# Dr. Rania Mazen Itani

## BPharm, PharmD, MSc, PhD

Pharmacy Practice Department
Faculty of Pharmacy
Beirut Arab University

PERSONAL INFORMATION

Rania Mazen Itani

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Sex: Female | Nationality: Lebanese

## POSITION

Assistant Professor

## Biography

Dr. Rania Itani is an Assistant Professor of Clinical Pharmacy at the Faculty of Pharmacy, Beirut Arab University (BAU). In 2026, she was recognized among the World's Top 2% Scientists in the Stanford University/Elsevier ranking, reflecting her significant scholarly contributions and research impact in the fields of pharmaceutical sciences and general medicine. She holds a PhD in Clinical Pharmacy and has over eleven years of university teaching experience across various Pharmacy Practice courses. Dr. Itani has actively contributed to the development, design, and delivery of several didactic and experiential clinical pharmacy courses. She serves as the Advanced Pharmacy Practice Experience Coordinator (PPE V–VI), overseeing the clinical training and placement of senior pharmacy students across affiliated hospitals and medical centers.

She also coordinates the Objective Structured Clinical Examinations (OSCEs) and delivers professional development workshops for academic staff. Additionally, she actively organizes and participates in various public health initiatives and professional development activities. Dr. Itani serves as an Editorial Board Member of BMC Health Services Research and as a member of the Scientific Committee of the Lebanese Order of Pharmacists.

Her primary research interests focus on global epidemiological studies and the emergence of antimicrobial resistance in hospital settings. Driven by her passion for advancing healthcare, she has more than 55 publications and 2,760 citations. Dr. Itani's expertise spans a wide range of healthcare topics, including antimicrobial surveillance, patient care practices, and healthcare needs. She has lead numerous multinational studies, assessing patient care practices in the Middle Eastern region, including Saudi Arabia, Jordan, Emirates, Kuwait, Iraq, Oman, and Bahrain. Currently, her focus is on multicenter surveillance studies investigating the prevalence of antimicrobial-resistant pathogens in hospitals and assessing treatment practices and outcomes, all aimed at advancing healthcare.

In recognition of her outstanding research productivity and scholarly contributions, Dr. Itani was awarded the "Most Active Researcher" by BAU for the academic year 2023–2024.

## WORK EXPERIENCE

**From 2014 till Present**

### Academic Contributions & Curriculum Development

- Contributed to launching the Pharmacy Practice Department at the Faculty of Pharmacy.
- Participated in establishing, designing, and delivering new pharmacy practice and experiential pharmacy courses to build up students' skills and facilitate acquiring the professional competencies.
- Develops, designs, and delivers several theoretical and didactic courses.
- Implements new teaching and assessment methodologies in the delivered courses.
- Periodically revises and updates the content and specifications of the Pharmacotherapeutics and the Integrated-cased based learning (ICBL) courses to align with the experiential training needs.
- Designs and validates evaluation rubrics to assess students' achievement of professional competencies.

### Experiential & Clinical Training

- Establishes new partnerships with prestigious teaching hospitals and medical centers to facilitate hands-on training for pharmacy students.
- Collaborates and mediates faculty-hospital communication to ensure optimal training experience.
- Reviews and performs medication-therapy management for internal medicine inpatients in affiliated hospitals.
- Guides and supervises site-related activities performed by seniors students in medical wards.
- Develops and updates pharmacy experiential manuals.
- Prepares and implements the Qualifying Comprehensive Exam for senior students before enrollment in the PPE V/VI courses.
- Designs, organizes, validates, and executes the biannual Objective Structured Clinical Examination (OSCE), a graduation requirement for pharmacy students.

### Accreditation

- Assisted the Faculty in obtaining and maintaining an international accreditation from the Canadian Council for Accreditation of Pharmacy Programs (CCAPP).
- Participates in presenting the Faculty's achievements and best practices during the cyclic Canadian Council for Accreditation of Pharmacy Programs (CCAPP) site visits.

### Preceptor Development & Faculty Activities

- Launched and implements weekly preceptor development workshops to update clinical preceptors with the latest guidelines and knowledge.
- Participates in the organization and execution of faculty events.

### Student Affairs

- Provides academic advising for undergraduate students.
- Conducts interviews for newly applying students to the Faculty of Pharmacy.

### Community Outreach

- Organizes and conducts community services activities in collaboration with affiliated hospitals to raise awareness of common medical conditions.

- Develops toolkits to equip hospital medical teams with an up-date, reliable & easy to use sources for evidence-based medication-therapy management.
- Delivers workshops and webinars to the Lebanese Pharmacy Students' Association (LPSA).

**Research & International Collaboration**

- Establishes and maintains ongoing research collaboration with partners in the Middle East.

**Membership in Professional Bodies**

- Editorial Board Member – BMC Health Service Research Journal
- Scientific Research Commitee Member – BAU
- Examiner Committee Member for the Pharmacy Colloquium at the Ministry of Education and Higher Education
- Lebanese Order of Pharmacists (OPL) Scientific Committee member (Hospital and Clinical Pharmacy Committee) – 2026 to present
- International Relations Committee Member – BAU
- Central Scientific Committee member – Lebanese Order of Pharmacists (OPL) 2023-2024
- Antimicrobial resistance (AMR) committee member – Saint Joseph University and the Lebanese Order of Pharmacists
- Pharmacy Education Committee Member of the Lebanese Universities: United in Action (LAU)
- Faculty Counsel Member
- Member of the American College of Clinical Pharmacy (ACCP)

**Academic Year Fall/Spring 2023-2026**

Business or sector: **Academic**

- Clinical Research II [PHCP 853] (for PhD students in Clinical Pharmacy) – Course Corrdinator
- Advanced Patient Care [PHCP 711] (for masters students in Clinical Pharmacy) – Course Corrdinator
- Journal Club [PHCP 719] (for masters students in Clinical Pharmacy) – Course Corrdinator
- Advanced Skills for Clinical Pharmacy Practice [PHCP 710] (for masters students in Clinical Pharmacy) – Course Coordinaror
- Pharmacotherapeutics III (Infectious Diseases) [PHAR 473] – Course Coordinator
- Pharmacy Practice Experience VI [PHAR 578] – Course Coordinator
- Pharmacy Practice Experience V [PHAR 577] – Course Coordinator & Clinical preceptor at the Central Military Hospital

