



Factors Influencing the Implementation of Independent Prescribing Pharmacists Under the Universal Health Care Law in the Philippines

Krizza Belle Domilies Mating, RPh, CRS, MHA

Lepanto Consolidated Mining Company Hospital-Medical Department, Visionary Research Association Inc.

ABSTRACT:

Aiming to address the continuing maldistribution of health care workers aggravating the problems on limited access to healthcare services in the Philippines, this study highlighted the importance of tackling the several factors, challenges and barriers, and more importantly thoroughly seeks recommendations associated with the implementation of independent prescribing pharmacists under the Universal Health Care Law in the Philippines. Recognizing a phenomenological qualitative method of approach, this study delved into major themes foregathered from the insights of nineteen (19) participants chosen via purposive sampling and incorporating a semi-structured and open-ended essay questions namely: (a) Competence of Pharmacists, (b) Community/Patient Impact (c) Interprofessional Collaboration, and (d) Conflicts. Generally, the findings of the study highlighted the complexity of implementing independent prescribing pharmacists in the Philippines and recommends further research and studies on the implications for healthcare system development, social and cultural aspects, regulatory and legal framework, and the clinical roles of pharmacists in the healthcare sector as it emphasizes the need for a more comprehensive approach and a refined understanding on the implications of independent prescribing pharmacists associated with the very objectives of the Philippine Universal Health Care Law. Nevertheless, the result of this study revealed that the implementation of Independent Prescribing Pharmacists in the archipelago suggests a significant development in the country's healthcare system.

Keywords: R.A. no. 11223, R.A no. 10918, R.A no. 2382, Millennium Development Goals, National Objectives for Health, Universal Health Coverage, Health Care Maldistribution

Introduction:

The Philippine Health Care System faces significant challenges in providing equitable access to medical or healthcare services especially the maldistribution of practitioners bugging the country's problems on health care, numerous interventions and innovations in healthcare delivery models continually grows globally (Panay news, 2022). Regardless of which, the common aim is to provide adequate resources – health human resources, health facilities, and health financing to address inequality in the Health System in the Philippines (Lagman, 2023). In the Country, the Universal Health Care (UHC) Law ensures the effective and efficient functioning of healthcare systems within the country by enhancing public health and well-being which further focuses on developing, managing, and optimizing various components of healthcare infrastructure (DOH, 2023). With the enactment of this law, the Department of Health (DOH) is further interested in strengthening primary health care and health care provider networks that prioritize continuity of care, comprehensive care, and personalized treatment options as aligned with the patient's need and rational use that can significantly improve overall health and well-being (DOH, 2023). Albeit with new advances and improvements in the recent years many are still unable to receive the needed quality care, this is why the Pacific Prime's 2024 blog content on addressing healthcare gaps suggests further investment from both governmental institutions and private organizations essential for tackling this issue head-on (Wish Sutthatathon, 2024). Relative to the Philippines' 2023-2028 National Objectives for health on the need for an intervention to address the underlying issues on its healthcare system specifically on the adaptation of healthcare practices across the world,

The Round-the-Clock Health Care Threat

Alarmingly, the Medical Trend Rate (MTR) of disparities and inequities in health care worldwide continuously rises due to inflation, higher levels of utilization, and changes in treatment mixes (Renou & Schmidt, 2023). This trend subjectively increases the amount of attention from physicians and health policy experts, as well as a renewed focus from federal health agencies (Riley, 2012). Although these disparities are unfortunately not a new phenomenon, little progress has been successfully noted in addressing the gaps (Ahmadi & Murdock, 2022). However, with the dedication of every nation to achieve universal health coverage by 2030, the assertion that optimal healthcare delivery cannot be achieved by simply following existing infrastructures, medical supplies, and healthcare providers continuously expands (WHO, 2019). Although there have been a lot of talks about a universal healthcare system, aside from a lack of political will and socioeconomic conditions, deficiencies in fundamental structures suggest a barrier to its implementation (Giplaye, 2019).

