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# Breaking Down Communication Roadblocks in Pharmaceutical the Struggles of Pharmacists Working in Rural Health Units in Pangasinan

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#### **ABSTRACT**

The researchers used a convenience sampling method to qualitatively explore the communication barriers to pharmaceutical care among pharmacists working in rural health units of Pangasinan. Interviewing the participants yielded in-depth information about the study's objectives.

The first theme, "Pharmaceutical Care Services: Their Scope and Delivery", highlights the pharmaceutical care provided in rural communities, mentioned alongside the subthemes of medication administration, pharmaceutical consultations, consistent care and education, and healthcare collaborative efforts. The second theme, "Barriers to Effective Communication in Pharmaceutical Care," brought to light the communication barriers that disrupt pharmaceutical care, including lack of electronic devices, language barriers, technological difficulties, language preference, and lack of language proficiency. The third theme, "Rural Healthcare Communication and Delivery Challenges", highlights how these challenges negatively impact the enhancement of pharmaceutical care for patients, particularly through the subthemes of language translators, dialect varieties, comprehension challenges, and a shortage of pharmacists. These factors significantly disrupt the delivery of pharmaceutical care from pharmacists to patients. The fourth theme, "Communication's Effect on Pharmaceutical Care Services", includes subthemes such as medication errors, misinformation, slightly improved healthcare outcomes, and adherence to healthcare information. It also identifies areas that require consistent improvement.

Lastly, the fifth theme, "Pharmacist-patient Communication Strategies and Healthcare Improvement", includes subthemes such as dedication to professionalism, establishing pharmacist-patient relationships, improved communication channels, and a team-based care model intervention that addresses communication challenges. When adopted, these interventions broadly structure the communication system and enhance pharmaceutical care services for patients in rural health units, as noted in the findings.

#### INTRODUCTION

A rural health unit, also known as a Rural Health Clinic (RHC), is an outpatient clinic that offers primary and preventive care in a designated rural, medically underserved region. By providing a unique Medicare and Medicaid reimbursement system that permits the utilisation of a team-based approach to treatment involving doctors, nurse practitioners, physician assistants, and pharmnacist. The RHCs were created to improve access to healthcare in disadvantaged regions. Primary care, basic laboratory testing, and emergency "first response" care are all mandated for these clinics (Google Search, n.d.-b).

According to the Rural Health Clinics (RHCs) Overview – Rural Health Information Hub (n.d.), the rural health clinic uses a team-based approach to deliver healthcare to patients in rural or remote communities. It further showed that the unit must be staffed at least 50% of the time with healthcare professionals, like doctors, nurse practitioners, physician assistants, and even pharmacists, to respond to healthcare emergencies. The same article also stated that pharmacists make up a crucial part of the rural health unit because they provide counselling to patients and advice to medical staff and case managers. At times, they are the ones who tend to have the most face-to-face interaction time with their patients. However, rural community pharmacies face



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many challenges to remaining open, including low-volume purchases, slim profit margins, unfavourable insurance practices, and a limited pharmacist workforce.

Pharmacists have tradtionally been in charge of administering prescription drugs, advising patients on over-the-counter medications that do not require a prescription, and giving customers reliable information about the effectiveness and safety of medications. But as time has gone on, pharmcists in the WHO European Region are now more than just "providing the right medicine to the right patient at the right time." Many of them are now offering a variety of pharmaceutical care services to help patients manage chronic illnesses that take longer to heal, as well as acute care services like vaccinations (World Health Organization: WHO, 2024).

A pharmacist's traditional responsibilities have expanded to include patient-oriented pharmaceutical care (PC) procedures in addition to standard product-oriented distribution (Kiflu et al., 2024). However, Lim et al. (2023) claimed that pharmacists' role and contributions in residential aged care extend beyond providing discrete clinical service and care; they focus on patient advocacy to more effectively reduce medication harms.

Pharmacists are the last line of treatment in the healthcare system, where medication and patient counseling are considered the two most important pharmaceutical care practices that improve patients' prescription regimens. Helper and Strand defined pharmaceutical care as "the responsible provision of drug therapy to achieve definite outcomes that improve the patient's quality of life" (Kiflu et al., 2024). Thus, to mention but a few pharmaceutical cares, which include disease curing, eliminating or reducing a patient's symptomatology, limiting the disease's progression, and disease prevention. In a word, pharmacists are considered as compounders and distributors of pharmaceuticals to patients. The process is known as pharmaceutical care, which enhances patients' quality of life, and therefore clinical outcomes are satisfied (Okeke et al., 2024).

