from April 2023 to 2025

- Director, General Directorate of Planning, Research, Information and Policy, National Health Insurance Fund, Sudan, Headquarters, September 2013 to September 2015.
- Research Director, National Health Insurance Fund, Sudan, Headquarters, May 2013 till August 2013.
- Director General of Falag Medical Co. Ltd (an investment company affiliated to NHIF-Sudan), August 2006 to March 2007.
- Director General for the Directorate of Funding & Projects, September 2002 to October 2003.
- Pharmaceutical Services Coordinator, West section, March 200 till September 2002.
- Houseman Shift + National Military Services, June 2000 till March 2002

Training pharmacist; Drug inspection director; Director of Pharmacy directorate.

6. Research & Publications:

6.1 Research Areas:

- My main area of research is Public Health, focusing on:
 - Social and Administrative Pharmacy
 - o Pharmacoeconomics and outcomes research,
 - o Pharmacoepidemiology and drug safety,
 - o Drug Utilization Research,
 - o Statistics on Medicines,
 - o Epidemiology
 - o Pharmaceutical Policy and Drug Management,
 - Health Planning.
 - Health Monitoring & Evaluation (M&E);
 - Health care Evaluation
 - o Digital Health.
- During my previous research experience, I worked on many disease areas, including:
 - o COVID-19,
 - o AIDS,
 - o Diabetes,
 - o Cancer,
 - o Tuberculosis,
 - o End-Stage Kidney Disease,
 - o Bacterial infection,
 - o Asthma
 - o Chronic kidney disease,
 - o Hypertension,
 - o Coronary heart disease,
 - o Schizophrenia,
 - o Primary Open-Angle Glaucoma,
 - o Pediatric Neurological Disorders,
 - Pneumococcal disease.

6.2 Research Outputs:

6.2.1 Summary of Publications

- Thirty Eight peer-reviewed journal publications (7 as first author, 30 as co-author).
- Four reports (as co-author).
- One book chapter (as co-author).
- Three conference abstracts (2as first author, 1co-author).

6.2.2 Publications:

Published articles (38)

- 1. Mai Elzain Omer, Al Hamad HK, Abdulwahab Al-Husami MA, Taha Nemeri OB and **Mousnad MA**. Benefits and Drawbacks of Proton-Pump Inhibitors as a Protective Agent for Aspirin Users in Long-Term Care and Geriatrics A Systematic Review. J Qual Healthcare Eco 2024, 7(5): 000403.
- 2. M El Rayah AR, Elhussein DM, Habbani K, Kheir SGM, **Awad MMousnad**, The Impact of Out-of-PocketExpenditures on Utilization of healthcare services in Sudan from 2010 to 2020: A Critical Review. American J Epidemiol Public Health. 2023 Apr 29;7(1): 008-0014. doi: 10.37871/ajeph.id64.
- 3. **Mousnad MA**. Pharmacoepidemiology Importance and Applications. American J Epidemiol Public Health. 2023 Apr 19;7(1): 006-007. doi: 10.37871/ajeph.id63.
- 4. Abdulrahman M, **Awad MMousnad**, Ahmad ANM, El Sayed A. Cost-effectiveness of Hydrocortisone Injection, Symbicort Inhaler and Prednisolone Tablets Used in Treatment of Asthma in Alshaab Teaching Hospital Khartoum, Sudan. J Young Pharm. 2023;15(2):360-7.
- 5. Cordie A, AbdAllah M, El Desouky E, Kheir SGM, Kooli I, **Awad Mousnad** M, et al. The evolving challenges confronting adults living with HIV in three North African countries during the COVID-19 crisis: a survey-based study. Transactions of The Royal Society of Tropical Medicine and Hygiene. 2021.
- 6. Mohamed HG, **Mousnad**. Pros and Cons of National Health Insurance Fund in Sudan: A Critical Review. Journal of Quality in Health Care & Economics. 2021;4(5):00241.
- 7. Mohamed BOA, **Mousnad**. Pharmacovigilance in Sudan: Knowledge, Attitudes and Behaviour among Community Pharmacists. Journal of Quality in Health Care & Economics. 2021;4(1):000207.
- 8. Esraa Mahadi Ali KH, **Mohamed A. Mousnad**. Life-Saving Drugs in Sudan: A Matter of Definitions and Concepts. American J Epidemiol Public Health. 2021;5(1):001-0.
- 9. Yousif AO, Idris AKM, **Awad MM**, El-Samani EFZ. Out-of-pocket payments by end-stage kidney disease patients on regular hemodialysis: Cost of illness analysis, experience from Sudan. Hemodialysis International. 2021;25(1):123-30.
- 10. Hebatallah Alhemadey, MA **Mousnad**, Ali Awadallah Saeed, Azza Hamid. Sudanese Pharmacy Students: Career Intentions, Expectations and Factors Affecting their Choices. Universal Journal of Pharmaceutical Research. 2021;5(6):6-12.

- 11. Sara H, **Mousnad**. Sudan National AIDS Spending Assessment Rounds: A Systematized Review. Journal of Quality in Health Care & Economics. 2020;3(6):000189.
- 12. Mohamed R, Suliman S, Arabi T, **Mousnad MA**, Saeed AA and Aldosh.Awareness of Sudanese Married Women among the Use of Hormonal Contraceptive. Journal of Quality in Health Care & Economics (JQHE). 2020;3(4):000178.
- 13. Aldosh A HK, Ali H, Mohammed A, Babiker O, Saeed AA. **Mousnad**. Thromboprophylaxis impact in patients undergoing major orthopaedic surgery in Sudan. Universal Journal of Pharmaceutical Research. 2020;5(3):44-7.
- 14. Dafaalla A, Saeed, **Mousnad**. Awareness of Pharmacists Towards Aspartame Side Effects in Khartoum City, Sudan. Universal Journal of Pharmaceutical Research. 2020;5(3):17-20.
- 15. Salah I. Kheder P, **Mousnad Mohamed Awad**, Khalid Hamid. Prioritization of Medicine Importation by the Private Sector in Sudan: Evidence from a Data Analysis, 2012-2015. Value In Health Regional Issues. 2020; 22:27-34.
- 16. Makkawi AME, **Mousnad MA**, Mohamed GK. Cost-effectiveness analysis of supply chain system: Sudan's national medical supplies fund 2011–2014. Global Journal on Quality and Safety in Healthcare. 2020;3(2):72-80.
- 17. Abadi and **Mousnad**. Pharmacoepidemiological Profiles of Oral Hypoglycemic Agents in Elbanjadeed Hospital, Khartoum, Sudan. Journal of Quality in Health Care & Economics. 2020;3(2):000158.
- 18. Saeed AA, Isameldin E, Hassan TM, **Mousnad MA**. Self-medication Practice among patients living in Soba-Sudan.Health Prim Car, 2020, doi: 10.15761/HPC.1000179. 4: 3-5.
- 19. Abbas O., Saeed A., Hassan T. and **Mousnad MA**. Evaluation of Drug Use at Four Hospitals in Khartoum, Sudan. J Oual Healthcare Eco 2020, 3(1): 000150.
- 20. Saeed AA, Osman OA, **Mousnad MA**, Hamid A. Assessment of The Risk of Type 2 Diabetes among Healthy without Diabetes in Sudan Using the FINDRISC Tool, Universal Journal of Pharmaceutical Research. 5, Issue 4, 2020.
- 21. Esraa A.Eltayeb, **Mousnad**, Perception and attitude of General Practitioners toward local generic medicines in Sudan: A hospital-based study. Research in Pharmacy and Health Sciences. 2020;6(2):108-14.
- 22. Salah I. Khder A, Abeya Saif Aldawla, Asmahan A. Ali, Muhtadi Kadoma, Narmeen Hassan, Sidig Mohammed, **Mousnad.** Measuring Availability and Prices of Locally Produced and Imported Medicines in Sudan. Journal of Medical Informatics and Decision Making. 2020;1(2):0-3.
- 23. Alaa, **Mousnad M**. Assessment of Pharmacist Dispensing Practices and their Educational Role toward Patients on Oral Cytotoxic Drugs Regimen in Radiation and Isotopes Centre at Khartoum, Sudan. Journal of Pharmacy Practice and Community Medicine. 2019;5(4):63-8.
- 24. Azza, Tarig, Ali, Mazin, **Mousnad**, Evaluation of Job Satisfaction and Job-Related Stress Among Community Pharmacists in North Khartoum and its Impact on Providing Pharmaceutical Care Services. Journal of Advanced Pharmaceutical Science and Technology. 2019;2(2):1-12.