**Fall/Spring 2018-2023**

- Pharmacotherapeutics III (Infectious Diseases) [PHAR 473] - Course Coordinator
- Pharmacy Practice Experience VI [PHAR 578] - Course Coordinator
- Pharmacy Practice Experience V [PHAR 577] - Course Coordinator & Clinical preceptor at the Central Military Hospital
- Pharmacy Practice I [PHAR 275] (Ethics in Pharmacy Practice, Health Care System and Professional Communication Skills essential for Patient Care) – Clinical Instructor
- Inter-professional Education (IPE) Facilitator (It has the objective to cultivate collaborative practice for providing patient-centered care)

**Summer 2017-2018**

- Pharmacy Practice Experience III [PHAR 380] - Course Coordinator

**Spring 2017-2018**
- Pharmacotherapeutics III (Infectious Diseases) [PHAR 441] - Course Coordinator
- Pharmacy Practice Experience V [PHAR 540] - Clinical preceptor at the Central Military Hospital
- Interprofessional Education (IPE) Facilitator

**Fall 2017-2018**
- Pharmacy Practice I [PHAR 275] - Executive Course Coordinator
- Pharmacy Practice Experience V [PHAR 540] – Clinical Preceptor at the Central Military Hospital

**Summer 2016-2017**
- Pharmacy Practice Experience III [PHAR 380] - Course Coordinator

**Spring 2016-2017**
- Pharmacotherapeutics III (Infectious Diseases) [PHAR 441] - Course Coordinator
- Integrated Case-based Learning III [PHAR 444] (Endocrinology & Infectious Diseases) – Course Coordinator
- Pharmacy Practice Experience V [PHAR 540] - Executive Course Coordinator & Clinical Preceptor at Rafic Hariri University Hospital and Central Military Hospital

**Fall 2016-2017**
- Pharmacy Practice I [PHAR 275] - Executive Course Coordinator
- Pharmacy Practice Experience V [PHAR 540] - Executive Course Coordinator & Clinical Preceptor at Makassed General Hospital & Central Military Hospital

**Summer 2015-2016**
- Pharmacy Practice Experience III [PHAR 380] - Executive Course Coordinator

**Spring 2015-2016**
- Integrated Case-based Learning III [PHAR 444] ( Endocrinology & Infectious Diseases) - Executive Course Coordinator
- Professional Pharmacy Practice III [PHAR 514] - Executive Course Coordinator & Clinical Preceptor at Makassed General Hospital
- Interprofessional Education (IPE) - Facilitator

**Fall 2015-2016**
- Professional Pharmacy Practice II [PHAR 519] - Executive Course Coordinator & Clinical Preceptor at Rafic Hariri University Hospital (RHUH)
- Pharmacy Practice I [PHAR 275] - Executive Course Coordinator & Lab Instructor

**Summer 2014-2015**
- Pharmacy Practice Experience I, II, III and Pharmacy Practice Training IV – Preceptor

**Spring 2014-2015**
- ICBL I [PHAR 343] (Introduction to Patient Care) - Lab Instructor
- Professional Pharmacy Practice III [PHAR 514] - Clinical Preceptor
- Professional Pharmacy Practice I [PHAR 416] - Clinical Preceptor
- Pharmacy Practice II [PHAR 337] (Drug Information & Literature Evaluation) - Lab instructor

**Fall 2014-2015**
- Professional Pharmacy Practice II [PHAR 519] – Clinical Preceptor at Makkased General Hospital
- Pharmacy Practice 1 [PHAR 275] - Instructor

**Summer 2013-2014**
- Pharmacy Practice Training I, II, III & IV – Preceptor in community pharmacies

**From 2013 to 2023** **Pharmacy Owner**
- Inventory control
- Patient care provision
- Prescription of medications for the minor ailments
- Interpretation of lab data
- Basic physical examination and primary assessment of patients' conditions
- Medical referral

## EDUCATION

**From 2026 to date** — **Pursuing American Board Certification in Infectious Diseases**

**From 2022 to 2025** — **PhD in Clinical Pharmacy – Excellent degree (GPA: 4/4)**
Beirut Arab University, Beirut, Lebanon

**From 2017 to 2021** — **Masters in Clinical Pharmacy – Excellent degree (GPA: 3.78/4)**
Beirut Arab University, Beirut, Lebanon

**From 2013 to 2015** — **Doctor of Pharmacy – Very good degree (GPA: 3.73/4)**
Beirut Arab University, Beirut, Lebanon

**From 2008 to 2013** — **Bachelor of Pharmacy – Very good degree (GPA: 3.71/4)**
Beirut Arab University, Beirut, Lebanon

**Further Education**

- **How to Conduct Systematic Reviews –** Clinical Research Institute (CRI) at the American University of Beirut (AUB) – November 2024
- **Medical Research Lecture Series** – Clinical Research Institute (CRI) at the American University of Beirut (AUB) – September 2024
- **Anticoagulation Therapy Management 12-hour Course – BAU – 2023**
- **Critical Care Management Course – BAU – 2023**
  - This 12-hour course was delivered by a distinguished Intensivist and associate professor at the American University of Beirut. During this course, essential topics in intensive care management and case-based discussions were covered.
- **Epidemiology in Public Health Practice Specialization - Johns Hopkins University – 2020**
  - This five-course specialization covered essential epidemiologic toolsets for public health practice, data/health indicators and surveillance systems. In addition, it highlighted the investigation of outbreaks and epidemics
  - Essential Epidemiological Tools for Public Health Practice - 2020
  - Surveillance Systems: The Building Blocks - 2020
- **COVID-19 Contact Tracing - Johns Hopkins University – 2020**
- **Psychological First Aid Course – authorized by John Hopkins University, November 2020.**

**Personal Development**

**Work Smarter, Not Harder: Time Management for Personal & Professional Productivity**
University of California, Irvine – 2020

**Using Google Forms to Analyze User Research Data – Online Project Network – November 2020**

## PERSONAL SKILLS

Mother tongue(s): Arabic

| Other language(s) | UNDERSTANDING | | SPEAKING | | WRITING |
|---|---|---|---|---|---|
| | Listening | Reading | Spoken interaction | Spoken production | |
| English | C1/2 | C1/2 | C1/2 | C1/2 | C1/2 |

Levels: A1/2: Basic user - B1/2: Independent user - **C1/2 Proficient user**

Communication skills:

Advanced communication skills gained through:
- Delivering advanced communication skills in the Pharmacy Practice Courses

Computer skills:
- Good command of Microsoft Office™ tools
- Good command of SPSS

Other skills:
- Research and data analysis
- Multitasking
- Initiative and problem solving
- Time management
- Leadership

**Research Skills**
- Design research studies & Protocols
- Conduct Literature review
- Develop and validate questionnaires
- Submit protocols for the Institutional research board to obtain ethical approval
- Train and supervise data collectors
- Recruitment of research assistants for simulated patient studies
- Recruitment of Hospitals for International Studies
- Data analysis using SPSS® (conducting advanced inferential statistical analysis)
- Manuscript preparation, writing, copy editing, and submission to international peer-reviewed journals

**Published Research**

1. **Itani, R*.,** Al Rawass, R., Tlayss, D., Al Zarif, F., Domiati, S., Alaeddine, C., Abdallah, M., & Hayouk, R. (2026). Prevalence, risk factors, and management practices of premenstrual syndrome among female university students in Lebanon: An observational cross-sectional study. PLOS ONE, 21(7), e0354807.