Every country's need for their populations' health care status is indicative of whatever interventions and initiatives in order to achieve successful implementation of UHC. For instance, in the country, the Philippines Health Systems Review expounded an outstanding number of Filipinos relying on public healthcare. Yet, a trend for Filipino medical staff to emigrate puts the system under strain causing understaffed and congested hospitals and further impactful delays in the treatment of patients (FutureLearn, 2022). To recapitulate, arising from structural defects in the primary health care as the basic building blocks of the Philippine health system leads to the major health problems in the country namely inequity and inaccessibility of appropriate health care (The Philippines Health Systems Review, 2018).

The Global Health Care Goals

Rooted through the Alma Ata Declaration of 1978, the Primary Health Care (PHC) which emphasizes a more people-centered approach to addressing healthcare needs, makes it a focal point for the aims of the Universal Health Care (UHC) in improving health system performance in the country (Nuevo *et.al.*, 2021). Anchored from the main pillars of the PHC, the ultimate objective of the UHC is to progressively realize Universal Health Care in the country through a systemic approach and to ensure that all Filipinos are guaranteed equitable access to quality and affordability of health care goods and services (Rebullida, 2006). This ultimate goal was later acknowledged by the legislation thereby of the Republic Act 11223, otherwise known as the Universal Health Care Law (Nuevo *et.al.*, 2021). Whereas the UHC law promises a golden age for the Philippine Healthcare System aiming to re-integrate the Philippines' devolved governance system into a diverse coverage of health systems. This includes institutionalization of cooperative intergovernmental decision-making and implementation, particularly in areas with recommendations of high-impact intervention for health promotion, health impact assessment, health professional education, and monitoring and evaluation of health system performance (Kruk *et al.*, 2018). With the extraordinary thrust of attaining Health-related Millennium Development Goals (MDGs), the country then requires a strong, efficient, well-run health system that meets priority health needs, access to essential medicines and technologies for diagnostic and therapeutic medical problems, and a large corps of trained, motivated health care providers to render the services every patient need (RA 11223).

The Innovation

Having the roles of optimizing medication use and improving population health outcomes, expanding access to care, and reducing healthcare costs, the American Pharmacists Association defines "Pharmacists" as trained health professionals responsible for ensuring the safe, effective, and rational use of medicines (APhA, 1994). Traditionally, pharmacists have played a more administrative role, with limited direct patient interaction and clinical responsibilities, and are not directly compensated for advanced clinical practice which is partly due to healthcare system structures (Parrish & Chew, 2018). Consequently, in response to the dynamic economic, political, and social environment, Hassali *et.al.* (2011) asserted that pharmacy curricula have undergone significant changes over the past years. This was further supported by the University of Findlay stating that over the years, pharmacy practice has increasingly shifted from dispensing medications and counseling patients to providing patient-centered, and team-based care across a variety of healthcare settings (University of Findlay, 2023). Thus, while pharmacists are perceived to also ensure the reasonable and cost-effective use of medicines, and encourage a healthy lifestyle, they also optimize clinical outcomes by diligently engaging in direct patient care and partnering with a variety of healthcare disciplines (Dalton & Byrne, 2017). Within this context, the pharmacist's role had expanded to include more direct interaction with the public in terms of the provision of health information and advice on the safe and rational use of medications (Hassali *et.al.*, 2011). In a more specific context, considering primary health care as the basic building block of health systems, pharmacists practicing in the community give a broad range of services not only on medication management but also educational consultations, care coordination, chronic condition management, patient empowerment, and wellness services (Querequincia & Faller, 2023).