- 25. Ahmed H, Kheder S, **Mousnad**. Pharmaceutical inventory control in Sudan central and hospital stores using ABC-VEN analysis. Global Drugs and Therapeutics. 2019;4:DOI: 10.15761/GDT.1000172.
- 26. Lobaba. F, M. **Mousnad**. Prescribing Pattern of Ceftriaxone among Inpatients Admitted to Emergency Room in Military Hospital-Omdurman, Sudan. Journal of Quality in Health Care & Economics. 2019;2(6):000141.
- 27. Hana S, Elmardi S, **Mousnad M**. Evaluation of Prescribing Pattern of the Referring Cases at Sudan National Health Insurance Fund. Journal of Quality in Health Care & Economics. 2019;2(5):000131.
- 28. Rania.H. and **Mousnad MA**, Systematic review of the impact of food provision on adherence to the tuberculosis treatment. Health Prim Car. 2019;3:1-5.
- 29. Mohamed. T, **M. McSnad**, Evaluation of Prescription Pattern and its Economic Losses at Sudan National Medical Supplies. Journal of Quality in Health Care & Economics. 2019;2(2):000118.
- 30. Mohamed .S , **MA. Mousnad**. Accessibility to Medicines in Khartoum State, Sudan. Journal of Quality in Health Care & Economics (JQHE). 2019;2(1):000108.
- 31. Adatu LS, **Mousnad**, Isa Ha. Assessment of Knowledge and Attitude toward Antibiotic Use and Resistance among International University of Africa, Medical Complex, Sudan Students. Global Drugs and Therapeutics. 2019;4.
- 32. Alaa AM, **Mousnad MA**. Oral Cytotoxic Chemotherapy Safe Use and Safe Handle Among Cancer Patients in Radiation and Isotopes Center, Sudan. Journal International Journal of Innovative Research in Medical Science. 2019;4(06):357 to 60.
- 33. **Mousnad M**. IM, Alraddadi K., Baabbad R. Perception and Level of Awareness among Healthcare Professionals in Saudi Arabia about Pharmacoeconomics. Journal of Quality in Health Care & Economics. 2019;2(3):000122.
- 34. **Mousnad MA** PS, Shafie AA, Mohamed Ibrahim MI. Medicine Expenditure and Trends in National Health Insurance Funds Sudan. Journal of Pharmacy Practice and Community Medicine. 2018;4(3):144-9.
- 35. **Mousnad MA**, Ibrahim MIM, Palaian S, Shafie AA. Medicines utilisation and trends in Sudan between 2006 and 2010. Tropical Journal of Pharmaceutical Research. 2017;16(7):1717-28.
- 36. **Mousnad MA**, Ibrahim MIM, Palaian S, Shafie AA. Medicine expenditures in Sudan National Health Insurance Fund: an ABC-VEN analysis of 5-year medicine consumption. Journal of Pharmaceutical Health Services Research. 2016;7(3):165-71.
- 37. **Mousnad MA**, Shafie AA, Ibrahim MI. Systematic review of factors affecting pharmaceutical expenditures. Health Policy. 2014;116(2-3):137-46.
- 38. **Mousnad MA**, Shafie AA, Mohamed Ibrahim MI. Determination of the main factors contributing to increased medical expenditures for the National Health Insurance Fund in Sudan. Journal of Pharmaceutical Health Services Research. 2013;4(3):159-64.

Published Book chapter (1)

Eltom EH, **Mousnad MA**. Medical Devices for 14 Infectious Diseases. Medical Devices for Pharmacy and Other Healthcare Professions. 2021 Dec 30:257.

Published Abstracts/ Posters (3)

- 1. **Mousnad M**, Ibrahim M, editors. PDB8 Anti-diabetic Drug Utilization in A University Health Care Setting. Value in Health; 2009: Elsevier.
- 2. **Mousnad M**, Shafie A, Ibrahim MM. PHP28 Systematic Review on Factors Affecting Pharmaceutical Expenditures. Value in Health. 2012;15(7):A614. Elsevier.
- 3. Jawher A; **Mousnad M**, Elhassan H; Tsiga A, Nuraldaem A; Shagali H. Evaluation of Pharmacoeconomics and Pharmacoepidemiology Awareness Among Pharmacists working in the Field of Pharmacy Education In Sudan, 18th Scientific Congress of the Association of the Pharmacy Colleges in the Arab World1st International Conference of Faculty of Pharmacy Omdurman Islamic University 18-20 November 2015, Khartoum, Sudan.

Published Technical Reports (Task Member) (4)

- 1. Jacqueline Mallender MB, Joe Mallender + Technical Working Group Members, Health System Benefit Package Design & Provider Payment Mechanisms-Essential Health Benefits Package Technical Report, 2020.
- 2. Health PHIF Mo. Health Financing Policy Options for Sudan, 2016. http://phi-sdnet/IHP%20book/Health%20Finance%20Policypdf. 2016.
- 3. Federal Ministry of Health PHI, World Health Organization, National Health Insurance Fund. Sudan Health System Financing Review Report (OASIS TOOL). 2014.
- 4. Profile C. Sudan Pharmaceutical Country Profile, 2010. WHO, provider. 2010;70:63.7.

7. Research Supervision

7.1 Graduate Supervision:

7.1.1 Graduated MSc. Students by full research

- Supervised three MSc. thesis by research in Pharmacy Practice, Faculty of Pharmacy,
 International University of Africa (IUA) as follows:
- 1. Student Name: Abdulrahman Mansir (Nigeria).

Research title: Cost-effectiveness of Corticosteroid Preparations in Asthmatic Patients at Alshaab Teaching Hospital Khartoum, Sudan.

Programme: Pharmacy Practice (Pharmacoeconomics).

Type of supervision, academic year and status: Main supervisor, 14/08/2017 (completed).

2. Student Name: Randa Almakky Siralkhatim (Sudan)

Research title: Assessment of Community Pharmacists' Knowledge, Attitude and Practice towards Patients Counselling in Khartoum State.

Programme: Pharmacy Practice (Management of Pharmaceutical services)

Type of supervision, academic year, and status: Main supervisor, 25/02/2021 (completed).

