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Community pharmacy practice

NLM, which offers access to scientific literature as a library, does not endorse or agree with contents of included databases, learn more at PMC Disclaimer | PMC Copyright Notice The practice of pharmacy continues evolving requiring comprehensive research. Good Pharmacy Practices (GPP) are widely adopted worldwide enhancing quality of services but little information is available regarding implementation in developing countries like Lebanon which lacks clear guidelines and evidence of good clinical practices. This study aims to highlight GPP application, identify obstacles hindering it, and suggest ways to facilitate its use in Lebanon. A review of recent studies published in English covered various aspects of pharmacy practice in relation to GPP standards excluding hospital and primary health care settings due to their own quality standards. Out of 20 studies, eight focused on research and professional development, five on medicine provision, four on interaction and communication, one on trainees, and the rest touched upon factors affecting pharmacy practice in general. It appears that pharmacists' productivity and job satisfaction would improve with better financial incentives and working conditions. The review showed standard of research and professional development was the most studied topic suggesting pharmacists need to develop their research capabilities. Implementing Continuous Education for pharmacists is also recommended but obstacles include work, family commitments, lack of interest, time, commuting difficulties, and technology competence issues. GGP compliance among community pharmacies in Lebanon was assessed by a single pilot study showing low adherence to standards. Barriers to implementation are lack of enforcing laws, inadequate dissemination of standards, poor public perception, and socio-economic crisis facing Lebanon. Collaborative efforts are necessary for implementing GPP standards in Lebanon; training and awareness programs should be initiated. Community pharmacists can boost their commitment and motivation by establishing key performance indicators to monitor implementation. These indicators should cover medication storage, dispensing processes, patient safety incidents, public satisfaction, and medicine provision and use. These recommendations are applicable to Health authorities and Pharmacy educational institutions in Lebanon as well as other low-income countries. Good Pharmacy Practice (GPP) is an international standard for pharmacy services established by the World Health Organization (WHO) and International Pharmaceutical Federation (FIP) in 1992. It has undergone enhancements and approvals since then. Traditionally, pharmacists were perceived as chemists with limited roles. However, modern practice views them as healthcare professionals offering patient-oriented care. To ensure this, structures such as Good Pharmacy Practice have been developed. In 2006, FIP collaborated with WHO to launch a handbook on developing pharmacy practice. The GPP is defined as the practice that meets patients' needs for optimal evidence-based care. FIP released Development Goals in 2020 aiming to transform the pharmacy profession globally. These goals cover quality assurance, leadership development, collaboration, equity and equality, impact and outcomes, pharmacy intelligence, policy development, and people-centered care. The following FIP development goals aim to enhance pharmaceutical sciences education, services, and research: 1. Build academic capacity through in-practice training with performance indicators and focused pharmaceutical sciences education. 2. Implement an early career training strategy for pharmaceutical practitioners and scientists in drug development and safe medicines use. 3. Ensure transparent and innovative processes by implementing quality improvement strategies and quality assurance of medical products through scientific excellence. 4. Develop sector-specific frameworks, including those for pharmaceutical sciences, alongside training infrastructures. 5. Foster service-led competencies with a focus on competency-based education and training at all stages of pharmaceutical sciences careers. 6. Promote professional accountability and leadership in healthcare, and foster leadership in pharmaceutical science education, services, and research. 7. Advance evidence-based health benefits by providing professional services and healthcare in a people-centered holistic manner. 8. Foster cooperation and innovation between different pharmaceutical sectors through collaborative working across multi-disciplinary teams. 9. Develop needs-based continuing professional development (CPD) strategies for pharmaceutical scientists, with clear pathways for CPD. 10. Ensure equity and equality in training and career development, as well as in the pharmaceutical care delivery and service practices, and address workforce inequality. 11. Monitor the impact of pharmaceutical services on public health and healthcare systems, as well as the impact of pharmaceutical sciences on health improvement. 12. Build on workforce intelligence by collating, sharing, and utilizing professional services and pharmaceutical science intelligence to accelerate decision making. 13. Develop policies that incorporate pharmaceutical science policy and practice to implement clear and manageable strategies. 14. Develop the workforce to deliver quality expertise and scientific, evidence-based information on medicines in practice. 