Methodology:

Research Design and Instrument:

To explore the fine distinctions between the experiences and perspectives of stakeholders involved in the healthcare sector, the study utilized a phenomenological qualitative research design and covered insights from participants throughout the country, semi-structured questionnaires and open-ended essay responses were floated online. The questionnaire sought the demographics of the participants and requires the participants to assess their awareness and familiarity with (a) the UHC Law, (b) the scope of practice of pharmacists in the current healthcare setting, (c) the continuum of independent prescribing pharmacists, and (d) the concept of Independent Prescribing Pharmacist within the context of the UHC Law, and their field and years of practice. This allowed the researcher to form an initial impression of the understanding and experience of the participants in the context of the research prior evaluation of the responses. Responses to these questions provided the researcher with diverse, rich, and deeper insights necessary to obtain essential data for the objectives of the study.

Furthermore, to gain and provide a comprehensive and in-depth understanding of the factors influencing the implementation of IPPs under the UHC Law in the Philippines, the data gathered were subjected to data analysis and was validated by four (4) experts in the field.

Sample and Sampling Design:

The nineteen participants selected through non-probability purposive sampling includes physicians, veterinarians, pharmacists, and other allied health care practitioners such as nurses, medical technologists practicing in the Philippines, and the main drivers of healthcare, the patients. This sampling technique allows the researcher to focus on specific areas of interest and gather relevant and wide coverage of data and insights for an in-depth analysis of the factors influencing the implementation of independent prescribing pharmacists under the UHC Law in the Philippines.

Data Analysis:

To gain and provide a comprehensive and in-depth understanding of the factors influencing the implementation of IPPs under the UHC Law in the Philippines, literature reviews were conducted upfront and artifacts and texts relevant to the research objectives were collected to primarily draft initial research questions, and collect salient data. Succeeded with the identification of scopes and limitations of the study as per participants and research locale, the research data gathering tool subsequently identified, structured, and generated. Then, data collected were analyzed through thematic analysis. Finally, findings of this study were presented in a research paper using quotes from both the texts and artifacts collected and the participants' answers were shared with the participants to validate the research.

Objective/s:

Having the aim of the Universal Health Care Law to create an equitable and accessible healthcare system, the concept of IPPs aligns with the global trend of expanding the roles of non-physician healthcare providers to address workforce scarcity and enhance healthcare delivery (Averbeck & Fischer 2022). However, while the feasibility of implementing IPPs into the Philippine healthcare system remains underexplored, this study aspired to investigate its feasibility in the Philippine healthcare system as it intended to provide details and analysis of valuable insights into how IPPs could help bridge gaps in healthcare access through the following:

1. To identify the factors influencing the implementation of Independent Prescribing Pharmacists under the Universal Health Care Law in the Philippines.
2. To determine the challenges and barriers associated with the implementation of Independent Prescribing Pharmacists under the Universal Health Care Law in the Philippines.
3. To evaluate recommendations associated with the implementation of Independent Prescribing Pharmacists under the Universal Health Care Law in the Philippines.

Results:

The study showed a complex interplay of factors influencing the of Implementing Independent Prescribing Pharmacists Under the Universal Health Care Law in the Philippines. Although several supports for the potential benefits of the innovation, barriers and challenges persist particularly on education/knowledge, clinical competence, alignment of roles, interprofessional dynamics, acceptance and trust from the participants, and perplexed goal alignment with the UHC. Effective implementation will require a multifaceted and sustained approach, addressing the systemic, perceptual, and social barriers.

Major Theme 1: Competence of Pharmacists

The study identified the following concepts: additional education on medicine, education on prescribing, clinical training, and a deep understanding of patient management. These responses were pre-coded to the knowledge and capabilities of a pharmacist to effectively and efficiently prescribe.

Sub-theme 1: Knowledge

R1: "Maybe a 2-year course in medicine"

R2: "Education in prescribing"

R3: "I think that there should be clinical training for simple cases to empower them and to make them more confident. They can also be empowered to know when to suggest hospitalization or visit to the ER".

Sub-theme 2: Capability

R1: "I am not aware of the scope of independent prescribing, but prescribing requires a deep understanding of the condition to provide adequate and appropriate management".

