Advancing Pharmacy Through Governance: The Lebanese Order of Pharmacists’ Perspective

Pascale SALAMEH, PharmD, MPH, PhD, HDR
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Chair, Scientific Committee. Lebanese Order of Pharmacists

OPL 23rd Pharmacist Day - June 24, 2018
Introduction

Mission:

- The Lebanese Order of Pharmacists seeks to raise the level of the profession, strives to enforce the laws and defend the rights of pharmacists and improve the level of practice and development of scientific competence. The Order also aims at providing the conditions for enhancing the patient's access to the appropriate medications and its safe use.

- This would enable the pharmacist to provide the best medical services to the patient and work to protect and maintain his health and quality of life.

- To achieve these goals, the OPL is working jointly with all the stakeholders such as the Ministry of Public Health (MOPH), the Ministry of Education and Higher Education (MEHE), the universities and the professional associations.
This presentation will only tackle the scientific projects conducted by the OPL and their impact on the pharmacy profession.
Good Governance:
Definition, Principles and Applications
Governance

- **Governance** is defined by the way in which an organization is managed at the highest level, and the systems for doing this.

- **Good governance** is defined by Kaufmann, Kraay, and Mastruzzi (2004; 2007) as the “traditions and institutions by which authority in a country is exercised for the common good”.

- **Principles** of good governance as described by the UNDP:
  - Legitimacy and voice: *participation* and *consensus orientation*
  - Direction: *strategic vision* for improvement
  - Performance: *responsiveness* and *effectiveness and efficiency*
  - Accountability: *accountability* and *transparency*
  - Fairness: *equity* and *rule of law*
Educational Governance

MEHE, OPL and universities:
- Learning needs analysis
  - *Numerus clausus* application and post-graduate training
  - Pharmacy Competencies Framework
  - Colloquium improvement suggestions
- Reporting to a program board:
  - Educational Programs Accreditation

Universities:
- Risk management
- Peer review
- Educational evaluation
Clinical Governance in Collaboration with the MOPH

Pharmacist-related

- Laws, Accountability & Transparency
  - Pharmacy Specialties and Titles
  - Hospital and Clinical Pharmacy Laws
  - Good Pharmacy Practice standards for Community Pharmacy
  - Code of Deontology
- Continuing professional development
  - Mandatory Continuing Education (CE)
  - Royal Pharmaceutical Society agreement
- Evidence-based practice
  - Research for institutional assessment-based decisions
Clinical Governance in Collaboration with the MOPH

Patient-related

- Evidence-based practice:
  - The Lebanese Advanced Patient Profile (LAPP) & Medication Therapy Management (MTM) platforms
- Laws, Accountability & Transparency:
  - Prescription Guidelines and Standard Operating Procedures
- Risk management
  - Pharmacovigilance & Medication Safety platform
  - Drug Shortage platform
- Continuing professional development
  - Awareness on antibiotic misuse and resistance
  - Health Promotion sessions and leaflets
- Research and development:
  - Research for medication quality and patient outcomes assessment
Mission:
To enable research and development of excellence in pharmacy practice through building knowledge expertise and skills of the workforce to achieve optimal health outcomes.
Educational Governance
### Density in Lebanon vs. the World

<table>
<thead>
<tr>
<th>Region</th>
<th>Density (per 10,000 Population)</th>
<th>1/Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lebanon</td>
<td>17.30</td>
<td>1:578</td>
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<tr>
<td>World – Sample Mean</td>
<td>6.02</td>
<td>1:1,661</td>
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<tr>
<td>France</td>
<td>12.00</td>
<td>1:883</td>
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</tbody>
</table>
Registered Active Pharmacists (2006-2017)

![Graph showing the number of registered active pharmacists from 2006 to 2017. The numbers increase each year, with a significant jump in 2017.]