Pharmacists focus on outcome-oriented and patient-centered approaches, which mean they must work together with patients and other healthcare professionals to come up with and follow certain medication schedules. To do this, they and other healthcare professionals need to be able to communicate to patients properly (Kiflu et al., 2024). According to Al-Azayzih et al. (2023) and Druica et al. (2021), communication involves pharmacists and patients sharing correct, up-to-date, and easy-to-understand information with each other. This approach builds trust, understanding, and teamwork in making decisions. In this context, communication includes any professional career that transmits information through public relations, broadcasting, and advertising.

According to Fatimayin's (2018) text, the general view of communication is that it is an interaction within a social context. Communication usually involves a sender (source) and a receiver. It involves the interlocutors exchanging signals. These signals could be verbal or graphic; they could be gestural or visual (photographic). Likewise, the Oxford Advanced Learner's Dictionary of Current English (2004) defines communicationas the activity or process of expressing ideas and feelings or of giving people information. In line with pharmaceutical care, it is the exchange of ideas and interaction among individuals.

Pharmaceutical care recognizes and uses communication as a crucial factor. Already, the 1990 Omnibus Budget Reconciliation Act in the United States provides mandatory guidelines for pharmacists and patient counseling (Wang et al., 2020). It might be difficult to provide pharmaceutical care in a healthcare system, especially when there is a poor communication system existing between the pharmacist and patient. Research has demonstrated that improved communication between the pharmacist and patient tend to improve therapeutic outcomes and increase patient satisfaction (Wang et al., 2020). Studies have shown that poor pharmacist-patient communication mediums are prevalent in the healthcare system, and this applies to pharmacists offering care to patients in community areas (Wang et al., 2020). For good care of patients, you need to be able to communicate clearly. This was shown by Koster et al.'s (2021) study: good communication is essential, especially when healthcare workers talk to patients, so they could give patients accurate information about their medications, which improves outcomes. Moreso, they have a major role in providing pharmaceutical care to patients to ensure an effective treatment regime.

Othman et al. (2023) study demonstrated that medication dispensing and counseling vital signs are crucial; this ensures patients understand their medication and prevents errors. According to studies, pharmacists must be



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able to communicate effectively to provide patient-centered care that considers the patient's psychosocial background and helps them develop a treatment plan that works for them (Othman et al., 2023). Most patients with when communication difficulties, like deafness or speech impairments, pose challenges to pharmacists, especially they dutifully carry out healthcare care counseling sessions (Othman et al., 2023).

Likewise, the same study also revealed that language barriers affect the level of pharmacist-patient relationships, especially in Malaysia. Findings showed that healthcare personnel face communication difficulties during healthcare services because most Malaysians have different dialects, and this affects healthcare service (Othman et al., 2023). Cultural diversity is be regarded as a challenge in healthcare between pharmacist and patients. Improved pharmacist-patient care has been demonstrated in most countries where pharmaceutical care has been included into the healthcare system. According to studies conducted in Ibadan, Nigeria, the largest barrier in this regard is a lack of collaboration with medical professionals.

Evans et al. (2021) also showed that not enough support for the pharmaceutical care practice, not enough money, not enough resources, and not enough public acceptance for most pharmacists all make it hard for them to practice. The gender of the pharmacist plays a big role in pharmaceutical care (PC). Evans et al.'s (2021) study suggested that male pharmacists lack the courage to make decisions about how to treat patients, which has a big impact on PC. A study in Malaysia also showed that not being able to tell the difference between dispensing and prescribing couild actually be a problem in pharmaceutical care. It is also clear that not having established ways to talk to doctors could be a huge problem in pharmaceutical care (Loh, 2021). Okeke (2024) also revealed that strain exerted on the working relationship or other professional rivalry between the pharmacist and physician obviously leads to collaboration issues among them. The study also suggests that the Pharmacists Council of Nigeria strengthen pharmacist conduct guidelines.

