Khawla Mohammad Abu Hammour Ph.D.

Assistant professor of clinical pharmacy and therapeutics Faculty of Pharmacy, University of Jordan Amman, Jordan

Effective date: November, 2020

PERSONAL INFORMATION

Name:	Khawla Mohammad Abu Hammour
Date of Birth:	Dec 15 th , 1971 (Amman, Jordan)
Nationality:	Jordanian
Marital Status:	Married
Languages:	Arabic (Native) English
	(Fluent)
Current	Department of Biopharmaceutics and Clinical
Address:	Pharmacy School of Pharmacy, University of Jordan
	Queen Rania St.
	Amman, 11942
	Jordan
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	Fax: + 962 6 5300250
	Email: <u>k.hammour@ju.edu.jo</u> Website:
	http://eacademic.ju.edu.jo/k.hammour/default.aspx

EDUCATION

2009-2012	Ph.D. degree in clinical Pharmacy and therapeutics College of Medicine, Queens University, Belfast, UK.
2005-2007	Master Degree in Clinical Pharmacy School of Pharmacy, University of Jordan, Amman, Jordan. GPA 3.94/4.0

Research topic:

A prospective randomized controlled trial to investigate the impact of pharmaceutical care on reducing drug related problems in hospitalized patients

1989-1994B.Sc. PharmacySchool of Pharmacy, University of Jordan, Amman, Jordan.

TRAINING AND WORKING EXPERIENCE

2019-current	Associate professor, Department of Biopharmaceutics and Clinical pharmacy, Faculty of Pharmacy, University of Jordan, Amman, Jordan.
2016-2019	Assistant professor, Department of Biopharmaceutics and Clinical pharmacy, Faculty of Pharmacy, University of Jordan, Amman, Jordan.
Feb-2015-May 2016	Lecturer (Department of Biopharmaceutics and Clinical Pharmacy. Faculty of Pharmacy/The University of Jordan
2009-2012	Demonstrator at the Faculty of Pharmacy / Queen's University of Belfast Demonstrating various courses related to pharmacokinetics and aseptic technique s to undergraduate students
2004-2009 2014-current	Director of Pharmacy Department / Jordan University Hospital
Sep-2016	Head of pharmaceutical care unit /Jordan University hospital 2016
Feb-2013- current	Clinical Pharmacy and Pharmacotherapy consultant / University of Jordan, Jordan University Hospital.
2003-2004	Pharmacist in-Charge Narcotic pharmacy /Jordan University Hospital
2002-2003	Pharmacist in-Charge Outpatient pharmacy /Jordan University Hospital
1997-2002	Pharmacist in-Charge Inpatient pharmacy /Jordan University Hospital
1994-1997	Researcher/ Research and Development department / Jordanian Pharmaceutical Company

Specialized training and certificates

1995	□ Attending Basic good manufacturing practice course, Amman
1995	Attending Product design and human factors workshop, thirty credit hours course, Jordan University
2000- 2001	□ Attending Pharma Care workshop, Amman, 2000-2001
2002	□ Attending and Presenting poster at Royal Pharmaceutical Society conference/Pirmengham 2012
2003	□ Attending Quality for better care workshop, Amman, 2003 2004
	□ Attending Multimedia course: The University of Jordan, .
2004	Attending High Management Course, sixty credit hours, Jordan University
2005	□ Attending Basic concepts of quality in health care, thirty credit hours course, Amman
2006	□ Attending Computer application program workshop, twenty credit hours course, Jordan University
2006	□ Attending Communication skills course, Jordan University Hospital
2006	□ Attending Internal training program, ISO 9001:2000, internal auditing course, Amman
2006	Attending Thirty international pharmaceutical conference, Cairo, 2006
2006	☐ Attending Second hospital clinical pharmacist Symposium, Greece, 2006
2006	Attending Hospital Pharmacy Workshop/Antimicrobial stewardship/antibiotic misuse/30 th /2016/ Amman
2007	Attending Tailored Leadership program, Amman
2007	□ Attending Documentation, policies and procedures in hospitals workshop, Amman, 2007
2007	□ Attending Disasters and emergencies course, Amman