3. Student Name: Mudathir Mohamed Eltigani (Sudan)

Research title: Evaluation of Pharmaceutical Services at Khartoum State Periphery, Sudan 2019

Programme: Pharmacy Practice (Management of Pharmaceutical services).

Type of supervision, academic year and status: Main supervisor, 25/02/2021 (completed).

7.1.2 Graduated MSc. Students by courses and research:

- > Supervised 40 master students' dissertations (Pharmacy Practice and Public Health (Table below described details).
 - ➤ University of Khartoum (U of K),
 - > Omdurman Islamic University (OIU),
 - > University of Gezira (U of G);
 - > Sudan National University (SNU),
 - University of Medical Sciences and Technology (UMST)

➤ Sudan Medical Specialization Board (SMSB).

No.	Student Named	Dissertation title	Program /Institution
1	Huyam Izzeldin Yassin	Cost-effectiveness Comparison between (Travoprost) and	Master of Clinical Pharmacy, U
	Osman	(Dorzolamide + Timolol) in Treatment of Primary Open-Angle	of K
		Glaucoma, 2015- batch 10	
2	Samar Ali JailaniHussien	Impact of Clinical pharmacists interventions on cost savings of	Master of Clinical Pharmacy, U
		intensive care unit in Ibrahim malik teaching hospital and royal care	of K
		international hospital Khartoum, Sudan 2015- batch 10	
3	Alaa Abdul Aziz AbdulBagi	Assessment of Safe Practicing of Oral Cytotoxic Chemotherapy at	Master of Clinical Pharmacy, U
	Mohamed	Radiation and Isotopes Center at Khartoum (RICK). 2014- batch 9.	of K
4	Islam Ahmed Mohamed	Estimating the cost of illness of chronic kidney disease in Ahmed	Master of Clinical Pharmacy, U
	Ahmed	Gasim Hospital from a societal perspective (Completed 2021).	of K
5	Ola Taj ElsirIbraheem	Cyclosporine versus Tacrolimus: a cost-effectiveness analysis for	Master of Clinical Pharmacy, U
		renal transplantation in Dr. Centre for Kidney Diseases (Completed	of K
		2020).	
6	Eman Mukhtar Nasr Salih	Combating Antibiotic Resistance in Sudan: Review of Governance	Master of Clinical Pharmacy, U
		Documents-2015- batch 10 (Completed 2015).	of K
7	Mayadaa bdlalaziz yousif	Impact of Physical Activity and Medication Adherence on the	Master of Clinical Pharmacy, U
		Seizure Frequency and Quality of Life of Epileptic Patients in Sudan	of K
		(Completed 2022).	
8	Marwa Musa Hago	Pharmacoeconomic analysis of clinical pharmacist interventions:	Master of Clinical Pharmacy, U
		experience from Sudan (Completed 2022).	of K
9	Nahla Galal Ahmed	Pharmacoeconomic Analysis of Intensive Care Unit for Hospitalized	Master of Clinical Pharmacy, U
	Mohamed	Covid-19 Patients Reflecting Sudan's Experience. (Completed	of K,
		2022).	
10	Salma Mohamed Alhassan	Oxytocin Utilization Review among pregnant women at Alsudi	Master of Clinical Pharmacy, U
	Yassin	Hospital, (Completed 2022).	of K,
11	Salma Mohammed Abdalla	Assessment of community pharmacists' practice of tetracyclines	Master of Clinical Pharmacy, U
	Mohammed Khair	dispensing for pregnant females in Khartoum locality 2022	of K,
		(Completed 2022).	
12	Salma Alhassan Abdelaziz	Safety and Effectiveness of Statins in Patients in Health Care	Master Clinical Pharmacy,
	Alhassan	Centers in Khartoum States, 2014	UMST
13	Nafisa Ibrahim Eldasis	Pharmacoeconomic evaluation of the erythropoietin stimulating	Master Clinical Pharmacy,
		agents based therapy VS blood transfusion method among anaemic	UMST
		patients with chronic kidney disease. 2014	
14	Maab Mohamed El Amein	The attitude of prescribers toward insured and uninsured patients at	Master Clinical Pharmacy,
		Khartoum state, Sudan. (Completed 2017).	UMST
15	Esraa Ahmed Osman	Generic medicines Perceptions of general practitioners in a private	M.Sc Public and Tropical
	Eltayeb	hospital in Khartoum, Sudan. (Completed 2017).	Health Programmes, UMST
16	Mozfar Ali Hassan	Mental Health Professional Knowledge, Attitude, Practice toward	M.Sc Public and Tropical
	Mohammed Ahmed	Drug Abuse in Psychiatric Hospitals Khartoum State (Completed	Health Programmes, UMST
		2017).	, , , , , , , , , , , , , , , , , , , ,
17	Sana Dafalla Mohammed	Availability and Affordability of Essential Medicines at Primary	M.Sc Public and Tropical
	Ahmed	Health Care Facilities m Kosti. White Nile State, Sudan (Completed	Health Programmes, UMST