Pharmaceutical care, which includes everything from drug delivery to patient counseling, screening, and immunization, is a vital part of healthcare systems across the world (Goodeet al., 2019; Shirdel et al., 2021). Pharmacists often serve as the first line of contact for patients seeking medical advice, but barriers hinder them from fully providing healthcare. The results of the study by Al-Azay-zih et al. (2023) show that personal and environmental factors made it harder for people to communicate and get healthcare in healthcare settings. Sharkiya (2023) and Sheehan et al. (2021) both emphasize the importance of effective communication as the cornerstone of a system for delivering quality healthcare and are fundamental to ensuring a barrier-free and effective communication system, and thus, understanding each other is considered the basic thing that makes sure there are no barriers in a communication system that works. Inasmuch as effective communication in community pharmacy settings is considered crucial, there are other existing barriers, notably gaps in literature regarding the barriers to effective communication between pharmacists and their patients, according to the study's findings conducted in the United Arab Emirates (Kharaba et al., 2022). Furthermore, Kharaba et al. (2025) studies have shown that while many studies have talked about communication problems, not many have looked at problems in community pharmacies in the United Arab Emirates from the patients' perspective. For patients with hearing and visual disability, it exacerbates healthcare (Clemente et al., 2022; Jairoun et al., 2022).

Research carried out in Qatar found that one of the difficulties faced by the pharmacy profession, which has been consistently improving, is the lack of connection between pharmacists and patients, as well as the lack of knowledge about the services provided and the necessity of improving communication tactics (Kharaba et al., 2025). An overview of Akande-Sholabi et al.'s (2022) study indicated that the main problems with communication in pharmaceuticals are not having enough time and not working together with other professional healthcare workers. A similar study in Poland also found that patients did not have enough time for pharmaceutical care. In Foulon et al.'s (2018) study's findings, the author suggested that collaborating in healthcare can be enhanced via interprofessional education that is considered a key element and can be regarded as competency that can be learned. However, the study indicated that collaboration in healthcare is an interprofessional communication. According to the National Healthcare Association (2021), interference in communication obstructs patient safety, and this leads to serious consequences. It was also recorded that 66% of errors found in the healthcare system are due to ineffective team communication. Thus, the article also recommended that pharmacists develop good communication skills, as it is considered crucial in the healthcare system.



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Communication tends to optimize patient care, according to Cadorna et al.'s (2023) study. However, research has indicated that there has been limited global assessment of patients' preferences for pharmaceutical care services through communication. Inasmuch as communication barriers have always been a problem in the healthcare system, studies conducted in the Philippines have shown that the University of the Philippines— Philippine General Hospital (UP-PGH) has encouraged the role of pharmacists in medication management, and the practice involves pharmacist-patient counseling. Cadorna et al.'s (2023) study's findings revealed that failure on the part of the hospital pharmacist to effectively communicate with patients affects their comprehension of the medication regime, which, in a word, contributes to their non-adherence to medication. The study by Cadorna et al. (2023) found several problems, such as the fact that pharmaceutical care is available in both public and private healthcare facilities, patients do not want pharmaceutical care, and pharmacists might have a role to play in medication counseling. The healthcare system has always preferred face-to-face mediums over other means. However, Renn et al.'s (2019) study suggests that older patients prefer face-to-face consultations when they have the freedom to choose their preferred communication method. For outpatient consultations, on the other hand, the author found that consumers and pharmacists had different opinions about what kind of consultation should be used. Most studies have revealed that the visibility of technology and attitudes toward the general use of text messages as a medium can be barriers to pharmaceutical care most time (Cadorna et al., 2023). Cadorna et al. (2023) revealed that younger people who use computers over time become more comfortable with the use of SMS, which predicts their preference for these mediums. Inasmuch as communication barriers to pharmaceutical care poses problem to the healthcare system, an overview from a study conducted in the Philippines revealed that lack of economic incentives also affects the implementation if pharmaceutical care in the Philippines.

There has been little to no study on the communication obstacles to pharmaceutical care services in Pangasinan, even though communication is the cornerstone of the healthcare system. The purpose of this study is to present data that can improve patient-pharmacist communication. The goal of the thesis is to improve one-on-one contact between patients and pharmacists. The study's goal is of addressing the problems pharmacists encountered when administering pharmaceutical care services. In actuality, the research seek to increase interpersonal communication between pharmacists and patients and the results of the study can increase the pharmacist's workflow efficiency with the patient.

This study explored the communication barriers to pharmaceutical care among pharmacist working in rural health units of Pangasinan.

It specifically answered the following questions:

- 1. What are the pharmaceutical care services you provided in the rural communities?
- 2. What are the common communication barriers you encounter when providing pharmaceutical care in these communities?
- 3. What are the experiences of pharmacists regarding communication challenges in delivering pharmaceutical care to rural communities in Pangasinan?
- 4. How do these communication barriers impact the effectiveness of pharmaceutical care and patient health outcomes?
- 5. What strategies should be implemented to improve pharmacist-patient communication to enhance healthcare delivery in rural communities?