2. Anyomih, T. T. K., Aregawi, A. B., Calvache, J. A., Dawson, A., Isik, A., Lapitan, M. C., Pata, F., Qureshi, A. U., Zarour, A. M. A., Bhangu, A., Nepogodiev, D., & **AlliGatOr Collaborative** (2026). Pre-hospital time and risk of perforation in patients with acute appendicitis in 112 countries (AlliGatOr): an international, prospective, observational cohort study. The Lancet Global Health.

3. AbuTayeh, R., Thiab, S., Mustafa, H. R., Altah, M., **Itani, R.**, & Abu-Farha, R. (2026). Evaluating the impact of video-only and video-assignment approaches on student learning in the computer-aided drug design course. Pharmacy Practice, 24(3), 3635.

4. Nugent, J. G., Tan, H., Stedelin, B., Nerison, C. S., Teton, Z. E., Zaidan, S. K., Demetriades, A. K., Dmytriw, A. A., Still, M. E. H., Ghaith, H. S., Zeigler, C., Lazio, B., Negida, A., Raslan, A. M., Arar, A., Aouabed, N., Mukherjee, S. K., Cusimano, M. D., Khellaf, A., **GNS-I Collaborators** (2026). Traumatic brain injury outcomes across human development index strata in 29 countries. Nature Medicine, 1(1), 1–20.

5. Ahmad, A. A., Sokhn, E., Dib, C., Shuhaiber, P., Issa, M., & **Itani, R*.** (2026). Epidemiology, Antimicrobial Resistance Patterns, Management, and Predictors of Mortality in Diabetic Foot Infections in a Lebanese Hospital: A Retrospective Observational Study. Journal of Infection and Public Health, 19(8), 103282.

6. Linder, C., Tellis, R., Adisa, A., Ghosh, D., Suroy, A., Singh, D., Marshall, N., Penney, O., Haque, P. D., Ingabire, J. C. A., Ramos-De La Medina, A., Nepogodiev, D., Bhangu, A., & **NIHR Group on Environmentally Sustainable Hospitals**. (2026). Barriers, facilitators and strategies for implementing on-site hospital solar power in low- and middle-income countries: a systematic review, global prioritisation survey and development of an implementation tool. BMJ Global Health, 11(6), e023926.

7. Zuriegat, L., **Itani, R*.,** Abu Hammour, K., & Abu-Farha, R. (2026). Multidrug resistance and inappropriate empiric therapy as predictors of hospital stay in diabetic foot infections. PLOS One, 21(6), e0350837.

8. NIHR Global Health Research Unit on Global Surgery (2026). 30-day postoperative mortality and the effects of hospital preparedness during the COVID-19 pandemic: a pooled analysis of prospective international cohort studies. The Lancet regional health. Europe, 62, 101566.

9. NIHR Global Health Research Unit on Global Surgery and the **GlobalSurg Collaborative** (2026). Safety and equity in scaling minimally invasive surgery worldwide in 109 countries using

cholecystectomy as a tracer procedure: a prospective cohort study. The Lancet Global Health, 14(2), e199–e212.

**10.** NIHR Global Health Research Unit on Global Surgery (2025). Global access and safety of robotic-assisted surgery for inguinal hernia and gallstone disease worldwide: A pooled multinational cohort study across 110 countries. Impact Surgery, 2(7), 266–277.

**11.** Abu-Farha, R., Alzoubi, K. H., Alsous, M., El-Zubi, M. K., Shilbayeh, S. A., & **Itani, R.** (2025). Exploring parental awareness and willingness to use monoclonal antibodies for respiratory syncytial virus prevention. Human vaccines & immunotherapeutics, 21(1), 2588886.

**12. Itani, R.,** Khojah, H. M. J., Shuhaiber, P., Raychouni, H., Dib, C., Hassan, M., Mukattash, T. L., & El-Lakany, A. (2025). Incidence and risk factors of resistant Pseudomonas aeruginosa infections: a multicenter study in Lebanese tertiary hospitals. BMC Infectious Diseases, 25(1), 1048.

**13.** Abu-Farha, R. K., Sobh, S., Abu Hammour, K., Darwish El-Hajji, F., Shilbayeh, S. A., & **Itani, R.** (2025). Prevalence, Appropriateness, and Outcomes of Colistin Use in Multidrug-Resistant Pseudomonas aeruginosa Infections: Insights from Hospital Data. Medicina, 61(7).

**14.** Taybeh, E. O., Naser, A. Y., Taybeh, A., Alsairafi, Z. K., Alwafi, H., Qadus, S., **Itani, R.,** Alsharif, A. A., Al Rajeh, A. M., Alqahtani, J. S., Aldhahir, A. M., Jarab, A. S., Alqahtani, S., Jaradat, A., Saloumi, L., Alhartani, Y. J., El-Qasem, A., Abukhalaf, A. H. I., Alzayani, S., Bahlol, M. (2025). Public preparedness and knowledge about emergency medicine: A study across 6 countries. Medicine, 104(28).

**15. Itani, R**., Khojah, H. M. J., Mukattash, T. L., Shuhaiber, P., Raychouni, H., Dib, C., Hassan, M., & El-Lakany, A. (2025). Difficult-to-treat resistant Pseudomonas aeruginosa infections in Lebanese hospitals: Impact on mortality and the role of initial antibiotic therapy. PLOS ONE, 20(5), e0321935.

**16. Itani, R**., Khojah, H. M. J., Raychouni, H., Kibrit, R., Shuhaiber, P., Dib, C., Hassan, M., Mukattash, T. L., & El-Lakany, A. (2025). Management practices and mortality predictors among Klebsiella pneumoniae infections across Lebanese hospitals: a multicenter retrospective study. BMC Infectious Diseases, 25(1), 620.