- 2006: 3924
- 2007: 4150
- 2008: 4493
- 2009: 4947
- 2010: 5397
- 2011: 5826
- 2012: 6190
- 2013: 6549
- 2014: 7070
- 2015: 7527
- 2016: 7882
- 2017: 8343
Registered Pharmacists/University/Year

Pascale SALAMEH, PharmD, MPH, PhD, HDR

24/06/2018
The 7-Star Pharmacist Concept

- Introduced by the WHO/FIP in 1997
- Evolving healthcare structure
- Evolving role of the pharmacist
Pharmacy Trainings and Competencies

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Pharmacy Trainings and Competencies
Competencies Framework

1. **Basic Competencies**
   - Undergraduate Education
     - Didactic Courses
     - Applied Work
   - Diploma (Grades)

2. **Training Competencies**
   - Undergraduate Training (university level)
     - 1. Training Certificate
     - 2. Personal Portfolio

3. **Post-Graduate Competencies**
   - Post-Graduate Training (university and/or OPL)
     - 1. PG Training Certificates:
       - Core
       - Specific
     - 2. Personal Portfolio
Colloquium Suggested Changes

Colloquium: "New Findings on the Efficacy of Osmotic Tablets in Clinical Practice"

Date: 24/06/2018

Pascale SALAMEH, PharmD, MPH, PhD, HDR

The objective of this colloquium is to discuss the latest findings on the efficacy of osmotic tablets in clinical practice. The speaker, Dr. Pascale Salameh, will present recent research on the use of these tablets in various conditions, emphasizing their advantages over traditional medications.

Topic: "Osmotic Tablets in Clinical Practice: Recent Findings and Future Directions"

Abstract:

Recent studies have shown promising results in the use of osmotic tablets for the management of various conditions. These tablets offer several advantages over conventional formulations, including improved bioavailability, reduced side effects, and enhanced patient compliance.

Key points to be discussed:

1. Introduction to osmotic tablets and their mechanism of action.
2. Case studies demonstrating the efficacy of osmotic tablets in specific conditions.
3. Challenges and limitations of current osmotic tablets.
4. Future directions and research needs for improving osmotic tablet technology.

Dr. Salameh will conclude the colloquium with a Q&A session, allowing attendees to ask questions and discuss the implications of the presented findings.

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Educational Standards

Committee: MEHE, OPL and universities

Documents developed:
- MEHE Quantitative Forms
- Guide to self-assessment
- Criteria for expert selection → Training

ITEMS
- ACPE (USA)
- CIDPHARMEF
- CCAPP (Canada)
- QSG (Lebanon)

ITEMS + STRUCTURE
- WHO/FIP
- fip

OUTCOME
- Lebanese Pharmacy Standards

ACCREDITATION
Clinical Governance:
Pharmacist-Related Projects
Pharmacy Specialties and Titles

**MAP OF PHARMACY TRACKS AND DEGREES**

**BS Pharmacy**

- Doctor of Pharmacy
  - Academic
    - Research Master
    - PhD/DBA/Fellowship
  - Clinical
    - PGY1/R1/DU Hospital and Clinical Pharmacy
    - PGY2
  - Professional
    - Professional Master/DU University Certificate
    - DES/DIS/Clinical Biology

**Notes:**
1. Clinical and Professional tracks’ pharmacists may join the academic track when this meets the academic institution’s rules and regulations.
2. All degrees should be from recognized universities/institutions.

Pascale SALAMEH, PharmD, MPH, PhD, HDR
24/06/2018
Revisions were made in 2014, then 2016

The proposal was submitted to the Lebanese Parliament in 2012

Revised in 2014, then 2016

The proposal was submitted to the Lebanese Parliament in 2012.