2008	□ Internet Based Tofel EXAM
2008	Attending ISO workshop Jordan University Hospital
2008	Attending Risk management course, Joint Commission International Accreditation, Amman, August, 2008/ certified
2008	Attending Fourth hospital clinical pharmacist Symposium, Al Fujera, Arab Emirates, 2008
2008	☐ Attending Dubai international pharmaceutical and technology conference and exhibition, 13.5 credit hours course, Dubai, 2008
2009	Attending Good Clinical Practice, Workshop, Queen's University Belfast
2010	□ Attending Research Methods: workshop Queen's University Belfast
2010 2011	□ Attending SPSS workshop: Queen's University Belfast
2010	Attending English language courses Queen's University Belfast 2011
2012 2011	Attending and Oral presentation at Health Services and Pharmacy Practice Conference Norich /UK 2011
2011 🗆	Attending and oral presentation at All-Ireland pharma-schools conference/ Dublin 2011
2011 🛛	Attending and Presenting poster at Royal Pharmaceutical Society conference /London 2011
2014	□ Attending Evidence, Money & Drug selection –a short course in pharmacoeconomics Amman Jordan (WHO, MeTA, the University of NEWCASTLE AUSTRALIA and King Hussein Cancer Centre).September 20 th -25 th 2014
2014 🛛	Attending The 29th Scientific Conference for Arab Pharmacists Nov/2014 Lebanon
2014	□ Attending Basic life support (BLS) –JUH-21-4-2016
2015	□ Attending The first public sector pharmacists conference Amman-

	Jordan (12 hours) 11-13 th 2015
2015	☐ Attending The American association of continuing medical education certificate (4.75 hours) Pharmacovigillence challenges in the middle east : a focus on biosimilars Dubai 2015
2015	☐ Attending The fifth pharmacovigillance conference "excellence in pharmacovigillence" 16-17 September 2015 Dubai (United Arab Emirates , Ministry of Health).
2015	□ Attending ACPE lecture by Prof. Mike Rouse B.Pharm, 14/2/2015
2016	Attending The 21 st Congress of the European Association of Hospital Pharmacists "Hospital pharmacists taking the lead- partnership and technologieas", from 16 to 18 th March in Vienna, Austria.
2016	Attending on line course (Introduction to the Principles and Practice of Clinical Research/ The National Institutes of Health Clinical Center on October 2015 through April 2016) Certified
2016	☐ Attending Pharmacoeconomic workshop Bayer. Dubai, 35/11/2016
2016	□ Attending and Presenting poster at Applied Science University\
	second international medical conference/Amman 2016
2016	Workshop about pharmaceutical care and medication errors (al Hashymia university) (key speaker) 11/2016
2016	□ Organizing Workshop medication management use for physicians, nurses and pharmacy staff at JUH (6 workshops 10-11/2016) organizer and speaker
2017	□ Attending Workshop Stakeholders Day 16-3-2017 /school of pharmacy /Jordan university
2017	Attending Staff development workshop /Jordan University - 1113/September-2017
2017	□ Attending GCP and clinical trial Quality Workshop 29-10-2017
2017	Attending Smart pharmacy workshop/ Jordanian Pharmacist

Association 8/9-10-2017

2017	☐ Attending The criteria of the King Abdullah II Awards for Excellence (Excellence Model) workshop 2017-10-26\25
2017	Attending Conference (Adult Pneumoccocal Vaccination Value Summit) 17-19\11\2017 UAE
2017	Attending and Presenting poster at the 22nd Congress of the <i>EAHP</i> /Cannes- France 2017
2018	□ Attending Antibiotic resistance and Zoonosis conference 20172018
2018 conferen	☐ Attending Dubai international pharmaceutical and technology ice and exhibition, 13.5 credit hours course, Dubai, 2018
2018	\Box Attending The third symposium on harmonisation of bioequivalence requirements 2^{nd} May 2018 Jordan
2018	Attending Second Jordan JFDA international congress pharma industry and clinical trials Growth & innovation 10-11 March-2018
2018	Attending the Joint Commission International Accreditation Update you recently in Dubai 7-9/11/2018
201 _دنية	دورة تدريبية التخطيط الاستراتيجي – هيئة تطوير القطاع العام 25-6-26-8 [] 8 مستشفى الجامعة الار مستشفى الجامعة الار
2018	□ ISPOR Dubai 2018. 19-20 September 2018 United Arab Emirates
2018	□ GCP course workshop 19-201-10-2018 □ Certificate (pass the course)
2018	☐ Technology Assessment Health training programme KHCC 16- 17/12/2018
2018	☐ How to increase the citation of your published research –The University of Jordan
2018	□ Strategical plan regarding antimicrobial resistance 17.9.2018 JFDA