17. Sobh S, **Itani R**, Abu Hammour K, Abu-Farha RK. Evaluation of empiric therapy appropriateness, resistance patterns, and mortality in *Pseudomonas aeruginosa* infections in Jordan. Explor Med. 2025;6:1001312

18. **Itani, R.,** Khojah, H. M. J., Kibrit, R., Raychouni, H., Shuhaiber, P., Dib, C., Hassan, M., Mukattash, T. L., & El-Lakany, A. (2024). Risk factors associated with multidrug-resistant Klebsiella pneumoniae infections: a multicenter observational study in Lebanese hospitals. BMC Public Health, 24(1), 2958.

19. Naser, A. Y., Aboutaleb, R., Khaleel, A., Alsairafi, Z. K., Alwafi, H., Qadus, S., **Itani, R.,** El-Dahiyat, F., Awaisu, A., Awwad, O., Alsous, M., Abdelwahab, G. M., Khojah, H. M. J., AbuAlhommos, A. K., Alsharif, A. A., Alghanemi, A. G., Al Rajeh, A. M., Alqahtani, J. S., Aldhahir, A. M., … Bahlol, M. (2024). Knowledge, attitude, and practices of pharmacy students in 7 Middle Eastern countries concerning antibiotic resistance: A cross-sectional study. Medicine, 103(36), 1–7.

20. NIHR Global Health Research Unit on Global Surgery, & **STARSurg Collaborative** (2024). A prognostic model for use before elective surgery to estimate the risk of postoperative pulmonary complications (GSU-Pulmonary Score): a development and validation study in three international cohorts. The Lancet. Digital health, 6(7), e507–e519.

21. **Itani, R.,** Khojah, H. M. J., Karout, S., Rahme, D., Hammoud, L., Awad, R., Abu-Farha, R., Mukattash, T. L., Raychouni, H., & El-Lakany, A. (2023). *Acinetobacter baumannii*: assessing susceptibility patterns, management practices, and mortality predictors in a tertiary teaching hospital in Lebanon. Antimicrobial Resistance & Infection Control, 12(1), 136.

22. Ajlouni, B., Al-nabulsi, A., Issa, S. N., Abu-Farha, R., Ta'an, W., Abu Saleh, S., **Itani, R**., Tawalbeh, R., & Mukattash, T. (2023). Evaluating Nutrition-related Knowledge , Attitudes , and Practices for the Prevention of Breast Cancer among Women in Jordan. Jordan Journal of Nursing Research, 2(4), 289–298.

23. **Itani, R***., Karout, L., Kassab, M. B., Karout, S., Rabah, M., Huda El Mais, H. E. M., Safar, A. O., Al Hajj, I., Awad, M. F., & El-Lakany, A. (2023). A crisis amidst many others: COVID-19 response satisfaction during the economic collapse and post-Beirut port explosion in Lebanon. Journal of Public Health and Development, 22(1), 12–37.

**24.** Hammour, K. A., Abu-farha, R., **Itani, R***., Karout, S., Allan, A., & Manaseer, Q. (2023). The prevalence of Carbapenem Resistance Gram negative pathogens in a Tertiary Teaching Hospital in Jordan. BMC Infectious Diseases, 23, 634–640.

**25.** Daghash, R., Al-Saaideh, M. A., & **Itani, R.** (2023). Evaluation of Pharmacotherapy Standards During Pregnancy Among Jordanian Pharmacy Colleges Graduates. Jordan Journal of Pharmaceutical Sciences, 16(3), 607–620.

**26.** Ayoub, K. H., Mukattash, T. L., Al-nabulsi, A. A., Khojah, H. M. J., Abu-Farha, R., Alzayani, S., El-Dahiyat, F., Al-TAIE, A., Karout, S., Al-Hashar, A. K., Rahme, D., Jarab, A., & **Itani, R***. (2023). Factors associated with children ' s dietary patterns during COVID- 19 pandemic lockdown : a multinational study across Middle Eastern Arab Nations. Journal of Public Health & Development, 21(3), 207–221.

**27.** Naser, A. Y., Alwafi, H., **Itani, R**., Alzayani, S., Qadus, S., Al-Rousan, R., Abdelwahab, G. M., Dahmash, E., AlQatawneh, A., Khojah, H. M. J., Kautsar, A. P., Alabbasi, R., Alsahaf, N., Qutub, R., Alrawashdeh, H. M., Abukhalaf, A. H. I., & Bahlol, M. (2023). Nomophobia among university students in five Arab countries in the Middle East: prevalence and risk factors. BMC Psychiatry, 23(1), 541.

**28. Itani, R.,** Khojah, H. M., Karout, S., Abu-Farha, R., Mukattash, T. L., Rahme, D., Housary, K., El Achi, H., Safar, A. O., Al Hajj, I. K., & El-Lakany, A. (2023). Oral contraceptive pills shortage in Lebanon amidst the economic collapse: a nationwide exploratory study. BMC Health Services Research, 23(520), 1–10.

**29.** Rahme, D., **Itani, R**., Karout, S., Khojah, H. M. J., & El-Lakany, A. (2023). Community Pharmacists' Commitment to Preventive Measures During the COVID-19 Pandemic in Light of the Economic Crisis in Beirut, Lebanon: A Simulated Client Study. BAU Journal - Health and Wellbeing, 5(2), 1–9.

**30.** Mukattash, T. L., Khairallah, K., Daradkeh, H., Jarab, A. S., Abu-Farha, R., Nusair, M., Karout, S., & **Itani, R**. (2023). A qualitative exploration of children's willingness to take the COVID-19 vaccine in Jordan. Journal of Applied Pharmaceutical Science, 1–6.

**31.** Abu-farha, R., Alzoubi, K. H., Mukattash, T., Karout, S., **Itani, R**., Nassar, R. I., & Barakat, M. (2023). Public perceptions about home delivery of medications service in Lebanon : A cross-sectional survey. Electronic Journal of General Medicine, 20(1), em430-37.

**32.** NIHR Global Health Unit on Global Surgery, & COVIDSurg Collaborative. (2022). Elective surgery system strengthening : development , measurement , and validation of the surgical preparedness index across 1632 hospitals in 119 countries. The Lancet, 400, 1607–1617.

**33.** Abu-Farha R, Alzoubi K, Alkhawaldeh R, **Itani R**, Karout S, Mukattash TL, et al. Home Delivery of Medications: Community Pharmacists' Perspectives on the Pros and Cons of the Service. Front Public Heal. 2022;10:966145.