15. Support education and training on prevention and therapeutic optimization of chronic conditions, as well as develop innovative treatments for them. 16. Oversee prevention, surveillance, and scientific strategy management for communicable diseases, Optimization of Communicable and Vector-Borne Diseases In The Arab world, particularly in Lebanon, there is a need to optimize communicable and vector-borne diseases. This can be achieved by setting up infrastructures and frameworks that are supported by scientific research in antimicrobial resistance. Improving Access to Medicines, Devices, and Services Access to effective medicines, devices, and pharmaceutical care services needs to be optimized through frameworks, education, and training. Patient Safety and Digital Health Workforce and education strategies linked to the safe use of medicines in practice can ensure patient safety and facilitate the development of digital pharmaceutical care and technologies. Sustainability and Pharmacy Practices Enabling sustainable pharmacy practices through scientific strategies can promote the delivery of quality pharmaceutical products. In Lebanon, the community setting is loosely monitored, resulting in a compromised relationship between patients and pharmacists. A 2017 study found that the general public did not have a clear understanding of the role of pharmacists in the healthcare system and often did not trust them as sources of reliable medical information. A review of existing studies on Good Pharmacy Practices (GPP) implementation in Lebanon revealed challenges impeding its application, including lack of documentation. This study aims to evaluate GPP implementation, identify challenges, and suggest ways to facilitate its application. community pharmacists, workplace surveys and/or questionnaires, continuing education, motivation, community pharmacy standards, and/or public health. Studies on Good Pharmacy practice in Lebanon were reviewed with focus on English-language publications. Electronic databases cutoff point was set 5 years prior to review start. GPP standards for provision of medicines were omitted due to common practices among pharmacists without prescription. Research on hospital pharmacies and primary health care centers were also excluded as they follow their own quality standards. Results will be presented in sections, focusing on governance perspective towards GPP standards and other issues identified within the study. First section deals with governance perspective, followed by information from relevant studies on research and professional development, medication provision, interaction and communication, trainees, pharmacotherapy monitoring, documentation systems, and factors affecting general practice of pharmacy in Lebanon. Given article text here The opioid prescribing guidelines (OPL) have a number of key components, including compounding operating procedures, documentation, and raw material handling. Pharmacies must provide medicines with clear prescription availability and patient identification, as well as dispensing supplies. Additionally, they must offer advice on selection and use, respond to minor ailments, interact and communicate effectively, and maintain communication skills among pharmacists and staff. Pharmacies are also required to document patient medication profiles, formulary systems, policies, and standard operating procedures. They must have documentation systems in place for patient interventions, equipment availability, status maintenance, and resource management. Furthermore, pharmacies engage in health promotion through initiatives such as providing diagnostic tests, monitoring pharmaceutical care plans, identifying medication-related problems, interacting with prescribers, and participating in research projects. However, a 2019 pilot study conducted by the OPL found that only 18.8% of community pharmacists in Lebanon were generally compliant with GPP guidelines. The study identified areas for improvement, including optimizing assessment tools for GPP compliance. Recent studies have highlighted various aspects of community pharmacy practice in Lebanon related to GPP standards. These include research and professional development, medicine provision, interaction and communication, trainee acceptance, pharmaceutical care monitoring, documentation systems, and factors affecting general pharmacy practice. Research and professional development are crucial components of standard type. Eight studies were reviewed, with one study finding that not all pharmacists need to be competent in advanced research as it is not a requirement for most domains in community pharmacy practice. However, increased research competencies among pharmacists can contribute to disease surveillance, drug error monitoring, and validating measurement tools. Implementing policies that encourage hiring pharmacists as researchers at the university level and pharmaceutical institutions can achieve this. Another study showed that 91% of participants had obtained continuing education (CE) credits, with most driven by personal motivation and perceived value. Pharmacists with advanced computer literacy were more likely to use online resources, own tablets, and access learning management systems. Increased computer competency can help CE providers prepare materials for pharmacists, enhancing their practice and developing skills. The OPL introduced Law 190 in November 2011 making CE obligatory for pharmacists. However, pharmacists reported encountering obstacles to participation, including work and family commitments, lack of interest, and lack of time. The Lebanese community pharmacy sector is plagued by inadequate practices, including the dispensing of medications without prescriptions or proper indications. Research has shown that there are discrepancies between the labeled dosages of local and brand medications, particularly concerning antimicrobial constituents. This lack of standardization can lead to antibiotic resistance due to insufficient dosages. Furthermore, a study revealed that community pharmacists in Lebanon often lack adequate knowledge and training in areas such as oral health and medication interactions. A national cross-sectional survey found that only 20.3% of community pharmacists had attended conferences or training modules on oral health, while nearly 16% reported no training at all. The main barriers to improving