R2: "More on Clinical aspect as it focus on pharmacology"

R3: "Counseling and immunization program be more emphasized"

R4: "knows the medicine prescribed so well"

R5: "Pharmacists can prescribe as long as he/she is capable to do so."

At present, the pharmacy profession still bears the notion and social visualization made in the community pharmacy as a "storekeeper". What lacks the realization is that not only do these pharmacists dispense drugs per prescription, but they also provide the patients with advice and deal with the patients' queries on their medications.

Although pharmacists are, by definition, drug experts. In line with the diverse and dynamic stature of the health care system not only in the Philippines, knowledge and competence are the cornerstones of health delivery whereas having a baseline understanding of prescribing is a critical requirement for a

pharmacist (Eid, 2023). Despite acquiring a level of medical knowledge, training, and interaction with patients, pharmacists are constrained in terms of the amount of care they can offer (Amez-Droz & Broughel, 2015).

Major Theme 2: Patient/Community Impact

The findings of the study suggest a positive impact of the concept of Independent Prescribing Pharmacists on patient/health care which concerns mainly the crucial roles of pharmacists in the country's current health systems addressing dynamic challenges, geographical aspects, workload of physicians, ease to patients, and improved accessibility of health care as transcribed from the participants' responses:

R1: "They Will Play a Very Crucial Role in A Very Challenging Environment Like the Philippines"

R2: "Makes Patients' Life Easier"

R3: "Improved accessibility of healthcare especially in the geographically isolated areas"

R4: "For instance, in isolated areas or provinces where there is no available prescribing doctor. Pharmacists can prescribe as long as he/she is capable to do so.

R5: "1. A long line of patients cannot wait for the doctor for an MHO consult hence going to a pharmacist for prescribing of an antibiotic after being clinically checked; 2. A patient has no money for a private check-up but has lab results and went to a pharmacist before antibiotics/continuation of hypertensive medications; 3. Immunization."

Assessing the healthcare structure in the country, situations and practices alike are inevitable for patients/community going directly to pharmacies seeking medications. Although pharmacists can be the first point of contact for some healthcare consumers more specifically in the communities, they are somewhat an underutilized healthcare resource and are almost unrecognized in the healthcare system map (Ilardo & Speciale, 2020). In addition, trained to be "the drug experts", pharmacists are a valuable and integral part of the healthcare system. Evans, 2022 states that through his exploration patients see their pharmacists more often than other healthcare providers, probably because they tend to be more accessible (Evans, 2022). Henceforth, the RPS Society emphasizes the times of high demand where workforce pressures can impact access to patient care, it is important to utilize the full range of skills and knowledge of health professionals whereas using these unique skilled pharmacist prescribers will contribute to improving patient flow and efficiencies across the health and social care system (Royal Pharmaceutical Society, 2024).

Major Theme 3: Interprofessional Collaboration

The study identified varied insights dwelling to positive and negative impacts on the professional relationships between health practitioners as transcribed subsequently: working relationships, respect, effective communication, and accountability suggest key notes in view of interprofessional collaboration in patient management.

Sub-theme 1: Professional Relationship

R1: "Good working relationship with other healthcare professionals"

R2: "Good working relationship"

R3: "It might negatively affect the relationship with the physicians"

R4: "It can negatively impact the relationship between pharmacists and doctors"

Sub-theme 2: Professional Collaboration

R1: "Respect, Effective Communication, Accountability"

Despite the growing awareness of benefits arising from pharmacist involvement in healthcare, professional relationships are still being challenged by conflicts and communication problems (Zielińska-Tomczak *et al.*, 2021). Nevertheless, in the understanding of the researcher as a pharmacist, a pact between the pharmacist and a physician/prescriber concerning medications is innate. In practice, one of the pharmacists' roles which is constitutive to the physicians/prescribers includes verification of prescriptions that appear violative, erroneous, and impossible as well as replacement or substitution of prescriptions subject to guidelines and conditions whereas this set-up is a rapprochement in the delivery of healthcare. Furthermore, reviewing the IPCEP framework suggests that shared decision-making is considered a patient-centered approach that requires interprofessional collaboration among healthcare professionals (Sultan *et al.*, 2022).