**34.** Abu-Farha R, Alzoubi K, Rizik M, Karout S, **Itani R**, Mukattash TL, et al. Public Perceptions about Home Delivery of Medication Service and Factors Associated with the Utilization of this Service in Jordan. Patient Prefer Adherence. 2022;16:2259—2269.

**35.** Itani, N., Domiati, S., Karout, S., M J Khojah, H., Awad, R., & **Itani, R*.** (2022). Upscaling the pharmacy profession: Knowledge and willingness of the Lebanese pharmacists to practice the administration of dermal fillers. Saudi Pharmaceutical Journal, 30(11), 1543–1551.

**36.** Mukattash, T. L., Jarab, A. S., Abu-Farha, R. K., **Itani, R.,** Karout, S., Mansour, R. Z., & Abuhishmah, S. (2022). The effect of the emerging omicron variant on the willingness to take or continue with COVID-19 vaccination in the Middle East. Journal of Applied Pharmaceutical Science, 12(10), 49–54.

**37.** Aldabagh A, Abu Farha R, Karout S, **Itani R**, Abu Hammour K, Alefishat E. Evaluation of Drug Use Pattern in Pediatric Outpatient Clinics in a Tertiary Teaching Hospital Using WHO Drug-Prescribing Indicators. J Multidiscip Healthc. 2022;15:1143–51.

**38. Itani, R.,** Karout, S., Khojah, H. M. J., Rabah, M., Kassab, M. B., Welty, F. K., AlBaghdadi, M., Khraishah, H., El-Dahiyat, F., Alzayani, S., Khader, Y. S., Alyahya, M. S., Alsane, D., Rana, A.-F., Mukattash, T. L., Soukarieh, T., Fawzi Awad, M., Awad, R., Wehbi, A., Karout, L. (2022). Diverging levels of COVID‐19 governmental response satisfaction across middle eastern Arab countries: a multinational study. BMC Public Health, 22(1), 893.

**39.** Karout, S., Khojah, H. M. J., **Itani, R*.,** Jaffal, F., & El-Lakany, A. (2022). Assessing the pharmaceutical care provision to suspected COVID-19 patients in community pharmacies: a simulated patient study. BMC Health Services Research, 22(1), 467.

**40. Itani, R*.,** Soubra, L., Karout, S., Rahme, D., Karout, L., & Khojah, H. M. J. (2022). Primary Dysmenorrhea: Pathophysiology, Diagnosis, and Treatment Updates. Korean J Fam Med, 43(2), 101–108.

**41.** Karout, S., Khojah, H. M. J., Karout, L., & **Itani, R*.** (2022). A nationwide assessment of community pharmacists ' attitudes towards dispensing errors : A cross-sectional study. Journal of Taibah University Medical Sciences, 17(5), 889-896.

**42.** Mukattash, T. L., Alkhalidy, H., Alzu'bi, B., Abu-Farha, R., **Itani, R.,** Karout, S., Khojah, H. M. J., Khdour, M., El-Dahiyat, F., & Jarab, A. (2022). Dietary supplements intake during the second wave of COVID-19 pandemic: A multinational Middle Eastern study. European Journal of Integrative Medicine, 49, 102102.

**43.** Karout, S., Soubra, L., Rahme, D., Karout, L., Khojah, H. M. J., & **Itani, R*.** (2021). Prevalence, risk factors, and management practices of primary dysmenorrhea among young females. BMC Women's Health, 21(1), 392.

**44. Itani, R.,** Khojah, H. M. J., Jaffal, F., Rahme, D., Karout, L., & Karout, S. (2021). Provision of pharmaceutical care to suspected high-risk COVID-19 patients through telehealth: a nationwide simulated patient study. BMC Health Services Research, 21(1), 997.

**45.** COVIDSurg Collaborative, G. C. (2022). SARS-CoV-2 infection and venous thromboembolism after surgery: an international prospective cohort study. Anaesthesia, 77(1), 28–39.

**46.** Khojah, H. M. J., **Itani, R.,** Mukattash, T. L., Karout, S., Jaffal, F., & Abu-Farha, R. (2021). Exposure of Community Pharmacists to COVID-19: A Multinational Cross- Sectional Study. Journal of Taibah University Medical Sciences, 16(6), 920–928.

**47.** Mukattash, T. L., Jarab, A. S., Al-Qerem, W., Abu Farha, R. K., **Itani, R.,** Karout, S., Mukattash, I. L., & Basheti, I. (2021). COVID-19 Patients' Views and Experiences of Pharmaceutical Care Services in Lebanon. International Journal of Pharmacy Practice, 30(1), 82–85.

**48.** COVIDSurg Collaborative, G. C. (2021). Effects of pre-operative isolation on postoperative pulmonary complications after elective surgery: an international prospective cohort study. Anaesthesia, 76(11), 1454–1464.

**49.** Abu-Farha, R., Mukattash, T., **Itani, R.,** Karout, S., Khojah, H., Al-Mahmood, A., & Alzoubi, K. (2021). Willingness of Middle Eastern Public to Receive COVID-19 Vaccines. Saudi Pharmaceutical Journal, 29(7), 734–739.

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**51.** COVIDSurg Collaborative, & G. C. (2021). Timing of surgery following SARS-CoV-2 infection: an international prospective cohort study. Anaesthesia, 76(6), 748–758.

**52. Itani, R.,** Karout, S., Khojah, H. M. J., Jaffal, F., Abbas, F., Awad, R., Karout, L., Abu-Farha, R., Kassab, M. B., & Mukattash, T. L. (2021). Community Pharmacists' Preparedness and Responses to COVID-19 Pandemic: A Multinational Study. International Journal of Clinical Practice, 75(9), e14421.

**53.** COVIDSurg Collaborative, G. C. (2021). SARS-CoV-2 vaccination modelling for safe surgery to save lives: data from an international prospective cohort study. The British Journal of Surgery, 108(9), 1056–1061

**54.** Mukattash, T. L., Jarab, A. S., Al-Qerem, W., Abu Farha, R. K., **Itani, R**., Karout, S., Mukattash, I. L., & Basheti, I. (2021). Providing pharmaceutical care during the COVID-19 pandemic: attitudes and experiences of home-treated patients in Jordan. Journal of Pharmaceutical Health Services Research, 12(2), 321–324.