competency levels were limited interaction with dentists and a lack of training in oral health. Additionally, studies have shown that patients often do not ask their pharmacists about potential interactions between OTC medications and prescribed drugs. The Lebanese Order of Pharmacists (OPL) has implemented a program for reporting adverse drug reactions, which showed positive attitudes among community pharmacists. However, no current data is available on the program's effectiveness. A study on medication therapy management found positive attitudes and knowledge among community pharmacists despite obstacles. A learning model was adopted in a Lebanese school of pharmacy to improve education and training in these areas. The study highlights a general limitation of experiential education in Lebanon, where the concept of onsite preceptorship is still evolving and pharmacy practitioners need to develop their precepting skills further. The literature provides insights into factors affecting community pharmacy practice, including productivity, job satisfaction, and public attitudes towards pharmacists. Findings show that sickness absenteeism and presenteeism have a significant impact on productivity, with 91% of pharmacists reporting sickness-related issues. Fatigue among pharmacists is also prevalent, linked to education level, experience, working hours, stress, depression, and soft skills. Job satisfaction among pharmacy owners has declined significantly over the past decade, attributed to rising costs and decreased revenue. Public perceptions towards community pharmacists in Lebanon remain relatively negative. The study on Good Pharmacy Practice (GPP) standards in Lebanon has been conducted with thorough research and analysis. To our knowledge, this is the first review of its kind to be published. The findings highlight that research and professional development capabilities among pharmacists are essential skills to develop. A trend towards implementing Continuing Education (CE) for pharmacists was observed, which aligns with the Lebanese Order of Pharmacists' (OPL) strategic goals. This standard supports the International Pharmaceutical Federation's (FIP) focus on continuing professional development strategies. Studies related to medicines provision and monitoring were limited. However, research in areas such as interaction and communication, patient perceptions, and factors affecting pharmacy practices provided valuable insights. Notably, the review emphasized the importance of supporting pharmacists with financial incentives and better working conditions to enhance their productivity, qualifications, and overall well-being. The assessment of GPP standards in Lebanon was found to be inadequate, with only one pilot study conducted. This lack of research suggests that GPP standards may not be being upheld, supported by reports of substandard pharmacy practices and negative public perceptions towards pharmacists' competency. Internationally, studies have identified key factors for successful GPP implementation: shared leadership, systematic approach, good communication, flexibility for community pharmacists, adequate resources, commitment, and evaluation. The implementation of Good Pharmacy Practice (GPP) in Lebanon is achievable but requires concerted effort from all stakeholders. Despite the development of GPP standards by the OPL, which have been contextualized for the Lebanese market, there is a lack of clear progress in implementing these standards. The literature suggests that GPP has not yet been adopted by the MOPH, and a strategy for training those involved in upholding GPP standards is lacking. The research reveals that the pharmacy sector is not actively engaging with GPP, with no documented evidence of good communication regarding GPP among pharmacies. The Lebanese population's low public satisfaction score with governmental responses to the covid-19 pandemic, which was positively associated with political crisis and corruption, further indicates a lack of trust in regulatory bodies. Challenges such as economic and financial crises can hinder the adoption of GPP standards. Barriers to good pharmacy practice in Lebanon are similar to those identified in other studies, including a lack of will to follow up on implementation, mind-set issues, resistance to change, and resource constraints. Structural barriers include time constraints, excessive bureaucratic workload, workforce shortages, and lack of support from employers and colleagues. Environmental barriers include poor communication among pharmacists and healthcare professionals, as well as a lack of support from professional associations. To ensure the effective presence of a calibrated data logger in community pharmacies, process indicators can be established by monitoring prescription error frequency and type. Public satisfaction with pharmacy services could serve as an outcome indicator. These recommendations are consistent with those presented in an international scoping review study published in 2019. The OPL is encouraged to assist pharmacists in developing data collection plans using appropriate tools, informing them of the formula used for each indicator, and notifying them of inclusion and exclusion criteria. Internationally, this practice has shown some success, as seen in Romania, where pharmacy performance indicators are determined by the Minister of Health's Order. The Romanian College of Pharmacists has developed monitoring methods for standardized pharmacy procedures and assessment tools to track community pharmacy practitioner performance. A continuous monitoring system for GPP standards implementation could be established through an academic initiative involving university pharmacy students collaborating with pharmacists to generate reports on GPP standard implementation. These reports would be submitted to the OPL for assessment after review by relevant faculty at academic institutions. Future research should test the feasibility of