Major Theme 4: Conflicts

Responses from the participants shown hereafter show differing thoughts on the concept of Independent Prescribing Pharmacists emphasizing objections specifically from physicians while this could initiate conflicts as to boundaries, job limitations, and workflow conflicts. The mixed insights as to the potential for friction among the healthcare professionals as shown hereupon. This finding is agreeably parallel to McIntosh *et al.*, (2019) which specifies interprofessional jealousy and turf wars exists between healthcare providers.

Sub-theme 1: Resistance from Prescribers

R1: "Doctors might object independent prescribing"

R2: “Doctors should learn to accept that simple cases can go to the pharmacists to decongest public services and workload of the doctors”

Sub-theme 2: Workflow Inconsistencies and confusions

R1: “Maybe fix/adjust workflow to avoid conflicts”

R2: “There could be confusions as to boundaries and limitations of the job”

Sub-theme 3: Portrayal of Roles

R1: “There should be a clear delineation of what can and cannot be prescribed by a pharmacist, especially dangerous drugs and management of complicated cases where a doctor is needed.”

R2: That pharmacist's role is to dispense medicines only.

The differing insights with a participant concerned about the overlapping of roles, which highlights the role of pharmacists as limited to dispensing, while another sees it as an opportunity to foster better delivery of care through the decongestion of hospitals/health facilities align with the Healthstream 2021 which states, that healthcare professionals should work for common causes across teams and departments whereas as employees develop their own roadmap, there is potential for employees to cross each other's paths and conflicts to evolve. It is essential to give emphasis on the way the social environment shapes the developmental process as these interventions that assume a new role may offer opportunities for learning and positive change (Kruger & Serpell, 2010).

Summary of Findings

The study came up with the following:

1. Factors Influencing the Implementation of IPPs under the UHC Law in the Philippines:
 - a. Competence of Pharmacists
 - b. Patient/Community Impact
 - c. Interprofessional Collaboration
2. Barriers and Challenges associated with the implementation of IPPs under the UHC Law in the Philippines:
 - a. Conflicts
 - b. Resistance from Prescribers
 - c. Workflow Inconsistencies and Confusions
 - d. Portrayal of Roles
3. Recommendations conveying the implementation of IPPs under the UHC Law in the Philippines:
 - a. Professional Advancement for the Pharmacists, Competency Development
 - b. Develop interprofessional collaboration to enhance accessibility of primary healthcare services
 - c. Establish clear delineation of roles to avoid conflicts

Conclusion

Abriding the insights as perceived to the current practices in the country coupled with the dynamic and diverse configuration of healthcare within and across the country, measures for the sector to cognize with the circumstances that could potentially be beneficial to the continuing development and enhancements of the healthcare system as healthcare is never an ordinary agenda. Whereas delimiting the explorations from this study, the researcher underscored the struggle of addressing health disparities in the country. Nevertheless, this study provided factors influencing the implementation of independent prescribing pharmacists under the healthcare law in the Philippines which suggests a potential feasibility of integrating the practice in the country. However, this puts through an emphasis for a more comprehensive healthcare approach and a refined understanding on the implications of independent prescribing pharmacists associated with strengthening healthcare as it aligns with the very objectives of the Philippine Universal Health Care Law.