**55.** Gaba, F., Bizzarri, N., Kamfwa, P., Saiz, A., Blyuss, O., Paranjothy, S., & Go SOAR Team. (2021). Determining post- - operative morbidity and mortality following gynecological oncology surgery : protocol for a multicenter , international , prospective cohort study ( Global Gynaecological Oncology Surgical Outcomes Collaborative — GO SOAR ). International Journal of G, 31(9), 1287–1291.

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|---|---|
| **Citation Count for the Published Papers** | **2759 Citations** |
| **h-index** | **21** |
| **i 10-index** | **33** |

**Ongoing Projects**

**56.** MIRABEL (Mental disorders, suicidal Ideation, substance abuse and emigRAtion choices in vulneraBlE populations in Lebanon during the economic crisis).

**Awarded Research Grants**

- Recognized among the World's Top 2% Scientists in the 2026 Stanford University/Elsevier ranking.
- Awarded the "Most Active Researcher Award" for the academic year 2023–2024 during the BAU Faculty Awards Ceremony. The event took place on Friday, May 2, 2025, at Jamal Abdel Nasser Hall, Beirut Campus.
- Won a research grant out of 73 submitted proposals by the French and Lebanese researchers for the "Action-Liban" project call, that was launched by the Ministry of Higher Education, Research and innovation (MESRI), the National Research Agency (ANR), the French Agency for development (AFD), and the National Council for Scientific Research of Lebanon (CNRS-L).
    - Entitled: **MIRABEL** (**M**ental disorders, suicidal **I**deation, substance abuse and emig**RA**tion choices in vulnera**BlE** populations in Lebanon during the covid-19 pandemic and economic crisis)

**Theses**

- Antimicrobial Resistant Pathogens: Exploring Susceptibility Patterns, Risk Factors, Management Practices, and Treatment Outcomes in Lebanese Hospitals – PhD thesis
- Incidence of Methicillin-Resistant Staphylococcus aureus, Risk Factors, Susceptibility Patterns and Treatment Outcomes (A retrospective study in a Lebanese Hospital) – PharmD thesis
- Prevalence, risk factors, and management practices of primary dysmenorrhea among university students – Masters thesis

**Research of Interest**

- Focus on clinical practice in the institutional and ambulatory settings, with the emphasis on incidence and treatment of multi-drug resistant pathogens in Lebanese Hospitals
- Health equity and the provided health services in the Middle Eastern countries

**Journal Peer Reviewer**

- Awareness of Academic Paper Retractions and AI-Related Risks Among Health Researchers in Jordan (2026). Science Editing.
- The Impact of the POCQI Model on Improving Maternal, Neonatal, and Children Healthcare Services in Jordan (2025). Electronic Journal of General Medicine.
- Medication Adherence and Beliefs About HIV Treatment in Jordan: A Cross-Sectional Analysis (2025) AIDS and Behavior.

- Assessment of Community Pharmacists' Experiences and Perceptions on Gabapentin Abuse in Jordan: A Cross-Sectional Study (2024) Journal of Pharmaceutical Policy and Practice.
- Fostering Healthier Choices: Empowering Pharmacy Students to Bridge the Food Label Gap in Lebanon: Fostering Healthier Choices (2024) Jordan Journal of Pharmaceuticals.
- Information Behaviour and Factors Influencing Family Planning Knowledge of Myanmar Ethnic Migrants: A Qualitative Study (2023) Journal of Public Health and Development.
- Anmar Al-Taie. (2023) Exploring the Psychological Impact and Quality of Life in Patients with Comorbid Medical Conditions Post COVID-19 Pandemic Era. Vacunas
- Rana Abu-Farha. (2023). Evaluation of Community Pharmacists' Perceptions and Willingness to Integrate ChatGPT into their Pharmacy Practice: A Study from Jordan. *Journal of the American Pharmacists Association*
- Anmar Al-Taie (2023). A Scoping Review for the Clinically Approved Monoclonal Antibodies and Association with Glycaemic Control: Impact Role of Clinical Pharmacist for Patient Care in Oncology Setting. *Clinical Therapeutics.*
- Semere Kahssay and Nebeyi Demeke (2023). Pharmacotherapy Problems and Associated Factors among Type 2 Adult Diabetic Patients on Follow up at Mizan-Tepi University Teaching Hospital, Southwest Ethiopia. *Plos One Journal.*
- The Impact of the POCQI Model on Improving Maternal, 1 Neonatal, and Children Healthcare Services in Jordan (2022). Electronic Journal of General Medicine.
- Gore, M. R. (2017). Severe Pansinusitis Due to Raoultella Ornithinolytica. *American Journal of Infectious Diseases, 13*(3), 28-31. doi:10.3844/ajidsp.2017.28.31

**Graduate Theses Supervision (PharmD. & Masters)**

- Reem Rawass, Diala Tlayss, and Fatima Al Zarif (2026). Prevalence, risk factors, and management practices of premenstrual syndrome (PMS) among Females. (**Main Supervisor**)
- Aya Ali Ahmad and Omar Ghali (2025). Epidemiology, Antimicrobial resistance Patterns, Management, and Predictors of Mortality in Diabetic Foot Infections in a Lebanese Hospital: A Retrospective Observational Study. (**Main Supervisor**)
- Sara El Saoudi and Yara Fakhri (2025). Knowledge, Attitude, and Practice of Non-Steroidal Anti-Inflammatory Drugs Use Among Beirut Residents. (**Co-Supervisor**)
- Lana Mohammad Oqla Zuriegat, (2025). Co-supervising a Masters student in Clinical Pharmacy at the "Applied Science Private University" in Jordan. Thesis titled: Multidrug Resistance and

Inappropriate Empiric Therapy as Predictors of Hospital Stay in Diabetic Foot Infections. (**Co-Supervisor**)