2018 Development and Analysis of Tests Using SPSS 29.11.2018

بناء اساسيات الابداع والريادة لدى الطلبة 🛛 2018

AWARDS & SCHOLARSHIPS

1989-1994 Scientific Achievement Scholarship to pursue B.Sc. degree kindly provided Ministry of Higher Education Amman, Jordan

2005-2007 Scientific Achievement Scholarship to pursue master degree kindly provied The University of Jordan, Amman, Jordan.

2009-2012 Scientific Achievement Scholarship to pursue Ph.D. degree kindly provided by The University of Jordan, Amman, Jordan.
 September- The King Abdullah II Award for Excellence in Government 2018
 Performance and Transparency (Leadership and management)

Recognitions

- Recognition for good Drug Management in the Pharmacy 1999
- Recognition as active member for good Purchasing Process for drugs in tenders and active negotiator to get the high quality Medication with a best Price 2005
- Recognition as active member in Hospital quality Project ISO (9001) 2006
- Recognition as active member for good Purchasing Process for drugs in tenders and active negotiator to get the high quality Medication with a best Price 2007

- Certificate of appreciation as active member in financial subcommittee (the fifth Arab Conference for antimicrobial agents), Amman-Jordan 2007
- Certificate of appreciation as active member in Higher Committee for the first public sector pharmacists conference Amman-Jordan11-13th2015

TEACHING EXPERIENCE

B.sc. in pharmacy and pharmD courses: •

Pharmacology I (1203363).

- Pharmacology II (1203364).
 Toxicology (1203562)
- Research project (1203610)
- Seminars in Biopharmaceutics and clinical pharmacy

(1203573).

- Pharmacology practical (1203365)
- Field Training II (1210402)
- 203604 Psychiatric & Geriatric Rotation
- Laboratory practical workshops in Applied Clinical Pharmacy in the 2009-2012 –UK
- Laboratory practical in septic Dispensing in the 2009-2012UK

Master in clinical pharmacy courses:

Master student supervision (as indicated below)

Research interests

Main research interests include: Clinical pharmacy, pharmacy practice, safety and adherence to medications/ compliance with guidelines, medication errors, medication reconciliation. Antimicrobial stewardship program.

PUBLICATIONS

<u>Abu Hammour KA</u>., Abu Farha R., Basheti I. Hospital pharmacy medication reconciliation practice inJordan: perceptions and barriers . Journal of Evaluation in Clinical Practice 22 (2016) 936–941

Abu Hammour KA., Abdel Jalil M. Medication Errors in Voluntary Reported Incidents at a Jordanian Hospital. Jordan Medical Journal. (2016) Jun; 50(2):87-96.

Abu Hammour KA., El_Dahiyat F., Abu Farha R. Health care professionals knowledge and perception of pharmacovigilance in a tertiary care teaching hospital in Amman, Jordan .J Eval Clin Pract. (2017);23: 608–613.

Abdel Jalil M., <u>Abu Hammour KA.</u>, Alsous M., Awad W., Hadadden R., Bakri F., Fram K. Surgical site infections following caesarean operations at a Jordanian teaching hospital: Frequency and implicated factors. Scientific Reports. (2017) Sep 22;7(1):12210.

Abdel Jalil M., <u>Abu Hammour KA.</u>, Alsous M., Hadadden R., Awad W., Bakri F., Fram K. Noncompliance with surgical antimicrobial prophylaxis guidelines: A Jordanian experience in cesarean deliveries. American Journal of Infection Control. (2017) Aug 8.