References:

1. Ahmadi, L., & Murdock, K. (2022, January 14). Five Inequities in Healthcare. *Third way*. <https://www.thirdway.org/report/five-inequities-in-health-care>

2. Amberscript Global B.V. (2023, June 19). Interview Transcription Step-By-Step Guide | Amberscript. <https://www.amberscript.com/en/interview-transcription/>
3. American Pharmacists Association. (1994, October). Code of Ethics for Pharmacists. *American Pharmacists Association*. <https://aphanet.pharmacist.com/code-ethics>
4. Averbeck, H., Litaker, D., & Fischer, J. E. (2022). Expanding the role of non-physician medical staff in primary care in Germany: protocol for a mixed-methods study exploring the perspectives of physicians in rural practices. *BMJ open*, 12(7), e064081. <https://doi.org/10.1136/bmjopen-2022-064081>
5. Broughel, J., & Amez-Droz, E. (2021, December). Expanding Pharmacists' Prescriptive Authority: Options for Reform. *George Mason University*. <https://acrobat.adobe.com/id/urn:aaid:sc:AP:a8c96c08-f8a7-46ac-a12f-c5d5ffbac02>
6. Caulfield, J. (2024, June 07). How to Do Thematic Analysis | Guide & Examples. *Scribbr*. Retrieved 22 July 2024, from <https://www.scribbr.co.uk/research-methods/thematic-analysis-explained/>
7. Crabtree B. and Cohen D., (2006, July). Qualitative Research Guidelines Project. *Robert Wood Johnson Foundation*. <http://www.qualres.org/HomeAnal-3596.html>
8. Cullinane, M., Borlaza, G., Gregorio C. and Hernandez, C. Carolina G. (2024, September 20). Philippines. *Encyclopedia Britannica*. <https://www.britannica.com/place/Philippines>
9. Dalton, K., & Byrne, S. (2017). Role of the pharmacist in reducing healthcare costs: Current insights. *Integrated Pharmacy Research and Practice*, Volume 6, 37–46. <https://doi.org/10.2147/ijpr.s108047>
10. Eid, D. (2023, November 3). Understanding the Continuum of Pharmacist Prescribing. *Pharmacy Times*. <https://www.pharmacytimes.com/view/understanding-the-continuum-of-pharmacist-prescribing>
11. Evans, A. (2022, July 22). Prescribing Authority for Pharmacists: Rules and Regulations by State. *GoodRx*. <https://www.goodrx.com/hcp-articles/pharmacists/prescriber-authority-for-pharmacists>
12. Giplaye, H. (2019). Healthcare delivery system in developed, developing and underdeveloped countries. *TEXILA INTERNATIONAL JOURNAL OF NURSING*, 95–101. <https://doi.org/10.21522/tijnr.2015.se.19.01.art009>
13. FutureLearn. (2022, April 22). An introduction to the healthcare system in the Philippines. *FutureLearn*. <https://www.futurelearn.com/info/futurelearn-international/an-introduction-to-the-healthcare-system-in-the-philippines>
14. Gill, P., Stewart, K., Treasure, E. *et al*. Methods of data collection in qualitative research: interviews and focus groups. *Br Dent J* 204, 291–295 (2008). <https://doi.org/10.1038/bdj.2008.192>
15. Halton, C. (2023, December 14). Diffusion of Innovations Theory: Definition and Examples. *Investopedia*. <https://www.investopedia.com/terms/d/diffusion-of-innovations-theory.asp>
16. Hassali, M. A., Shafie, A. A., Al-Haddad, M. S., Abdulkarem, A. R., Ibrahim, M. I., Palaian, S., & Abrika, O. S. (2011). Social pharmacy as a field of study: the needs and challenges in global pharmacy education. *Research in social & administrative pharmacy : RSAP*, 7(4), 415–420. <https://doi.org/10.1016/j.sapharm.2010.10.003>
17. Hensen, B., Mackworth-Young, C. R. S., Simwanga, M., Abdelmagid, N., Banda, J., Mavodza, C., Doyle, A. M., Bonell, C., & Weiss, H. A. (2021). Remote data collection for public health research in a COVID-19 era: ethical implications, challenges and opportunities. *Health policy and planning*, 36(3), 360–368. <https://doi.org/10.1093/heapol/czaa158>
18. Ilardo, M. L., & Speciale, A. (2020). The Community Pharmacist: Perceived Barriers and Patient-Centered Care Communication. *International journal of environmental research and public health*, 17(2), 536. <https://doi.org/10.3390/ijerph17020536>
19. Jebara, T., Cunningham, S., MacLure, K., Awaisu, A., Pallivalapila, A., & Stewart, D. (2018). Stakeholders' views and experiences of pharmacist prescribing: A systematic review. *British Journal of Clinical Pharmacology*, 84(9), 1883–1905. <https://doi.org/10.1111/bcp.13624>
20. Katherine A. Kruger MSW, James A. Serpell PhD, [Handbook on Animal-Assisted Therapy \(Third Edition\)](#), 2010
21. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S, et al. 2018. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *Lancet Glob Health*. 11;6(11):e1196–252. [http://dx.doi.org/10.1016/S2214-109X\(18\)30386-3](http://dx.doi.org/10.1016/S2214-109X(18)30386-3) pmid: 30196093
22. Lagman, O., Jr. (2023, February 27). Universal healthcare is many years away. *BusinessWorld Online*. Retrieved August 14, 2024, from <https://www.bworldonline.com/opinion/2023/02/27/507205/universal-healthcare-is-many-years-away/>
23. Laird, J. (2024, April 27). Being a pharmacist independent prescriber — BPSA. *BPSA*. <https://www.bpsa.co.uk/pubs/being-a-pharmacist-independent-prescriber>