- Sara Afif Ghanem (2025). The Role of Pharmacists in Lebanon Amidst Medication Shortages and the COVID-19 Pandemic: A Cross-Sectional Study among Patients with Type II Diabetes Mellitus. (**Co-Supervisor**)
- Sufana Suboh (2024). Co-supervising a Masters student in Clinical Pharmacy at the "Applied Science Private University" in Jordan. Thesis titled: *Pseudomonas aeruginosa*: Assessing Succeptibility Patterns, Management Practices, and Mortality Predictors in a Jordanian Tertiary Care Hospital. (**Second Supervisor**)
- Mohamad Ihab Abdallah (2024). Prevalence and Risk Factors Associated with Methicillin-Resistant Staphylococcus aureus Infections in Two Lebanese Tertiary Care Centers. **(Main Supervisor)**
- Ghinwa Zahwi (2024). Evaluation of Psychometric State of Lebanese Citizens during COVID-19 Pandemic. (**Second Supervisor**)
- Jana Daher (2024). Methicillin-Resistant *Staphylococcus aureus* Infections in a Lebanese Hospital: Prevalence and Associated Risk Factors. **(Main Supervisor)**
- Dana El Hajj (2024). Knowledge of Contraception Use and Family Planning Among Married Female Syrian Refugees in Lebanon. **(Second Supervisor)**
- Razan Farfour (2024). The Knowledge of Family Planning and Contraceptive Methods among Female Syrian Refugees in Lebanon. **(Second Supervisor)**
- Sarah Ghanem (2024). The Role of Pharmacists in Lebanon Amidst Medication Shortages and the COVID-19 Pandemic: A Cross-Sectional Study among Patients with Type II Diabetes Mellitus. **(Second Supervisor)**
- Razan Diab (2024). Exploring Susceptibility Patterns and Risk Factors for the Acquisition of Multidrugresistant ***Pseudomonas aeruginosa***: A Retrospective Observational Study in a Tertiary Care Hospital in Lebanon. (**Main Supervisor**)
- Rahaf Kibrit (2024). Examining Susceptibility Patterns and Factors Influencing the Acquisition of Antimicrobial Resistant ***Klebsiella pneumoniae*****:** A Retrospective Observational Study in a Lebanese Hospital. (**Main Supervisor**)
- Nancy Dika (2024). Examining Susceptibility Patterns and Factors Influencing the Acquisition of Methicillin-resistant ***Staphylococcus aureus***: A Retrospective Observational Study in a Lebanese Hospital. (**Main Supervisor**)
- Reem Awad (2023). Analysis of Treatment Appropriateness and Predictors of Mortality in Patients Infected with *Acinetobacter baumannii:* A Cross-sectional Study in a Lebanese Hospital. (**Main Supervisor**)
- Lara Hammoud (2023). Assessing Susceptibility Patterns, Appropriateness of Antimicrobial Treatment, and Associated

Mortality Rates among Patients Infected with *Acinetobacter baumannii:* A Retrospective Observational Study at a Lebanese Hospital. (**Main supervisor)**

- Co-supervising a Masters student from Jordan University of Science and Technology (JUST). Buthaina Alzu'bi (2021). Dietary supplements intake during the second wave of COVID-19 pandemic: A multinational Middle Eastern study. (**Second Supervisor**)
- Co-supervising a Masters student from Jordan University of Science and Technology (JUST). Claudia Ayoub (2022). Children's Eating Habits and Lifestyle Patterns during COVID-19 Pandemic in Arab Countries. (**Second Supervisor**)

**Graduate Theses Examination (PharmD. & Masters)**

- Dana Rahme (2026). Knowledge, Attitude, and Practice of Headache among Lebanese Population.
- Zeina Ayache (2025). The Prevalence of Antibiotic Resistance and Multidrug Resistant Pathogens in Urinary Tract Infections in an Outpatient Setting.
- Hiba El Cheikh Ammar (2025). Physicians' Perception of the Emerging Role of Clinical Pharmacists in Saida, Lebanon.
- Rayan Daher (2025). Knowledge, Attitude, and Practice of Community Pharmacists Towards Anti-Aging Products in Mount Lebanon.
- Fatima Dakdouk (2025). Knowledge, Attitude, and Practices of Lebanese Community Pharmacists on Beta-blocker Drugs Substitution during the Economic Crisis.
- Zeinab Al Ahmar (2024). Knowledge and Perception of Premenstrual Syndrome in the South of Lebanon Community.
- Leen Kalo (2024). Exploring Lifestyle Changes after the Crisis among a Sample of Lebanese People Residing in South Lebanon: A Crosssectional Assessment.
- Mohamad Younes (2024). Assessing the knowledge, practice, and attitude of physicians towards antibiotic use and antimicrobial resistance.
- Nadine Rachid (2024). Exploring Knowledge, Attitude and Practice of Dispensing Generics among Community Pharmacists during the Lebanese Economic Crisis.
- Carol Slim (2024). Assessment of Lipid Lowering Drug Use by Type II Diabetic Patients in Lebanon
- Wissal Yassine (2023). Assessment of Community Pharmacists' Knowledge, Attitude, and Practice toward Asthma in North Lebanon
- Mariam El-Kadi (2023). Premenstrual Syndrome: Knowledge and Perception of the Beqaa Valley Residents

- Ali Khazen (2023). Drug Shortage and Substitution: The Mount Lebanon Residents'.
- Hussein Jawad (2022). Identification of Potential Drug-Drug Interactions Among Prescription Medications: A Lebanese Community Pharmacy-Based Study.

**Delivered Conferences**

- Served as a member of the judging panel for the University 3-Minute Thesis (3MT) Competition, evaluating graduate student presentations. (2026)
- Served as a member of the judging panel for the University 3-Minute Thesis (3MT) Competition, evaluating graduate student presentations. (2025)
- Designed, organized, and conducted the community service event "Safe Fasting: Managing Diabetes During Ramadan" on March 13, 2025, in collaboration with the Tripoli Municipality, Ministry of Public Health, and Makarem Primary Healthcare Center at Sahat Al-Tell Park in Tripoli.
- Organized and co-led a workshop on Gingivitis and Dentin Sensitivity at BAU on March 11, 2025, in collaboration with the Faculty of Dentistry, providing specialized training to Pharmacy and Dentistry students for interdisciplinary presentations.
- Participated in the Fourth Annual Pharmacy Day on February 6, 2025, at Lebanese Hospital Geitaoui University.
- Served as a jury member for two consecutive years (2022 & 2023) in the medical student research competition conducted by the Faculty of Medicine at BAU.
- As a member of the scientific committee at the Lebanese Order of Pharmacists, I participated in organizing and conducting the 26th Pharmacist Day, titled "Sustaining Lebanon's Legacy as the Pharmacy of the Middle East." The event took place on May 21, 2023, at Le Royal Hotel.
- Itani, R. Antimicrobial Resistance & Antibiotics Use: the Spiral Effect Seminar. Lebanese Pharmacy Students' Association (LPSA). Lebaon, November 21, 2022.
- Itani, R. Optimizing Public Health through Social Engagement, BAU Initiative; 5th IVPN Pharmacy Conference, Cleveland Clinic Abu Dhabi, November 16, 2019.