Abu Farha R., <u>Abu Hammour KA.</u>, Alefishat E., Alsaeed H., Alma'aiah S. Drive-thru pharmacy service: Assessments of awareness, perception and barriers among pharmacists in Jordan .Saudi Pharmaceutical Journal 25 (2017) 1231–1236

<u>Abu Hammour KA</u>., Abu Farha R., Alsous M., Rizik M., Abu Hammour W. Evaluation of risk factors affecting parental knowledge and attitude toward antibiotic use in children with upper respiratory tract infections European Journal of Integrative Medicine 17 (2018) 107–111

Abu Farha R., <u>Abu Hammour KA</u>., Rizik M., Aljanabi R., Alsakran L. Effect of educational intervention on healthcare providers knowledge and perception towards pharmacovigilance: A tertiary teaching hospital experience .Saudi Pharmaceutical Journal (2018) <u>https://doi.org/10.1016/j.jsps.2018.03.002</u>

<u>Abu Hammour KA</u>., AbdelJalil M., AbuHammour W. An exploration of parents' knowledge, attitudes and practices towards the use of antibiotics in childhood upper respiratory tract infections in a tertiary Jordanian Hospital.

Saudi Pharmaceutical Journal. (2018) https://doi.org/10.1016/j.jsps.(2018).04.006

Lana K Salameh, Rana K Abu Farha, <u>Khawla M Abu Hammour</u>, Iman A Basheti Impact of pharmacist's directed medication reconciliation on reducing medication discrepancies during transition of care in hospital setting <u>Publication date 2018</u>. Journal of Pharmaceutical Health Services <u>Research</u>

Raja AlQudah1 and Mohammed Zawiah3 Rana Abu Farha1, **Khawla Abu Hammour2**, Sayida Al-Jamei2 The prevalence and clinical seriousness of medication discrepancies identified upon hospital admission of pediatric patients 2018/12/14 BMC Health Services Research

MH Abdel Jalil, N Abdullah, MM Alsous, M Saleh, K Abu-Hammour<u>A systematic</u> review of population pharmacokinetic analyses of digoxin in the paediatric population. British Journal of Clinical Pharmacology.2020

K Abu Hammour, R Abu Farha, M Rizik, T Mukattash, M Alnan, A Alkhader, ...<u>Pharmacy drive-thru service in Jordan: assessing customers' awareness,</u> <u>perceptions and factors affecting the use of this service</u> Journal of Pharmaceutical Health Services Research 10 (1), 141-147.2019

MHA Jalil, MM Alsous, KA Hammour, MM Saleh, R Mousa, EA Hammad. <u>Role of pharmacists in COVID-19 disease: a Jordanian perspective</u> Disaster Medicine and Public Health Preparedness, 1-17.2020

KA Hammour, S Al-Saleh, WA Hammour. <u>Parental views of antibiotic use in</u> <u>children with upper respiratory tract infections in Dubai</u>. European Journal of Integrative Medicine 29, 100917.2019

Influencing factors of knowledge, attitude, and practice regarding antibiotic use in children with upper respiratory tract infections in Dubai.

AHW Al-Saleh S1, Abu Hammour K2 J Eval Clin Pract.2020

RK Abu Farha, TL Mukattash, L Al-Sakran, K Abu Hammour, M Zawiah. <u>Prevalence and predictors of polypharmacy in Jordanian hospitalised patients: A</u> <u>cross-sectional Study</u> International Journal of Clinical Practice, e13742. 2020

N Asakrh, R Abu Farha, K Abu Hammour, A Al-Hashar <u>Evaluation of the completeness of information sources used to prepare the best</u> <u>possible medication histories at a tertiary teaching hospital in Jordan</u> International Journal of Clinical Practice 74 (10), e13597 Khawla Abu Hammour 1,*, Esraa AL-Heyari 2, Aya Allan 2, Ann Versporten 3, Herman Goossens 3, Ghayda' Abu Hammour 2 and Qusai Manaseer 4 Antimicrobial Consumption and Resistance in a Tertiary Care Hospital in Jordan: Results of an Internet-Based Global Point Prevalence Survey. Antibiotics. 2020

Khawla Abu Hammour, Rana Abu Farha, Mai Rizik, Tareq Mukattash, Murhaf Alnan, Ahmad Alkhader, Rand Aljanabi, Iman Basheti Pharmacy drive_thru service in Jordan: assessing customers' awareness, perceptions and factors affecting the use of this service 2018 Journal of Pharmaceutical Health Services Research