24. Lowrie, R., McPherson, A., Mair, F. S., Stock, K., Maguire, D., Paudyal, V., Duncan, C., Blair, R., Lombard, C., Ross, S., Hughes, F., Moir, J., Scott, A., Reilly, F., Sills, L., Hislop, J., Wishart, S., Brannan, D., Robertson, J. R., Williamson, A. E. (2024). Holistic health and social care outreach for people experiencing homelessness with recent non-fatal overdose in Glasgow, Scotland: the Pharmacist and third sector Homeless charity worker Outreach Engagement Non-medical Independent prescriber Rx (PHOENIX) pilot randomised controlled trial. *BMJ Public Health*, 2(1), e000219. <https://doi.org/10.1136/bmjph-2023-000219>
25. McIntosh, T., Ness, E., & Willis, J. (2019). Interprofessional barriers to pharmacist prescribing: An attitudinal survey. *Journal of Health Services Research and Policy*, 15(1), 29-36.
26. Nikolopoulou, K. (2022). Face-To-Face, Online and Hybrid Education: university students' opinions and preferences. *Journal of Digital Educational Technology*, 2(2), ep2206. <https://doi.org/10.30935/jdet/12384>
27. Orendorff, F. (2023). Online Qualitative Research: What it is & how to conduct it. *Drive Research*. <https://www.driveresearch.com/market-research-company-blog/how-to-conduct-qualitative-research-online-changing-from-in-person-to-remote-methodologies/>
28. Panay News. (2022, August 12). Maldistribution of healthcare workers. *Panaynews.net*. https://www.panaynews.net/maldistribution-of-healthcare-workers/#google_vignette
29. Parrish, R., & Chew, L. (2018). Lecture 1—Justification of the Value of Clinical Pharmacy Services and Clinical Indicators Measurements—Introductory Remarks from a Traveler on a 40-Year Wayfaring Journey with Clinical Pharmacy and Pharmaceutical Care. *Pharmacy*, 6(3), 56. <https://doi.org/10.3390/pharmacy6030056>
30. Professional Regulatory Board of Pharmacy. (2021). Resolution Promulgating and Prescribing the Code of Ethics of the Pharmacy Profession. *Professional Regulatory Board of Pharmacy., Resolution No. 23, s. 2021*. https://www.prc.gov.ph/sites/default/files/ResoPharma_2021-23%20published.pdf
31. Pöttschke, Steffen, Weiß, Bernd, Daikeler, Jessica, Silber Henning and Beuthner, Christoph (2023). A guideline on how to recruit respondents for online surveys using Facebook and Instagram: Using hard-to-reach health workers as an example. *Mannheim, GESIS – Leibniz Institute for the Social Sciences (GESISurvey Guidelines)*. DOI: 10.15465/gesis-sg_en_045
32. Querequincia, N. J. M. B., & Faller, N. E. M. (2023). A mini review on the Community Pharmacy practice experiences in selected Southeast Asian countries. *GSC Biological and Pharmaceutical Sciences*, 23(2), 129–132. <https://doi.org/10.30574/gscbps.2023.23.2.0193>
33. Rebullida, Ma. G.L. (2006). The Philippine Commitment to Primary Health Care: Policy Directions. *PUBLIC POLICY*, 10(1)
34. Republic Act No. 11223. (2019). Universal Healthcare Act. *Official Gazette of the Republic of the Philippines*.