Clinical and Hospital Pharmacy Law

Pascale SALAMEH, PharmD, MPH, PhD, HDR

24/06/2018
Deontology and Ethics

 نظام آداب مهنة الصيدلة

 ميثاق المعايير الأخلاقية لترويج الأدوية في لبنان

 Pascale SALAMEH, PharmD, MPH, PhD, HDR
Continuing Education

- Establishing the internal regulations in 2014 to implement the mandatory CE Law
- Internal regulations amended in 2016 to meet the pharmacists’ needs
- Organizing Regular CE sessions about different topics
- Organizing CE weekends in different regions on chronic diseases management
- Launching a series of CE sessions on Soft Skills
- Organizing 3 Hospital Pharmacists CE sessions, with the collaboration of the hospital subcommittee
- 2 ongoing publications
## OPL - CE Offerings During 2016-2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
<th>Credits</th>
<th>Venue</th>
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<tbody>
<tr>
<td>2016</td>
<td>OPL 22nd Pharmacist Day</td>
<td>3</td>
<td>Hilton Habtoor</td>
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<tr>
<td>2016</td>
<td>Bekaa SD 2016</td>
<td>4</td>
<td>Al Khayyal Temnine</td>
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<td>2016</td>
<td>OPL Medication Safety in the Hospital Setting</td>
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<td>2016</td>
<td>OPL CE Program 2016 - Introduction to Critical Pathos</td>
<td>1</td>
<td>OPL</td>
</tr>
<tr>
<td>2016</td>
<td>Nabatieh Scientific Day</td>
<td>3</td>
<td>Nabatieh</td>
</tr>
<tr>
<td>2016</td>
<td>OPL CE Program 2016 - Communication Skills</td>
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<tr>
<td>2016</td>
<td>North Scientific Day</td>
<td>4</td>
<td>Chamber of Commerce Tripoli</td>
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<td>2016</td>
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<td>2017</td>
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<td>2017</td>
<td>OPL 2017 - 2/6 - Assertive Communication</td>
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<td>2017</td>
<td>OPL 2017 - 5/6 - Leadership for Leaders: Advanced</td>
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<tr>
<td>2017</td>
<td>OPL 2017 - 6/6 - Leadership for Leaders: Change</td>
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<td>OPL Auditorium</td>
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<td>2017</td>
<td>OPL 2017 - 2/5 Patient Profile Program</td>
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<td>OPL 2017 - 3/5 Patient Profile Program</td>
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<td>2017</td>
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<td>OPL Auditorium</td>
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<td>2017</td>
<td>OPL 25th Congress 2017</td>
<td>19.5</td>
<td>Hilton Habtoor</td>
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</tbody>
</table>

### CE Offered
- **36 CE** offered in 2016
- **71 CE** offered in 2017

**Focus on Soft Skills**
Pharmacists Who Started CE

- 70% Did not start CE
- 30% Has started CE
Institutional Assessment-Based Decisions:

Published Articles


Submitted Articles

Clinical Governance:
Patient-Related Projects
# Lebanese Advanced Patient Profile - LAPP

## LEBANESE ADVANCED PATIENTS PROFILE

![Image](image_url)

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**Pascale SALAMEH, PharmD, MPH, PhD, HDR**

24/06/2018
Medicines Use Review Template

(Audit for Professional Activities)

MUR Feedback Form

Pharmacy Silo

MUR Feedback Form

Physician's Name

Date

Patient Name

Patient Address

DOB

This patient recently received a Medicines Use review (MUR) which identified issues with the following medicines which are detailed below:

Medicine name(s):

The following matter were identified which require your consideration:

- Potential drug interaction(s)
- Potential side effects/adverse drug reaction preventing use of the medicine
- Potential reports not using the medicine any more
- Potential reports not using the medicine in line with the directions of the prescriber
- Potential reports difficulty using the medicine-issue with the device
- Potential reports difficulty using the medicine-issue with the formulation
- Potential reports lack of efficacy
- Potential reports problem with dosage regimen
- Potential reports unresolved concern about the medicine
- Other (see comments below)

Further information/Comments/ Possible action:

Addition Center
No current issues detected

Mail
gmail.com

Password

Search

Web Share

Enable cookies

Firefox

Enable cookies

Password

Database
Graphs

13:00
Today
12/22/2017

33

Pascale SALAMEH, PharmD, MPH, PhD, HDR

24/06/2018
Dispensing Guidelines

World Health Organization Prescription's Timeline

Physician
STEP 1: Define the patient's problem
STEP 2: Specify the therapeutic objective
STEP 3: Verify the suitability of the prescribed drug
STEP 4: Write the prescription
STEP 5: Give information, instructions and warnings
STEP 6: Monitor the treatment (and stop, if necessary, in collaboration with the physician)