<u>Skills</u>

Research related	Advanced skills in using statistical packages such as
	SPSS
	Advance skills in drug formulation
	Advance skills in clinical trials
Computer skills	Advanced skills in using Windows 7, Microsoft Office
	suite and the internet (certificate)
Languages	Fluent in Arabic, English

Funded research

Surgical site infections: incidence, risk factors, antibiotic appropriateness and additional costs (funded by the university of Jordan by 5,600 JD)

Evaluation of medication prescription patterns during pregnancy at two Jordanian university hospitals (funded by the university of Jordan by 750.0 JD)

Professional membership

2018-current	Member in the National Health
	Technology assessment committee
2010	
2018- current	Member committee of guidleines for biological medications
2019 automat	(the University of Jordan) Member of committee (down time plan for digital system)
2018-current	Member of committee (down time plan for digital system)
2018-current	Member National committee for track and trace for medication
2017- current	Member in Course outline and intended learning outcomes
	(Faculty of Pharmacy/ University of Jordan).
2017-current	Member in the training committee (Faculty of Pharmacy/
	University of Jordan).
2016-2017	Member in the "social committee" at the faculty of pharmacy
2014-2015	Member in preparation committee for ACPE
2014 2013	Accreditation" at the faculty of pharmacy".
2008	Jordan pharmaceutical association: member of Good
2015 2010	clinical Practice committee
2017-2018	Academic supervisor for 4^{th} year students
	Academic supervisor for 5 th year students
2016-2018	Coordination of teaching Toxicology, Field Training II

2007-2009	Member of JFDA The Jordanian National committee for
2014-now	addition and deletion of Medication to RDL list
2015-now	Member of JFDA Drug registration & pricing objections committee
2008-2009, 2014current	Co-organizer/Planner: Jordan University Hospital Executive Committee

2004-2009	Member Cardio pulmonary resuscitation committee /JUH
2014-now 2004-2009 2014-now	Member, infection control committee/ Jordan University Hospital
2006-2009 2014 -now	Quality Assurance Committee/ JUH
2014-now 2004-2009 2014-now	Chair/ member in Staff annual performance evaluation
2004-2009	Chair/ member in drug tenders' technical committees
2014-now 2004-2009 2014-now	Drug & Therapeutic Committee /Jordan University Hospital
2015-now	Member of various committees within the school of pharmacy such as the training and social committees
1994-now	Jordanian Pharmaceutical Association (JPA)
2006-2008	Member of volunteer committee / JUH Member, Bevacizumab Intravitreal injection task force committee
2006	Member IVF committee
2006	Member, epidermal growth factor task force committee
2006	Member, development of family medicine centre committee /Jordan University
2006	Member, antimicrobial stewardship program committee/ JUH
2006-2009 2014-current	Member, Quality improvement and safety issues for emergency department
2007-2009	Member, medication use guidelines for hepatitis B treatment task force committee
2006	Member, narcotic task force committee
2007-2009 2014-current	Facilitator in Jordan University hospital for external auditing committees
2007-2009	Member emergency and disaster plan committee/ JUH

2007-2009 2014- current	Chair, medication use and pharmacy services committee/ JUH
2007	Member, Chemotherapy medication use, task force committee
2007-2009	Chair, Jordan University Hospital Nursery committee
2007-2009 2014-current	Member, strategic plan committee
2007-2009 2014- current	Member, code of ethic and patient family rights committee
2014 ⁻ current 2007	Member, muscle relaxant task force committee
2007-2009	Chair, medication use Joint Commission Standard committee
2007	Member, financial auditing, task force committee Member, medical record task force committee
2007	Member, clinical studies center development committee
2008	Member, improving safe and rational drug dispensing committee –Jordan Procurement department –Jordan
2008	Member, National committee for developing integrated electronic prescription and dispensing system
2008-2009	Member, executive committee for good pharmacy practice /JPA
2007	member, policy and procedures for availability of life saving medication in all health sectors in Jordan committee
2007-2009 2014-current	Member, drug specifications for tenders
2014-current	
2005-2009 2015-current	Member, Rational Drug Use committees- Jordan
2015-current	Member institutional review board (IRB) committee