- Itani, R.. The Role of Lebanese Pharmacists in Managing Acute Cystitis & Preventing Antibiotic Resistance; Lebanese Pharmacy Students' Association (LPSA) Webinar, Beirut, Lebanon. July 8, 2018.
- Judge in the LPSA Symposium: Patient Care activities. Beirut, Bristol Hotel– Aug 25, 2018.

**Conducted Radio Interview**

- Hepatitis A: Symptoms, signs, risk factors, treatment and prevention. Radio Liban, June 2022.
- COVID-19 Preventive Measures and Different Types of Face Masks, Radio Liban, March 2019.

**Community Services**

**Professional Contributions**

- Along with Dr. Rawad Hayouk, participated in organizing a workshop titled "Behçet's disease Workshop" on Friday December 5, 2025 at Mount Lebanon Hospital Balamand University Medical Center

- Participated alongside senior pharmacy students in the Blood Donation Open Day held on June 13, 2025, at Hôpital du Sacré-Cœur Centre Universitaire, which included an educational lecture, hospital unit tours, and student-led blood donations, promoting community service and public health engagement.

- Coordinated the Objective Structured Clinical Examination (OSCE) for Ukrainian pharmacy graduates on July 16th, 2024, in collaboration with the Lebanese Ministry of Education and Higher Education to assess the clinical competencies of Lebanese pharmacy students who graduated from Ukrainian universities in 2022 and 2023. Led a dedicated team to ensure a high-standard evaluation of candidates through standardized simulation scenarios, including interactive and non-interactive stations, focusing on clinical skills, performance, and problem-solving abilities in patient care.

- Organized and co-led a workshop on Gingivitis and Dentin Sensitivity at BAU on March 11, 2025, in collaboration with the Faculty of Dentistry, providing specialized training to Pharmacy and Dentistry students for interdisciplinary presentations.

**Community outreach**

- Along with Dr. Siba Jneid, participated the "Colon Cancer Awareness Campaign" at Nini Hospital, Tripoli, on October 19, 2026.
- Contributed to the planning and organization of the World Pharmacists Day 2026 event, on October 13, 2026, at BAU, and designed and coordinated the community outreach booth titled "Diabetes Care: Know Your Numbers, Know Your Risk."
- Along with Dr. Siba Jneid, participated in organizing a campaign titled "Colon Cancer Awareness Campaign" on Friday March 6, 2026 at Nini Hospital, Tripoli

- Participated in organizing the “Osteoporosis Awareness Campaign” held on Tuesday, November 25, 2025, at Sahet Al-Tal in Tripoli.
- Participated in coordinating a diabetes awareness campaign for parents at Iman High School, Saida, on November 15, 2025. The event aimed to empower families through evidence-based education and patient-centered health counseling.
- Contributed to the coordination of the “Awareness Campaign on Non-Communicable Diseases” held on November 14, 2025, at the Makhzoumi Foundation Primary Healthcare Center. The campaign addressed major chronic diseases, cardiovascular, pulmonary, and oncologic.
- Contributed to the coordination of the “Type 1 Diabetes Awareness Session” held on October 23, 2025, at the Makhzoumi Foundation Primary Healthcare Center, aimed to educate patients and their families on Type 1 Diabetes.
- Collaborated in coordinating the “Breast Cancer Awareness Campaign” held on October 29, 2025, at Nini Hospital, aimed at serving the community through health promotion and empowering women with knowledge on breast cancer screening and prevention.
- Designed, organized, and conducted the community service event “Safe Fasting: Managing Diabetes During Ramadan” on March 13, 2025, in collaboration with the Tripoli Municipality, Ministry of Public Health, and Makarem Primary Healthcare Center at Sahat Al-Tell Park in Tripoli.
- Coordinated the “Managing Diabetes During Ramadan: Awareness Campaign” at Hammoud Hospital University Medical Center on February 28, 2025, facilitating the active involvement of pharmacy students in clinical training, and collaborating with healthcare professionals to deliver evidence-based education and promote safe fasting practices for individuals with Type II Diabetes Mellitus.
- In collaboration with Saint Joseph University, we are actively preparing and designing workshops focused on antimicrobial stewardship, which will be delivered to community pharmacists in Lebanon.

- **Optimize the medication therapy management for the inpatients in the affiliated hospital**

Provide medication therapy management services for inpatients in the internal medicine department in the affiliated hospital. These services aim to optimize the therapeutic management, prevent drug-therapy related problems; such as the prevention of irrational use of medications, drug-drug interactions, and the provision of cost-effective therapies.

**Health Promotion and Public Awareness:**

- **Antimicrobials Awareness Campaign; World Pharmacists Day, Beirut Arab University. 2019**

  Designed the campaign activities, posters, and leaflets.
  Supervised participants to counsel the public about the impact of irrational use of antibiotics. This campaign aimed to raise awareness about antimicrobial resistance and collateral damage, to encourage best practices among the general public to avoid the further emergence and spread of antibiotic resistance.

- **Diabetes Management; World Pharmacists Day at Beirut Arab University, 2017 and 2018**

  Designed the campaign activities, posters, and patient education tools. Mediated the communication with a pharmaceutical company to provide us with diabetes measurement kits for the event. This campaign aimed to screen the public for diabetes (especially the high-risk groups), review the patients' medical profile, assess the appropriateness of their medications used to control DM II and their cardiovascular protective medications.

**Developed Toolkits**

Preparation and designing of informative toolkits that were distributed in the affiliated hospitals, aiming to provide practitioners with an up-to-date, reliable & easy to use source of information about commonly encountered medication therapies optimize their uses

- Lipid-Lowering Drugs Toolkit - 2026
- Antibiotics Smart Use Toolkit - 2022
- Anticoagulants Toolkit - 2018
- VTE Prophylaxis Algorithm – 2018
- Diabetes Management in Hospitalized Patients - 2019
- NSTEMI Algorithm -2019

**Development of Experiential Training Network**

- Established new partnerships with prestigious teaching hospitals and medical centers to enhance hands-on clinical training for pharmacy students.
- Coordinated and facilitated the signing of MoUs with:
  - New Mazoum Hospital (2026)
  - Mount Lebanon Hospital University Medical Center (MLH UMC) (2026)
  - Makhzoumi Foundation (2025)
  - Nini Hospital (2025)
  - Clémenceau Medical Center (2024)
  - Hammoud Hospital University Medical Center (HHUMC) (2023)
  - Lebanese Hospital Geitaoui University Medical Center (UMC) (2022)
  - Raee Hospital (2021)