		2017).	
18	Elsafi Adam Ahmed Elsafi	The role of health insurance in improving antenatal care services in rural Sudan, 2020 (Experience from Gezira state, Sudan). (Completed 2021)	M.Sc Public and Tropical Health Programmes, UMST
19	Anas Hamdan Abdel Waly Eljack	Health Benefits Package, How Is It Impacting the Healthcare Financing and Availability of Resources: Assessment of Sudan National Health Insurance Health Benefits Packages (Completed2021)	M.Sc Public and Tropical Health Programmes, UMST
20	Rania Hassan Mohammed	Systematic Review of Food Provision's Impact on Adherence to Tuberculosis Treatment. 2014	Master Health Economics, U of K
21	Ayat Mohammed Elhassan Makkawi	Cost-Effectiveness Analysis of Supply Chain System: Sudan's National Medical Supplies Fund 2011-2014(Completed 2015).	Master Health Economics, U of K
22	Telal Mohamed Ali Hamza Ahmed	Cost of Haemodialysis in East Nile Hospital.2014	Master Health Economics, U of K
23	Aisha Osman Yousif	Out-of-pocket payment of End-Stage Renal Disease patient on regular hemodialysis: Experience form Sudan(Completed 2015).	Master Health Economics, U of K
24	Thuwiba Elsheikh Mohamed	Evaluation of prescriptions pattern and economic losses at National Medical Supplies Fund Khartoum state, Sudan (Completed 2015).	Master Health Economics, U of K
25	Gazi Mohamed Hassan	Evaluation of Cost, Profit and Affordability of Revolving Drug Fund Healthcare Centers' Pharmacies Khartoum state-Sudan, 2015	Master Health Economics, U of K
26	Abeer Mohammed Osman Saeed	The effect of economic and mortality indicators on life expectancy at birth in Sudan (1995-2014) (Completed 2017).	Master Health Economics, U of K
27	Iman Osman Ahmed Sanoussi	Pharmacoeconomic Evaluation of intensive lipid-lowering Treatment for Patients with congestive heart failure and coronary heart disease in Sudan (Completed 2017).	Master Health Economics, U of K
28	Mai Abdulrahman Ahmed Elsheikh	Assessing of policies and regulations adopted by Khartoum's health insurance corporation, 2020	Master Health Economics, U of K
29	Mona HassabAlrasoulBabiker Osman	Pharmacovigilance in Sudan: Knowledge, attitudes and behaviour among community pharmacists at Khartoum City, Sudan (Completed 2017).	Master Clinical Pharmacy, OIL
30	Nora Mahmoud HussienSharief	Pharmacoepidemiologic study of Antibiotic Prescription for Pregnancy at Tertiary Hospital In Khartoum, Sudan (Completed 2018).	Master Clinical Pharmacy, OIU
31	Lobaba Abdullah HussienFaki	Prescribing Pattern of Ceftriaxone Among Inpatients Admitted to Emergency Room in Military Hospital-Omdurman (Completed 2018).	Master Clinical Pharmacy, OIU
32	Taha Salah Taha	Assessment of Selling Skills in the Pharmaceutical Field (Completed 2018).	Pharmaceutical Management & Marketing, OIU
33	Musab Awad AbdelhaleemAbdelfadil	Drug consumption analysis of Azal Pharmaceutical Company, Khartoum, Sudan, for the year 2014 (Completed 2015).	Master Program Pharmaceutical Management &Marketing, OIU
34	Hani Abdalmoniem Abdalkareem Abdallah	Pharmaceutical Sales Forecasting Trends for Pfizer company: A case study from Sudan (Completed 2015).	Master Program Pharmaceutical Management &Marketing, OIU
35	NazikEltayeb Abd Allah	Health care professionals' knowledge, practice, and attitude toward pharmacovigilance and adverse drug reaction reporting process in Khartoum, Sudan (Completed 2017).	M. Sc. Program Hospital Pharmacy, SNU
36	Ethar Osama AlsaddigDafallah	Knowledge, Attitude and Practice of Skin Lightening products use among National University female students in Khartoum, Sudan (Completed 2018).	M. Sc. Program Hospital Pharmacy, SNU
37	IsmaeilEldooma Adam Yahya	Variations in Medicines Prices Reimbursement of Claims at National Health Insurance Fund, Gezira State, Sudan (Completed 2016)- co-supervisor.	Master of Pharmacy Practice, U of G
38	Salwa Abdullah Mohammad	Estimating the direct cost of diabetes in the national health insurance fund referral unit in 2014. (Completed 2015).	Fellowship in Pharmaceutical Services Management, SMSB
39	Amir Ahmed Hassan Ahmed	Assessment of Current Medicine Pricing Policy in Sudan. (Completed 2015).	Fellowship in Pharmaceutical Services Management, SMSB
40	Mohammed Suleiman Ismael Mohammed	Medicine Prices, Availability, Affordability and Price Components in Khartoum State, Sudan	Fellowship in Pharmaceutical Services Management, SMSB

7.1.3 Graduated B.Pharm. degree:

o From 2013 to 2023, I supervised over 30 studies for final-year students' B.Pharm. degrees in pharmacy practice at the International University of Africa (IUA).

8. Teaching:

8.1 High-Quality Teaching Practice

8.1.1 Undergraduate Teaching

- From September 2013 April 2023, the following courses: (Details are presented in the tables below)
 - 1. Pharmacoeconomics (Undergraduate Year 5; Semester 10, IUA), Code: EGYPT 522.
 - 2. **Pharmacoepidemiology** (UndergraduateYear 5; Semester 10, IUA) Code: MR 523.
 - 3. Research Methodology (Undergraduate Year 5; Semester 9, IUA), Code: MJB 511.

Course Title: Pharmacoeconomics

Department/Institution: Faculty of Pharmacy, International University of Africa (IUA).		
Level: Undergraduate Course code: EGYPT 522		
Intended Semester: Semester 9 Course duration: 15 weeks.		
Credits Hours: 2 (1+1) Contact Hours: 30		
	Mousnad, PhD (mousnad-ph@iua.edu.sd)	
instructor: Wionamea 7	Mousiaa, Tiib (<u>mousiaa pii(a)tuu.eau.sa</u>)	
Module	Type of teaching (Lectures, Group Work Sessions, Seminars)	
Module 1:	Lectures	
Introduction to	1.1: Pharmacoeconomics: Basic concepts and terminology	
Pharmacoeconomics	1.2: Economic, Clinical, and Humanistic Outcomes Model	
	1.3: Historical Background of Pharmacoeconomics	
	1.4: Costs and consequences.	
	Group Work Sessions	
	-Rewrite and explain the following terms in your own words: Health economics,	
	pharmaceutical care, outcomes research, decision analysis, and perspective.	
Module 2:	Lectures: Medical literature, Search strategy, Selected Academic Institution,	
Pharmacoeconomics	Selected Texts	
Resources	Group Work Sessions	
	Citation Management Software (Endnote)	
	Tut. 1: Program setup.	
	Tut. 2: How do you build your library?	
	Tut. 3: How to use your library to write scientific report?	
Module3: Economic	Lectures: Cost-benefit analysis (CBA), Cost-effectiveness analysis (CEA), Cost-	
Evaluation Methods	utility analysis (CUA), cost-minimization analysis (CMA)	
	Group Work Sessions	
	Pharmacoeconomics Evaluation case studies.	
	One simple hypothetical example for each of the following:	
	- Cost-effectiveness analysis	
	- Cost-benefit analysis	
	- Cost-utility analysis	
Module4: Basic steps	Lectures: The pharmacoeconomic problem, Identify the study perspective, Identify	
in conducting a	the alternative interventions, Select the appropriate PE method, Identify and measure	
pharmacoeconomic	outcomes of the alternative, Value costs and effectiveness.	
research	Interpret and present results.	

Course Title: Pharmacoepidemiology

Department/Institution: Faculty of Pharmacy, International University of Africa (IUA).		
Level: Undergraduate Course code: MR 523 Intended Semester: Semester 9		
Course duration: 15 weeks Credits Hours: 2 (1+1) Contact Hours: 30		
Instructor: Mohamed A. Mousnad, PhD (mousnad-ph@iua.edu.sd)		
Module	Type of teaching (Lectures, Group Work Sessions, Seminars)	
Module 1:Theoretical	Lectures	
Concepts of Drug	Introduction to Drug Epidemiology	
Epidemiology	Study of drug epidemiology designs.	
	Post-marketing monitoring of new drugs and risk assessment	
	Some familiar sources of bias in drug studies	
	Group Work Sessions	
	-Learn basic knowledge of the host-agent-environment model	
	-Define various terms related to epidemiology and public health.	
Module 2: Study designs of	Lectures	
Pharmacoepidemiology	2.1: Introduction	
	2.2: Types of Epidemiological Study Designs	
	Group Work Sessions	
	In groups, discuss the following	
	-Distinguish between retrospective and prospective epidemiological study	
	designs.	
	-Types of Epidemiological Study Designs.	
Module 3: Drug Utilization	Lectures	
Studies	Introduction to the basics of drug use	
	Drug classification systems for drug use studies	
	Methods of drug use studies	
	Methods of detecting problems when using medication	
	Group Work Sessions.	
	Discuss drug classification systems with specific emphasis on the ATC	
	classification system.	
Module 4:Pharmacovigilance	Lectures	
_	Introduction to the basics of Pharmacovigilance.	
	Medication safety	
	Pharmacovigilance risk management	
	Causes of side effects of drug use and methods of treatment	
	Exercises to record drug interactions	
	Group Work Sessions	