BASIC LEGAL REQUIREMENTS OF A PRESCRIPTION

Prescriptions should:
• Be written clearly in ink to decrease risk of errors (for written prescriptions)
• Be indelible (including computer-generated prescriptions)
• Be signed and dated by the prescriber
• Be in e-prescription format to reduce prescribing errors and improve safety of dispensing
• Specify the third party payer when it exists
Details pertaining to the prescribing physician should include:
• Name, address and qualifications of the prescriber
• Phone number
• Date of prescribing
• Stamp with physician's registration number
Details pertaining to the patient should include:
• Patient's full name
• Patient's age, weight and gender
• Patient's address and phone number

Medical Information Required in a Prescription

• The name of the medication, dose, dosage form, route, frequency and duration of treatment (including overall quantity) and other useful information (empty stomach, with meals, after meals...)
• Should be stated. In the absence of this information, the pharmacist will arrange to contact the physician. If unable to do so, the pharmacist can use their discretion and professional judgement to dispense up to five days’ worth of treatment. If they have insufficient information to make a judgement, they will refrain from dispensing the medication in question.
• Refill information
• Instructions are best avoided but if any is used, it should be clear, unambiguous and endorsed by the prescriber’s signature.
• Schedules should preferably be written without abbreviations. However, some Latin abbreviations are acceptable (Table 1).

PRESCRIPTION AND E-PRESCRIPTION GUIDELINES FOR PHYSICIANS

World Health Organization Prescription's Timeline

Physician
STEP 1: Define the problem of the patient
STEP 2: Specify the therapeutic objective
STEP 3: Verify the suitability of a prescription drug
STEP 4: Write a prescription
STEP 5: Give information, instructions and warnings
STEP 6: Monitor and/or stop the treatment

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• Patient’s age, weight and gender
• Patient’s address and phone number

Elements of Good Practice

• Write generic (when available) unless there are irreversibility issues. This practice will enable the pharmacist to dispense any equally equivalent preparation, and avoid expenses and potential delays as per the decision framework on substitution on page 3.
• Strictly avoid abbreviations or scrivbling the name of the medications.
• State name of drug, dose, dosage form, route, frequency and duration of treatment or any other useful information (empty stomach, with meals...)
• Specify the strength and quantity. In the absence of this information, the pharmacist will attempt to contact you; if unable to do so, the pharmacist can use their discretion and professional judgement to dispense up to five days’ worth of treatment. If they have insufficient information to make a judgement, they will not dispense.
• Alterations are best avoided but if any is to be made, it should be clear, unambiguous and endorsed by the prescriber’s signature.
• Avoid the unnecessary use of decimal points (tailing zeros). For example, 3 grams should be written as 3g and not 3.0g; quantities of less than 1 gram should be written in milligrams (such as 50mg instead of 0.05g).
Medication Safety Initiative

Our Goal
A safer and more effective use of medications for everyone!

Our Initiative
• Creating the Medication Safety subcommittee
• Designing the Medication Safety reporting tool
• Analyzing reported submissions
• Organizing CE sessions on Medication Safety
• Providing incentives for reporting

Our Commitment
Implement a Medication Safety culture despite several barriers to Medication Safety
Medication Safety Platform
Medication Safety Published Articles


Medication Safety Submitted Articles


Awareness on ATB Misuse and Resistance

Knowledge, attitudes and behaviors towards antibiotics use among Lebanese adults: An awareness survey on antibiotic resistance

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3. Marwan Nait
4. Bhaba Shukla
5. Raheem Zassy
6. Riham Tail, MD
7. Huda Rijji
8. Anou Maria Hoteima, MPH
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Abstract