35. Renou, & Schmidt. (2023, November 28). 2024 Global Medical Trends Survey. *WTW*. <https://www.wtco.com/en-vn/insights/2023/11/2024-global-medical-trends-survey>
36. Riley W. J. (2012). Health disparities: gaps in access, quality and affordability of medical care. *Transactions of the American Clinical and Climatological Association*, 123, 167–174.
37. Royal Pharmaceutical Society (2024). Pharmacists Independent Prescribers. *Royal Pharmaceutical Society*. <https://www.rpharms.com/recognition/all-our-campaigns/policy-a-z/pharmacist-independent-prescribers>
38. Sultan, L., Alsaywid, B., De Jong, N., & De Nooijer, J. (2022). Current trends in Interprofessional Shared Decision-making programmes in Health Professions Education: A scoping review. *Sustainability*, 14(20), 13157. <https://doi.org/10.3390/su142013157>
39. Sutthathothon, W. (2024, July). The healthcare system in the Philippines for expats. *the pacific prime*. Retrieved August 14, 2024, from <https://www.pacificprime.com/blog/healthcare-system-in-philippines-for-expats.html>
40. Tomczak, Z. L., Koczorowska, C. M., Przymuszała P., Gałazka N, & Marciniak R. (2021). Pharmacists' Perspectives on Interprofessional Collaboration with Physicians in Poland: A Quantitative Study. *International journal of environmental research and public health*. <https://doi.org/10.3390/ijerph18189686>
41. University of Findlay. (2023, June 13). The Role of Pharmacists in Healthcare Systems. *University of Findlay*. <https://pharmdonline.findlay.edu/blog/role-pharmacists-healthcare-systems#:~:text=Pharmacists%20play%20a%20crucial%20role,safety%2C%20and%20improved%20health%20outcomes>
42. Valliant, S. N., Burbage, S. C., Pathak, S., & Urick, B. Y. (2022). Pharmacists as accessible health care providers: quantifying the opportunity. *Journal of managed care & specialty pharmacy*, 28(1), 85–90. <https://doi.org/10.18553/jmcp.2022.28.1.85>
43. WHO (2019, October 10). Delivering quality health services: a global imperative for universal health coverage. *World Health Organization* <https://www.who.int/publications/i/item/9789241513906>
44. World Health Organization. (2018). *The Philippines Health System Review: Vol. 8 (No.2)*. <https://9789290226734-eng.pdf>

-
45. World Health Organization: WHO. (2023, October 5). Universal health coverage (UHC). [https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-\(uhc\)](https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc))
 46. Wright, K.B.(2005). Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services, *Journal of Computer-Mediated Communication*, Volume 10, Issue 3, 1 April 2005, JCMC1034, <https://doi.org/10.1111/j.1083-6101.2005.tb00259>
 47. Zielińska-Tomczak, Ł., Cerbin-Koczorowska, M., Przymuszała, P., Gałązka, N., & Marciniak, R. (2021). Pharmacists' Perspectives on Interprofessional Collaboration with Physicians in Poland: A Quantitative Study. *International journal of environmental research and public health*, 18(18), 9686. <https://doi.org/10.3390/ijerph18189686>