Course Title: Research Methods

	Course Title: Research Methous			
Department/Institution: Faculty of Pharmacy, International University of Africa (IUA).				
Level: Undergraduate Course code: MJB 511 Intended Semester: Semester 9				
Course duration: 15 w	Course duration: 15 weeks Credits Hours: 2 (1+1) Contact Hours: 30			
Instructor: Mohamed	Instructor: Mohamed A. Mousnad, PhD (mousnad-ph@iua.edu.sd)			
Module	Type of teaching (Lectures, Group Work Sessions, Seminars)			
Module 1:	Lectures			
Introduction	1.1. Definition of Research			
Introduction	1.2. Types of Research			
	1.3. Main Components of any Research Work			
	1.4. Steps and Criteria of Good Research			
	1.5. Identification and Formulation of the Research Problem.			
	Group Work Sessions			
Module 2: Review of	Lectures			
Literature	2.1: Introduction to Review of Literature			
	2.2: Sources of literature review			
	2.3: Types of literature review			
	2.4: Steps in developing a literature review			
	Group Work Sessions Data Abstract/extract Form			
M 112 D				
Module 3: Research	Lectures			
Objectives &	3.1: Research Objectives			
Formulation of the	3.2: Research Questions			
Hypotheses or	3.3: Research Hypothesis			
Research Questions	Group Work Sessions			
	Characteristics of research objectives.			
	Characteristics of a reasonable research hypothesis.			
Module 4: Research	Lectures			
Materials and	Study Designs; Sampling; Study Variables; Data collection methods; Ethical considerations;			
Methods	Methods for Data Analysis, Check feasibility; Conduct experiment; How to write a proposal			
Wiethous				
	Practice quizzes for basic research methodology, study designs, and case studies; practice			
	quizzes for sampling methods; and develop a research proposal for your topic.			
M I I 5 D 4	T /			
Module 5: Data	Lectures			
analysis and results	5.1: The relationships between the variables			
Interpretations	5.2: The type of data qualitative vs. quantitative			
	5.3: Drawing Conclusions			
	Group Work Sessions			
Module 6: Scientific	Lectures: Title; Introduction; Objectives; Methods; Results; Discussion; Conclusions and			
writing (Dissertation	recommendations; References			
O (1000mmendarions, References			
+ paper)	Lastones			
Module 7: The	Lectures			
Citation	What is EndNote?			
Management	What can EndNote do?			
Software (EndNote)	Group Work Sessions			
	Tut. 1: Introduction + program setup.			
	Tut. 2: How do you build your library?			
	Tut. 3: How do you use your library to write scientific reports?			
L	1 1			

8.1.2 Postgraduate Teaching, September 2013 – April 2023 (Details of some courses are presented in the tables below):

- 1. Advanced Pharmacoeconomics and outcome research (MSc. in Clinical Pharmacy at UMST, U of K, OIU and MSc. in Health Economics at U of K).
- 2. Advanced Pharmacoepidemiology and Drug Safety (MSc. in Clinical Pharmacy at MSc. in Clinical Pharmacy UMST, U of K, OIU). In addition to M. Sc. Program Hospital Pharmacy, SNU.
- 3. The nature & role of Business in pharmacy practice (Master Program in Pharmaceutical Management & Marketing, OIU).
- 4. Pharmaceutical Pricing procedures & credit policies (Master Program in Pharmaceutical Management & Marketing, OIU).
- 5. Pharmaceutical Supply Chain Management (Master's in MSc. Pharmacy Management, SMSB).
- 6. Pharmaceutical Marketing (Master Program in Pharmaceutical Marketing, OIU, SMSB).
- 7. Project Cycle Management (Fellowship in Pharmaceutical Services Management, SMSB).
- 8. Health care Evaluation (MSc. in Health Economics, U of K).

Course Title: Advanced Pharmacoeconomics and outcome research:

Contact Hours: 30	urse duration: 15 weeks Credits Hours: 2 (1+1)		
Instructor: Mohamed A. Mousnad, PhD (mousnad-ph@iua.edu.sd)			
Module	e Type of teaching (Lectures, Group Work Sessions, Seminars)		
Module 1: Introduction to	Lectures		
Pharmacoeconomics	1.1: Pharmacoeconomics: Basic concepts and terminology		
	1.2: Economic, Clinical, and Humanistic Outcomes Model		
	1.3: Historical Background of Pharmacoeconomics		
	1.4: Costs and consequences.		
	Group Work Sessions		
	-Rewrite and explain the following terms in your own words: Health economics,		
	pharmaceutical care, outcomes research, decision analysis, and perspective.		
	-The economic, clinical, and humanistic outcomes		
	(ECHO) model.		
	-The costs and consequences of health care.		
Module 2:	Lectures: Medical literature, Search strategy, Selected Academic Institutions, Selected		
Pharmacoeconomics	Texts, Selected NGO& Government Services, Selected Websites, Selected		
Resources	Professional Journals, Professional organisations, and Internet Services.		
	Group Work Sessions: Citation Management Software (Endnote)		
	Tut. 1: Program setup.		
	Tut. 2: How do you build your library?		
	Tut. 3: How to use your library to write scientific report?		
Module 3: Applications of	Lectures: Introduction, Practice/Clinical Guidelines, Formulary Management, Approval		
Pharmacoeconomics	Decisions, Reimbursement Decisions, Pricing Decisions, Research and Development		
	Decisions, Post-Marketing Surveillance, Marketing		
Group Work Sessions			
	- Describe the uses of PE applications for decision makers. How can these applications		
	employed within the Sudan health care environment?		
	- Pharmacoeconomics and Formulary Management & Decision Analysis Principles		
Module 4: The role of PE	Lectures		
studies in the product life	4.1 Clinical trial phases in a product's life cycle.		
cycle	4.2 The different stages in the research and development of a new drug.		
	4.3 The role of PE studies in the product life cycle.		
Module 5: Economic	Lectures: Cost-benefit analysis (CBA), Cost-effectiveness analysis (CEA), Cost-utility		
Evaluation Methods	analysis (CUA), cost-minimization analysis (CMA), Cost comparison/cost analysis, Cost of		
	illness study		
	Group Work Sessions		
	Pharmacoeconomics Evaluation case studies; Two cases for each of the following:		
	Cost-effectiveness analysis; Cost-benefit analysis; Cost-utility analysis		

Module 6: Basic steps in conducting pharmacoeconomic research.	Lectures: Define the pharmacoeconomic problem, Identify the study perspective, Identify the alternative interventions, Select the appropriate PE method, Select the primary data source and design, Select analysis techniques, Identify and measure outcomes of the alternative intervention, Establish probability of outcome events, Use decision analysis, Value costs and effectiveness, Sensitivity analysis, Interpret and present results.
Module 7: Quality assurance in pharmacoeconomic analyses.	Lectures Essential elements of pharmacoeconomic literature; Basic Criteria for Evaluation of Pharmacoeconomic Literature; Tools for critical appraisal in PE Studies; Checklists for PE Literature Evaluation Group Work Sessions Assessing the Quality of Pharmacoeconomic Studies; Practical Example
Module 8: International experiences of using Pharmacoeconomics.	Lectures 8.1 Introduction 8.2 Country-specific Guidelines for Pharmacoeconomics Evaluation Seminars International experiences of using Pharmacoeconomics Report contents. Country Health Care System; Economic Analysis Guidelines or pharmacoeconomic guidelines Outcomes of the therapy; Assessment of outcomes; pharmacoeconomic Guidelines Format for Formulary Submissions; Guide to the methods of technology appraisal Economic evaluation submissions.