High levels of antibiotics misuse and resistance are increasingly reported, particularly in developing countries. The aim of the present study was to investigate the current levels of knowledge, attitude and practice of antibiotics use among 18-year-old living in Lebanese towards antibiotic use and misuse. A questionnaire was adopted from a similar survey conducted by the WHO in 2015. Overall, 986 respondents answered the survey. The majority of respondents (97.5%) considered the use of antibiotics within the past six months. More than one third (33.6%) of the respondents surveyed reported having taken antibiotics within the past six months, and more than one third (33.6%) of the respondents surveyed reported having taken antibiotics within the past six months. The proportion of respondents who recognized the roles of antibiotics was 60%. In the current survey, the term “antibiotic resistance” was defined as the failure of antibiotics in the treatment of a disease. This was followed by “resistant bacteria” (12%) and “antibiotics are not helping” (10%). The proportion of all respondents who could not distinguish between the two terms was 25%. While 78% of respondents correctly summarized what antibiotics are, becoming increasingly resistant to antibiotics by antibiotics as a true statement, an even greater proportion (79%) thought the statement “Antibiotic resistance occurs when your body becomes resistant to antibiotics and they no longer work as well it was true, whereas 75% thought that the statement “Antibiotic resistance is only a problem for people who take antibiotics regularly” was true, whereas 75% thought that the statement ‘Bacteria which are resistant to antibiotics can be spread from person to person’ was true and 52% thought that the statement ‘Antibiotics are harmful to the environment’ was false. This study revealed several misconceptions and the lack of awareness on the use of antibiotics and resistance.
Awareness on ATB Misuse and Resistance

Antibiotic Resistance Awareness

The problem
- Antibiotics treat infection by killing bacteria, but bacteria are fighting back leading to antibiotic resistance.
- Antibiotics are becoming less effective, which means more deaths, side effects, new infections and higher medical costs.

OPI National Survey 2016
Percentage of Lebanese Citizens with Misconception about ATB use (n=906)

Viral infections thought to be treatable by ATBS

- 27%
- 24%
- 18%

- 50%
- 33%
- 27%

- 21%
- 10%
- 5%

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Non-Prescription Medications

- **Article 43 of the Lebanese law 367:**
  
  *No pharmacist may dispense a medicinal drug without a medical prescription or without the advice of a doctor, with the exception of medicinal drugs which shall be specified by ministerial order issued by the Minister of Public Health, after consultation with the Medical Association and the Association of Pharmacists. Pharmaceutical work shall continue as before until the publication of the ministerial order by the Minister of Public Health.*

- In 2018, the MOPH released a list of 330 brands of non-prescription medications

- The OPL suggested a list of 1488 brands:
  - 350 active ingredients
  - 17% of the active ingredients on the Lebanese market

- Stepwise approach to regulate prescription of medications, **including antibiotics**
Health Promotion

Upcoming Themes

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<thead>
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<th>Smoking cessation</th>
<th>Asthma and COPD</th>
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<td>Infectious diseases and</td>
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<tr>
<td>Diabetes</td>
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<td>Osteoporosis</td>
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<td>Drug and alcohol abuse</td>
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<td>Obesity and nutrition</td>
<td>Medication reconciliation</td>
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<td>Drug use in pregnancy and</td>
<td>Health literacy and</td>
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<td>lactation</td>
<td>hygiene</td>
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<td>Supplements and doping</td>
<td>Child referral</td>
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<tr>
<td>Non-Communicable</td>
<td>Pharmaceutical waste</td>
</tr>
<tr>
<td>Diseases and screening</td>
<td>management</td>
</tr>
</tbody>
</table>

In collaboration with other institutions
More Initiatives and Projects
OPL Suggested Initiatives

- Participating actively to all MOPH and MEHE relevant committees

- Creating a **National Committee for Pharmacy Governance** and Strategy in collaboration with the MOPH and the Royal Pharmaceutical Society, and the participation of all stakeholders.