2008-2009	
2000 2007	Member, Medicines Transparency Alliance committee
2006-2009,	Member, research committee-JUH
2014current 2016	Member/ The Committee on Relations Conference/ school of Pharmacy conference
2016-current	Chair of FEME committee (Failure mood and effective analysis /quality Project, JCI
2014-current	Member of Strategic planning- the King Abdullah II Awards for Excellence (Excellence Model)
2014- current	Member of leadership & management - the King Abdullah II Awards for Excellence (Excellence Model)
2017	Member in Health Insurance board / Jordan University
2017	Member Prime minister committee for adjust consumption in health system
2017-current	Member / Comprehensive health insurance national technical committee/ The Ministry of Planning/ Jordan
2016	Chair of Cost effectiveness committee chair (alcohol Use)/ JUH
2017- current	Memebr in the board -Stem Cell Centre

CLINICAL PHARMACEUTICAL RESEARCH

- 1. Participating in Phase three clinical research (angioedema) 2008
- 2. Participating in Phase three clinical research for diabetes (Sanofi) 2017-current

Confe	erences and presentations
2018	Abu Hammour KA., AbdelJalil M., AbuHammour W. an exploration of
	parents' knowledge, attitudes and practices towards the use of antibiotics in childhood
	upper respiratory tract infections in a tertiary Jordanian Hospital" the Third International
	Conference on General Practice & Primary Carewhich will be held from August 9-17,
	2018 in Madrid, Spain. Poster presentation
2018	Khawla abu hammour, Rana Abu Farha, Iman Basheti Hospital pharmacy medication
	reconciliation practice in Jordan: perceptions and barriers
	11 th Royal Medical Services conference Jordan Amman 11/2018 Oral presentation
2017	Hammour KA, Abdel Jalil M. Medication Errors in Voluntary Reported
	Incidents at a Jordanian Hospital. The 22 nd Congress of the European
	Association of Hospital Pharmacists (EAHP) in Cannes, France (poster
	presentation).
2016	Hammour KA, Abdel Jalil M. Medication Errors in Voluntary Reported
	Incidents at a Jordanian Hospital. ASU Congress in Amman, Jordan
	(poster presentation).
2012	Abu Hammour k., Hughes C., Parsons C., PAssmore P. Exploring
	nusrisn home managers' attitudes and beliefs towards end of life and
	palliative care for residents. Royal pharmaceutical Society conference
	(poster presentation) Birmingham UK
2011	Abu Hammour k., Hughes C., Parsons C., PAssmore P. prescription
	Patterns in recently deceased hospitalized older patients in Northern
	Ireland Royal pharmaceutical Society conference (poster presentation) London UK
2011	
	patterns for patients admitted from care home settings to an acute hospital
	setting: a cross sectional study.HSRPP confernece (oral
2011	presentation) Norich UK
2011	Abu Hammour Kh., Hughes C., Parsons C., Passmore P. Prescription patterns for patients admitted from care home settings to an acute hospital
	setting:
	a cross sectional study. All-Ireland pharma-schools conference/ Dublin
	(oral presentation)

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2008 AbuRuz S., Abu Haammour K. pharmaceutical care and drug related problem in internal medicine hospitalized patient. Oral presentation (pharma World Science)

References

Carol Parsons., Dr Lecturer

<u>School of Pharmacy</u> - Lecturer <u>Pharmaceutical Science and Practice</u> <u>Material and Advanced Technologies for Healthcare</u> <u>c.parsons@qub.ac.uk</u> Phone: +44 (0)28 9097 2304

Mohammad Saleh , Ph.D., Dr Contact information: Department of Biopharmaceutics and Clinical Pharmacy Faculty of Pharmacy The University of Jordan, Amman, 11942, Jordan

- Coordinate and supervise PhD student Wejdan Shroukh in her data collection with Doug Steinke (University of Manchester -2018)
- Internal Examiner master student Eman Nejdawee School of pharmacy the University of Jordan-2018 thesis (Economic impact of selecting oncology drugs for formulary inclusion in Jordan University Hospital(JUH) July 22-Pharmacy -JU

Reviewer:

- 1. pharmaceutical Journal
- 2. BMJ Open
- 3. Journal of Family Medicine