Course Title: Advanced Pharmacoepidemiology and Drug Safety: Denartment/Institution: MSc. in Clinical Pharmacy at MSc. in Clinical Pharmacy UMST. U of K. OIU). Ir

Department/Institution: MSc. in Clinical Pharmacy at MSc. in Clinical Pharmacy UMST, U of K, OIU). In			
addition to M. Sc. Program Hospital Pharmacy, SNU.			
Level: Post-graduate	Course duration: 15 weeks Credits Hours: 2 (1+1)		
Contact Hours: 30			
Instructor: Mohamed A. I	Mousnad, PhD (mousnad-ph@iua.edu.sd)		
Module	Type of teaching (Lectures, Group Work Sessions, Seminars)		
Module 1: Introduction	Lectures: Introduction, Historical background of Pharmacoepidemiology, Focus of		
to	Pharmacoepidemiology and related areas of study, Pharmacoepidemiology in		
Pharmacoepidemiology	Pharmacy Practice, The fundamental aspects of Epidemiology and Public Health		
	Group Work Sessions		
	-Learn basic knowledge of the host-agent-environment model.		
	-Define various terms related to epidemiology and public health.		
	-Explain the interrelationship between Epidemiology, Clinicalpharmacology, and		
	Pharmacoepidemiology and how it relates to the practice situation.		
Module 2: Study	Lectures: Introduction, Types of Epidemiological Study Designs, Observational		
designs of	Study Designs, Experimental Study Designs		
Pharmacoepidemiology	Group Work Sessions		
	In groups, discuss the following		
	-Distinguish between retrospective and prospective epidemiological study designs.		
	-Describe what a case report is.		
	-Describe what a case series is.		
	-Describe what a cross-sectional study is		
	-Describe what a cohort study is.		
	-Describe concisely what a clinical trial is		
Module 3: Post-	Lectures: Introduction, Definition and purposes, Types of post-marketing		
marketing surveillance	surveillance, Application of post-marketing surveillance, Risk assessment		
of new drugs and	Group Work Sessions		
assessment of Risk	Discuss the different types of post-marketing surveillance studies.		
Module 4: Some	Lectures: Introduction, Selection bias, Information bias, Confounding, Currently		
familiar sources of bias	available solutions of biases in Pharmacoepidemiology		
in	Group Work Sessions		
Pharmacoepidemiology	Outline familiar sources of biases in pharmacoepidemiology.		
Studies	Define a confounding variable and give some examples.		
	Describe how evidence-based medicine is used to make therapeutic decisions.		

Module 5: Validity and	Lectures: Introduction, Types of data, Choosing the appropriate statistical analysis,
Generalizability in	Interpretation of results, Data quality -Validity, Data Quality Reliability
Epidemiologic Studies	
	Group Work Sessions
Module 6: Applications	Lectures
of	6.1: Introduction
Pharmacoepidemiology-	6.2: Methods Used in Drug Utilisation Studies
Drug Utilization Studies	6.3: Drug classification systems
	6.4: Unit of measurement
	Group Work Sessions
	-Discuss drug classification systems with specific emphasis on the ATC
	classification system.
	-Define the ATC /DDD system.
	- A case study for calculating the DDD system in Drug utilisation studies.

Course Title: HealthCare Evaluation

Department/Institution: MSc. in Health Economics, U of K			
Course Title: HealthCare Evaluation			
	Level: Post-graduate Course duration: 15 weeks		
Credits Hours: 2 (1+1)	Contact Hours: 30		
	Instructor: Mohamed A. Mousnad, PhD (mousnad-ph@iua.edu.sd)		
Module	Type of teaching (Lectures, Group Work Sessions, Seminars)		
Module 1:Health care	Lectures: Introduction to health and health care, Introduction to evaluation		
and evaluation	· · ·		
and evaluation	Group Work Sessions: Health-care intervention, Measuring intervention objectives,		
	Evaluation of health care program or service in terms of effectiveness, efficiency, humanity,		
	and equity, criteria a new technology must satisfy before introducing it.		
Module 2: Measuring	Lectures: Measuring disease, Measuring health status and health-related quality of life		
disease, health status	Group Work Sessions		
and health-related	In groups, discuss the following:-		
quality of life	- How would you define point prevalence, period prevalence, and incidence?		
	-Evaluation of the effectiveness of a new treatment for patients suffering from a disease.		
	Write down the disease outcomes you would use and some examples of how you would		
	measure		
	them.		
	- Advantages and disadvantages of using routine, ad hoc or especially collected standardised		
76 11 25 1 4	data to evaluate health care.		
Module 3:Evaluating	Lectures: Association and Causality, Randomized designs, Non-randomized designs, Cohort		
Effectiveness	and case-control studies, Ecological designs, Comparing study designs		
	Group Work Sessions		
	-Measure health status or HRQL. Why would HRQL be a helpful outcome measure?		
	-Combining generic and disease-specific outcome measures within a particular study.		
	- Nature, advantages and disadvantages of RCT, a case-control study, a cohort study, and an		
	ecological studyReview types and sources of bias.		
Module 4: Measuring	Lectures: Measuring cost, Evaluating the cost-effectiveness		
Cost and evaluating the	<u> </u>		
cost-effectiveness	Group Work Sessions		
cost effectiveness	-List all types of costs -Consider the relative usefulness of each of the following in health care evaluation: Cost		
	minimisation analysis, Cost-effectiveness analysis, Cost-benefit analysis, and Cost-utility		
	analysis.		
	-What are the advantages and disadvantages of using QALYs in health care provision?		
Module 5: Evaluating	Lectures: Evaluating humanity, Measuring patient satisfaction using quantitative methods,		
humanity	Measuring patient satisfaction using qualitative methods.		
	Group Work Sessions		
	- Information on inhumanity in health care.		
	-Ways care may not be humanely in a hospital or health centre.		
	ajs tart maj not as numunarij in a nospitari or nautu aantaa.		

	Lacking in humanity.		
	- Dimensions of humanity (autonomy, dignity, beneficence and non-maleficence).		
	-Health care interventions, which aspects of humanity should be evaluated.		
	-Planning a survey (a social, an experimental study).		
	-Designing questionnaires (features of a 'good' question?		
	-Focus groups and nominal groups.		
Module 6:Evaluating	Lectures: Defining equity, Assessing equity		
equity	Group Work Sessions		
	- Describe forms of equity.		
	-outlines seven possible ways of defining equity in health care.		
	-Describe the difference between equality of access and equality of utilisation.		