- Current OPL president: active member of the High Commission for Health at the MOPH → suggested health reforms
# OPL Suggested Health Reforms

<table>
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<th>PRINCIPLES</th>
<th>STRATEGIC GOALS</th>
<th>EXECUTIVE PROJECTS</th>
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<tr>
<td>Laws and Order</td>
<td>Leadership of MOPH&lt;br&gt;Legal framework improvement&lt;br&gt;Clearer boundaries between health professions&lt;br&gt;Laws enforcement</td>
<td>Change/suggest laws and regulations in every sector&lt;br&gt;Establish professional competency framework&lt;br&gt;Improve inspection and apply accountability measures</td>
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<tr>
<td>Strategic Thinking</td>
<td>Use SWOT analysis&lt;br&gt;Evidence-based decisions</td>
<td>Conduct expert focus groups</td>
</tr>
<tr>
<td>Quality Practice</td>
<td>Implement Good Practice to promote patient-centered care&lt;br&gt;Manage risks</td>
<td>Apply Accreditation standards&lt;br&gt;Apply ISO standards&lt;br&gt;Professional Practice Evaluation&lt;br&gt;Prepare risk management plans</td>
</tr>
<tr>
<td>Ethical Behaviors</td>
<td>Professionalism (human rights, secrecy, respect)&lt;br&gt;Independence in the practice&lt;br&gt;Humanized communication with patients</td>
<td>Conduct workshops for soft skills&lt;br&gt;Circulate documents about ethics and deontology&lt;br&gt;Apply accountability measures</td>
</tr>
<tr>
<td>Collaborative Spirit</td>
<td>Inter-professional practice&lt;br&gt;Public/private collaboration</td>
<td>Conduct inter-professional practice workshops&lt;br&gt;Initiate collaboration projects between public and private sectors</td>
</tr>
<tr>
<td>Resources Stewardship</td>
<td>Protect human resources&lt;br&gt;Protect financial resources&lt;br&gt;Health promotion</td>
<td>Plan human resources needs&lt;br&gt;Promote prevention versus cure&lt;br&gt;Cost-effectiveness studies&lt;br&gt;Health outcomes studies&lt;br&gt;Diagnosis-Related Group: DRG system trial and application</td>
</tr>
<tr>
<td>Technical Improvement</td>
<td>Standardize measurements&lt;br&gt;Promote applied research&lt;br&gt;Adapt treatment to context</td>
<td>Central laboratory activation&lt;br&gt;Useful data generation&lt;br&gt;Guidelines adaptation and adherence</td>
</tr>
<tr>
<td>Educational Perspective</td>
<td>Link education to practice&lt;br&gt;Maintain adequate competency</td>
<td>Basic competencies framework&lt;br&gt;Specialties and titles clarification&lt;br&gt;Mandatory post-graduate continuing education</td>
</tr>
<tr>
<td>Governance</td>
<td>Health Related Equity&lt;br&gt;Transparency&lt;br&gt;Innovation&lt;br&gt;Sustainability</td>
<td>Work for “Health for All”, “SDG: Sustainable Development Goals”&lt;br&gt;Use IT for tracking activities&lt;br&gt;Try new ideas based on professionals’ consensus</td>
</tr>
</tbody>
</table>
Ongoing Research: 8

- Assessment of Knowledge, Perception & Practice in Chronic Bronchitis Among Community Pharmacists
- Continuing Education in Lebanon: Pharmacists’ Perception
- Assessment of Burnout, and Empathy Among Community Pharmacists
- Knowledge Towards Antibiotics Use Among Lebanese Adults: A Study on the Interaction Between Education and Income
- Health System Pharmacists: Baseline Assessment of Pharmacy Practice Initiatives
- Pharmacists in Lebanon: Figures, Projections and Challenges
- Smoking in Lebanon: Knowledge, Attitude, and Practice
- Good Pharmacy Practice Assessment in Lebanese Community Pharmacies
In Summary…

- Total number of **professional projects** ongoing or submitted to relevant ministries: **17**
  - White papers/standards/frameworks: 5
  - Laws/decrees/decisions: 12

- Total number of **research projects**: **22**
  - Published: 6
  - Submitted: 8
  - Ongoing: 8

December 2015
November 2018
References


- National Health Services. Clinical governance requirements for community pharmacy, 2012

THANK YOU