this procedure. To properly implement GPP, a clear framework must first be established to describe implementation and monitoring processes. This framework should be recognized at national, municipal/governorate, and organizational levels. Despite the potential benefits of implementing GPP standards, there is substantial evidence suggesting that they are not being maintained due to the absence of enforcing laws and the socio-economic crisis facing Lebanon. The authors of this paper declare that they have no financial or personal interests that could have influenced the work presented here. Alein W. Bou-Saba, Kassem M. Kassak, and Pascale R. Salameh are listed as corresponding authors. The World Health Organization has published several guidelines on good pharmacy practice in community and hospital settings since 1996. A study by Toklu et al. emphasized the need for a new model of pharmacy education to adapt to changing pharmacy practices. The FIP/WHO guidelines on good pharmacy practice were jointly issued in 2011, emphasizing standards for quality of pharmacy services. Other studies have highlighted the importance of transforming pharmacy education and practice in the Arab world. Research papers on governance solutions in Lebanon were studied to understand the current state of pharmacy practice in the country. These papers, published between 2018 and 2020, highlighted various issues affecting community pharmacies and pharmacists in Lebanon. They discussed topics such as medication safety, continuing education, and knowledge gaps among pharmacists. Studies like "Medication Safety Spontaneous Reporting System: The Lebanese Order of Pharmacists Initiative" (Akel et al., 2019) and "Good Pharmacy Practice Assessment Among Community Pharmacies in Lebanon" (Badro et al., 2020) emphasized the importance of quality control measures in community pharmacies. Other studies, such as "Attitudes of Lebanese Pharmacists Towards Online and Live Continuing Education Sessions" (Sacre et al., 2019), explored pharmacists' perspectives on professional development. Research also focused on pharmacists' roles beyond dispensing medication. For example, the study "Emphasizing The Role Of Pharmacist As A Researcher: The Lebanese Order Of Pharmacists' Perspective" (Hallit et al., 2019) highlighted the potential for pharmacists to contribute to research in their field. Additionally, several studies investigated knowledge and practice gaps among community pharmacists. For instance, "Assessment of Patients' Knowledge and Practices Regarding Their Medication Use and Risks in Lebanon" (Ramia et al.) revealed concerns about patients' understanding of medication risks. The findings from these studies suggest that there are areas for improvement in pharmacy practice in Lebanon, including the need for better quality control measures, enhanced continuing education opportunities, and increased focus on pharmacists' roles in research and patient care. A series of studies and articles published in various medical journals focus on pharmacy practices, education, and healthcare services in Lebanon. Researchers investigated patient perceptions of pharmacist-provided healthcare services, experiential education models for pharmacy students, factors associated with work impairment and productivity among community pharmacists, and quality of life among pharmacists. The studies also explored work fatigue, prevalence, and correlates among Lebanese community pharmacists, as well as the situation analysis of community pharmacy owners in Lebanon. Additionally, a comprehensive review of pharmacy education and practice in 13 Middle Eastern countries was conducted. Other articles discussed the importance of professionalism in pharmacy, the design of an assessment tool for hospital pharmacy practice in Macedonia, and the development of a pharmacy practice intervention based on literature reviews. The research highlights the challenges and opportunities faced by pharmacists in Lebanon and other developing countries, emphasizing the need for evidence-based interventions to improve patient care, pharmacist well-being, and pharmacy education. The article "First regulatory inspections measuring adherence to Good Pharmacy Practices in the public sector in Uganda" (2016) examines the compliance of pharmacies in Uganda with good pharmacy practices. Another study found that levels of satisfaction with government responses to COVID-19 vary across Middle Eastern Arab countries. The article "Barriers to Pharmacy Practice Change: Is it Our Nature or Nurture?" (2016) investigates the challenges faced by pharmacists in implementing changes to their practice. The Canadian Pharmacists Association has outlined the scope of pharmacy practice in Canada. Promoting evidence-based practice in pharmacies is an important area of focus, as highlighted in articles such as "Promoting evidence-based practice in pharmacies" (2015) and "Role of a professional organization in promoting and conducting research: the Lebanese order of Pharmacists' experience" (2019). The article "Quality indicators and community pharmacy services: a scoping review" (2019) examines the quality indicators for community pharmacy services, while another study found that pharmacists in Lebanon have varying levels of confidence and self-perceptions about their computer literacy. Finally, an article on "Upscaling the pharmacy profession in Lebanon" (2019) discusses workforce distribution and key improvement opportunities for the Lebanese pharmacy sector. Factors influencing medication adherence among Lebanese patients with chronic illnesses were explored by various studies, including those published in Pharm Pract, Eur J Pharm Med Res, BAU J Health Wellbeing, and Res Rev. These publications highlighted the crucial role of pharmacists in healthcare, as well as their involvement in public health promotion services. The analysis of medical prescriptions from Mount Lebanon also provided valuable insights into cost and content.