Course Title: The Nature & Role of Business in Pharmacy Practice

Department/Institution: Master	Program in Pharmaceutical Management & Marketing, OIU.		
Level: Post-graduate	Course duration: 15 weeks		
Credits Hours: 2 (1+1)	Contact Hours: 30		
Instructor: Mohamed A. Mousnad, PhD			
Module	Type of teaching (Lectures, Group Work Sessions, Seminars)		
Module 1: Deciding on a role	Lectures		
for the pharmacy.	The practices of pharmacy and business		
	Quality of care vs generation of profits		
	Business and ethical standards		
	The Role of Competition		
	Utilisation of resources		
	Remaining competitive and adapting to change		
	Group Work Sessions		
	Pharmacy be viewed as an input—output system.		
	Misconceptions about the role of business in pharmacy practice.		
	Benefits to pharmacy practice of having an interrelationship with		
	business.		
Module 2: Deciding on Roles	Lectures		
for Pharmacists.	Evolution of the profession		
	The Role of Pharmacists as Healthcare Professionals		
	The role of the pharmacist within the community		
	The pharmacist as a clinical purist		
	Group Work Sessions		
	Pharmacists from a business perspective.		
Module 3: Identifying the	Lectures		
challenges for community	A business world orientation		
pharmacies.	Challenges in community settings		
	Challenges in hospital settings		
	Group Work Sessions		
	Influence of Doctrine of Laissez-faire to pharmacy practice		
Module 4: How to integrate	Lectures: Planning ;Organizing ;Staffing; Directing ;Controlling		
different managerial functions			
_	Functions of business, importance, and interrelation.		
Module 5 The functional areas	Lectures		
of business	Accounting function, Financial function, Human resource		
	management function, Operations management function, Marketing		
	function		
	Group Work Sessions		
	Elements of the management process, importance, and Interrelation.		

9. Curriculum Enhancement

- CURRICULUM Committee member at Faculty of Pharmacy, International University of Africa, 2013. Involved in updating the CURRICULUM 2014 and 2019.
- Participated in designing Nahda College Program of Pharmacy, Curriculum, Department of Pharmacy Practice, 2014.
- Participated in upgrading the Fellowship in Management of Pharmaceutical Services to a Professional Doctorate for the Sudan Medical Specialization Board in 2014.
- I participated in designing the Master of Pharmaceutical Management& Marketing-Omdurman Islamic University (OIU), Faculty of Pharmacy, 2015.
- Participated in designing a Master of Pharmacy (M-Pharm) in Pharmaceutical Policy and Supply Management, Faculty of Pharmacy, International University of Africa, 2022.
- Head of CURRICULUM Committee at Professional Doctorate in Management of Pharmaceutical Services Council, Sudan Medical Specialization Board, 2023- to date.

10. Improving Teaching Practice:

10.1 Teaching Innovation and Development:

- I completed six training courses as part of the International University of Africa (IUA) programme (Quality and Performance Promotion Administration Department) in June 2021; total cumulative contact hours: 38.
- Quality of Higher Education (6 contact hours).
- Learning and Teaching Strategies- (6 contact hours).
- Measurement and Evaluation- (6 contact hours).
- Formulation Learning Outcomes- (6 contact hours).
- Research Methodology (6 contact hours).
- Publication Scientific Research (8 contact hours).

10.2 Scholarly Activity:

- Published a chapter in the book titled "Medical Devices for Pharmacy and Other
 Healthcare Professions", 9781000514346, 100051434X. 2021 Dec 30:257. This book
 comprises 19 chapters covering various clinical specialities and services written by 30
 contributors from 9 countries and 18 institutions. Publisher: Taylor & Francis eBooks.
 The chapter is entitled "Medical Devices for Infectious Diseases."
- Citation: Eltom EH, Mousnad MA. Medical Devices for 14 Infectious Diseases.
 Medical Devices for Pharmacy and Other Healthcare Professions.

11. Leadership:

Leadership Roles	Dates held
Member of the International University of Africa (IUA) Senate representing pharmacy practice and clinical pharmacy department, Faculty of Pharmacy.	April 2023 – Present
Faculty Board member, Faculty of Pharmacy, International University of Africa (IUA)	2017– Present
Head Department of Pharmacy Practice and Clinical Pharmacy.	April 2023 – Present
Member of the research council at the Faculty of Pharmacy level.	2013-Present
The head unit of research and publications at the faculty level	April 2023 – Present
Editor-in-Chief, Africa International Journal of Pharmaceutical Sciences (AIJPS) -in process.	2020-Present

12. Professional Standing and Wider Engagement: Continuing professional development (Short Courses& Training):

NO	Course/training title	institution	Place	Date
1	Remote Appraisal, Supervision,	RASMI	Khartoum,	11/2022
	Monitoring and Evaluation -RASM E-		Sudan	
	ICT solution training.			
2	Project Cycle Management,	International Training Centre (ITC)	Turin (Italy)	2019.
3	AfDB Country Portfolio Performance	AfDB Sudan office	Khartoum,	2016-2020
	Review (CPPR)		Sudan	
4	AfDB Institutional Capacity and	AfDB Sudan office	Khartoum,	03/2019
	Fiduciary Clinic Workshop		Sudan	
5	AfDB Institutional Capacity and	AfDB Sudan office	Khartoum,	03/2020
	Fiduciary Clinic Workshop		Sudan	
6	AfDB Institutional Capacity and	AfDB Sudan office	Khartoum,	09/2022
	Fiduciary Clinic Workshop		Sudan	2017
7	Project Management Professional	University of Khartoum,	Khartoum,	2015
- 0	(PMP®) Preparation Course		Sudan	2012
8	National Pharmacoeconomics Roadshow:	School of Pharmaceutical Sciences,	Penang,	2012
	Introduction to Pharmacoeconomics Evaluation.	USM.	Malaysia	
9	Introduction to Pharmacoeconomics	International Society for	Distance	2012
)	introduction to I narmacocconomics	Pharmacoeconomics and Outcomes	Learning	2012
		Research (ISPOR)	Dearning	
10	Pharmacoeconomics and Drug Financing	Sudan Medical specialisation Board	Khartoum,	2011
		(SMSB)	Sudan	
11	Time series analysis	School of Mathematical Sciences,	Penang,	2010
	Ž	USM.	Malaysia	
12	Introductory to data analysis and	School of Mathematical	Penang,	2010
	statistical process control	Pharmaceutical Sciences, USM.	Malaysia	
13	Project Management& proposal writing	Reference Consultation & Business	Khartoum,	2009
		Development.	Sudan	
14	Strategies for Local and State Health	Learning Institutes American Public	Philadelphia,	2009
	Departments to Reduce the Negative	Health Association	USA	
	Impacts of a Distressed Economy			
15	Assessment and Planning Tools for	Learning Institutes American Public	Philadelphia,	2009
	Building Effective Health Systems	Health Association	USA	
16	Web 2.0 for Public Health Practice	Learning Institutes American Public	Philadelphia,	2009
		Health Association	USA	
17	Quality Management in Public Health:	Learning Institutes American Public	Philadelphia,	2009
	Using PDCA Methodology to Improve	Health Association	USA	
	Processes of Care			
18	Pharmacoeconomic Modelling Advanced	International Society for	Paris, France	2009
		Pharmacoeconomics and Outcomes		
10	Coat Estimation C. According D.	Research (ISPOR)	Dogie E.	2000
19	Cost Estimation & Assessing Financial (Budget) Impact of New Health Care	International Society for Pharmacoeconomics and	Paris, France	2009
	Technologies.	Outcomes Research (ISPOR)		
20	Pharmacoeconomic Modelling	International Society for	Paris, France	2009
20	i narmacocconomic woderning	Pharmacoeconomics and	Tans, Falle	2003
		Outcomes Research (ISPOR)		
21	Computerising the system	National Health Insurance Fund	Khartoum,	2008
	P sterroung one of sterri	The state of the s	Sudan	2000
22	Strategic Planning, theoretical concepts	Capacities International Organization	Khartoum,	2008

	and practical application	+ NHIF	Sudan	
23	ATC/DDD Methodology	WHO Centre for Drug Statistic	Oslo, Norway	2008
		Methodology		
24	Methodology and statistical	Institute of Postgraduate Studies,	Penang,	2004
	techniques	USM.	Malaysia	
25	Occupational safety and health	Institute of Postgraduate Studies,	Penang,	2004
		USM.	Malaysia	
26	Total Quality Management	Sudanese German Centre for Quality	Khartoum,	2003
		Assurance	Sudan	
27	Effective Drug Management	Centre for Drug Management and	Khartoum,	2003
		Policy (CEMAP) & MOH Khartoum	Sudan	
		State, Sudan		
28	Project Management using a computer	Management Development Centre	Khartoum,	2002
		(MDC)	Sudan	
29	Drug Control Training	General Directorate of Pharmacy	Khartoum,	2001
			Sudan	
30	Drug supply Management	WHO &Central Medical Supplies	Khartoum,	2001
		(CMS)	Sudan	
31	Pre-registration course	General Directorate of Pharmacy	Khartoum,	2000
			Sudan	
32	Alternative medicine (Honey)	International Centre for Eman	Khartoum,	1999
		Research	Sudan	

13. External standings:

- Served as a Scientific Committee member for the International Pharmacy Conference in 2015, Organized by Omdurman Islamic University (OIU) Khartoum, Sudan.
- Served as a Scientific Committee member for the third Saudi International Pharmacoeconomics Conference in 2014, Riyadh, Saudi Arabia.
- Served as a principal investigator for technical assistance for medical supply and logistics, King Saud Medical City (11 April- 11 May 2014) Riyadh, Saudi Arabia.
- Served as Conference advisor for the second Saudi International Pharmacoeconomics Conference in 2012, Riyadh, Saudi Arabia.
- Served as co-investigator Assignment for WHO EMRO-Sudan Assessment of Medicines Quality Assurance Activities in Central Medical Supplies Sudan - 2010), Khartoum, Sudan.
- Served as Consultant, Sudan Building Capacity for Inclusive Service Delivery (BCISD), African Development Bank 2015- up to date.

14. Conferences and Workshops:

No	Conference/workshop title	Place	Date
1	10th International Health Conference,	Khartoum, Sudan	7-8- January 2023
	International University of Africa (IUA)		
2	Third Saudi International	Riyadh, Saudi	April 13-15, 2014
	Pharmacoeconomics Conference	Arabia	
3	Second Saudi International	Riyadh, Saudi	April 29-30, 2012
	Pharmacoeconomics Conference	Arabia	
4	Asian Pacific Pharmacy Education Workshop	Penang, Malaysia	October 10-12, 2010
5	Evidence-Based Pharmacy Practice	Khartoum, Sudan	January 19, 2010
	Workshop		
	Sudan Medical Specialization Board (SMSB)		
6	The American Public Health Association	Philadelphia, USA	November 7-11, 2009
	(APHA) 137th annual meeting & exposition		
7	ISPOR 12th Annual European Congress	Paris, France	October 24-27, 2009
8	Arab Strategic Project for Health Insurance	Khartoum, Sudan	December 27-29, 2008
	Arab Centre for Social Insurance + National		
	Health Insurance Fund Sudan		
9	Arab Health Exhibition and Congress: the	Dubai, UAE	January 29-1 February
	largest healthcare exhibition in the Middle		2007
	East		
10	Asia-Pacific HIA International Conference	Penang, Malaysia	2004/2005
11	Scientific writing workshop		2004
	Institute of Postgraduate Studies, Universiti	Penang, Malaysia	
	Sains Malaysia (USM)		
12	Modernisation of Pharmaceutical Services	Khartoum, Sudan	May 29-31, 2001
	conference, General Directorate of Pharmacy		

15. Reviewing Articles in Academic Journals (Verified peer reviews).

I have been an invited reviewer for some journals, including the following:

- Value in Health Regional Issues, an official journal of the International Society for Pharmacoeconomics and Outcomes Research (ISPOR),
- Reviewer for the Journal of Pharmaceutical Health Services Research, an official journal of the Royal Pharmaceutical Society of Great Britain. 2013 – Present.
- Reviewer for the Journal of Public Science Framework, American Institute of Science (AIS).
 September 2017 Present.
- Reviewer for the International Health, published by the Royal Society of Topical Medicines and Hygiene, September 2017 Present.
- Reviewer for the International Journal of Health Policy and Management September 2017 –
 Present.

> My peer-review records link:

https://www.webofscience.com/wos/op/peer-reviews/summary.

16. Administrative activities outside the University

National Health Insurance Fund, Sudan, Head Quarters	Director, General Directorate of Planning, Research, Information and Policy	September 2013-up to 2015
	Research Director	May 2013 to August 2013
	He was on full-time leave for postgraduate studies [Doctor of Philosophy (PhD)] as part of the capacity-building Program.	March 2007 to April 2013
	Director General of Flag Medical Co. Ltd (an investment company affiliated with NHIF-Sudan).	August 2006 to March 2007
	He was left for postgraduate studies [Master of Science (MSc.)] as part of the capacity-building Program.	January 2004 to March 2006
	Director General for the Directorate of funding & projects.	September 2002 to October 2003
	Pharmaceutical Services Coordinator, West section.	March 2002 to September 2002
Ministry of Health-White Nile State, Sudan • Rabak Specialisation Hospital • Pharmacy Directorate	Houseman Shift + National Military Services: -	June 2000 to March 2002

17. Professional Membership

Year	Association
2004- present	International Society for Pharmacoeconomics and Outcomes Research (ISPOR)
2004- present	International Society for Pharmacoepidemiology (ISPE)
2012-present	American Society of Consultant Pharmacists (ASCP)
2013-present	National Council for Health Research
2013-present	Technical and Ethical Research Committee, National Health Insurance Fund, Sudan

Referees:

1. Assist. Professor Mohamed Abdalrhman, PhD

Dean, Faculty of Pharmacy, International University of Africa (IUA)

H/P: +249122369898; +249922229799

Email: mkasamber@gmail.com (main); mkasamber@iua.edu.sd.

Relation: Direct reporting to & University reference.

2. Professor Mohamed Izham b. Mohamed Ibrahim, PhD (PCPS, USA)

Professor of Social & Administrative Pharmacy

Dean, College of Pharmacy, Qatar University, P.O. Box 2713, Doha, Qatar

Tel: +974 4403 5580, (GMT +3hrs), Fax: +974 4403 5551.

Email: mohamedizham@yahoo.com. mohamedizham@qu.edu.qa

Relation: My main supervisor is in MSc and PhD research.

3. Professor Asrul Shafie Akmal, BPharm (Hons), Pg Dip Health Economics, PhD (Cardiff),

Discipline of Social and Administrative Pharmacy,

School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia.

Director Institutional Planning & Strategic Centre, USM

Tel: +604-6533888 Ext. 4726

Email: aakmal@usm.my.

Relation: my co-supervisor in PhD research.

4. **Professor Albert I.Wertheimer**, PhD.,MBA

Professor of Pharmacy, Nova Southeastern University- College of Pharmacy, USA.

President of Pharmacultants Group, Professor Emeritus of Pharmaceutical Economics at Temple University

Tel: 215 707 1291 (Work) Email: <u>albertw@erols.com.</u>

Relation: (my external examiner, PhD research).