### METHODOLOGY

The study used a qualitative phenomenological design to explore the lived experiences of pharmacists working in Rural Health Units (RHUs) across Pangasinan, focusing on communication barriers in pharmaceutical care. Data were gathered through semi-structured, face-to-face interviews, supported by an interview guide to ensure consistency while allowing participants the flexibility to express their thoughts in depth. Participants were selected through convenience sampling, ensuring that only registered pharmacists currently working in RHUs and willing to participate voluntarily were included. Their anonymity was protected through the use of code names. Interviews were audio-recorded, transcribed verbatim, and conducted in comfortable settings to encourage open discussion. Ethical standards—including informed consent, confidentiality, and principles of



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beneficence, autonomy, and justice—were strictly observed throughout the study.

Data analysis followed Colaizzi's seven-step method, ensuring systematic interpretation, theme development, and validation of findings. The researcher repeatedly reviewed transcripts, extracted significant statements, formulated meanings, and clustered these into themes that captured the essence of the pharmacists' experiences. Member-checking was conducted to ensure accuracy and confirmability of interpretations. Trustworthiness of the study was achieved through credibility, transferability, dependability, and confirmability, supported by careful documentation in an audit trail. The audit trail outlined each procedural step—from conceptualization and data gathering to theme development and conclusion formulation—enhancing transparency and rigor. Overall, the methodology ensured that findings authentically reflected how pharmacists navigate communication challenges within rural healthcare settings.

#### **RESULTS AND DISCUSSIONS**

The first theme, "Pharmaceutical Care Services: Their Scope and Delivery," highlighted a few areas of focus on healthcare services for patients. It demonstrated that medication administration is a crucial area in which the pharmacist provides pharmaceutical guidance to the patient after offering consultation. The pharmacist consistently ensures that prior to medication dispensing, patients are properly educated on their dosage regime. In a healthcare system, findings showed that pharmaceutical care services are not always achieved individually; the instance of healthcare collaborative effort is a key element of consideration because it ensures that the patient receives quality life from the collaborative efforts of the pharmacist with other healthcare personnel.

The second theme, "Barriers to Effective Communication in Pharmaceutical Care," brought to light the communication barriers that disrupt pharmaceutical care, including lack of electronic devices, language barriers, technological difficulties, language preference, and lack of language proficiency. Because pharmacist-patient contact necessitates normality in language and the technological medium that facilitates it, the research identified these limitations as important variables that disrupt communication. Here, the pharmacist has difficulties while dealing with a patient who speaks many languages not commonly used in a specific region which makes it difficult for the pharmacist to communicate effectively and provide patients with pharmaceutical care.

The third theme, "Rural Healthcare Communication and Delivery Challenges", highlights how these challenges negatively impact the enhancement of pharmaceutical care for patients, particularly through the subthemes of language translators, dialect varieties, comprehension challenges, and a shortage of pharmacists. These factors significantly disrupt the delivery of pharmaceutical care from pharmacists to patients. The fourth theme, "Communication's Effect on Pharmaceutical Care Services", includes subthemes such as medication errors, misinformation, slightly improved healthcare outcomes, and adherence to healthcare information. It also identifies areas that require consistent improvement. Despite the difficulties in providing patient care, the findings emphasize how misleading information impacts compliance, which, therefore, leads to medication errors that negatively impact the patient's overall health. However, the findings showed a slight improvement, irrespective of the challenges in communication.

Lastly, the fifth theme, "Pharmacist-patient Communication Strategies and Healthcare Improvement", includes subthemes such as dedication to professionalism, establishing pharmacist-patient relationships, improved communication channels, and a team-based care model intervention that addresses communication challenges. When adopted, these interventions broadly structure the communication system and enhance pharmaceutical care services for patients in rural health units, as noted in the findings.

#### **CONCLUSIONS**

The study explored that communication roadblocks in pharmaceutical care, the struggles pharmacists working in rural health units face in Pangasinan. It revealed the numerous communication challenges pharmacist encounter while rendering pharmaceutical care to patients. The striking issues identified revolves around barriers to communication, challenges involve in pharmaceutical care delivery, and the outcome of



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pharmaceutical care due to poor communication system remarkably contributes to less improvement in patient care. Using a qualitative analysis, I sort to capture the pharmacist lived experiences regarding the challenges they faced rendering pharmaceutical care.

The first theme is "Pharmaceutical Care Services: Their Scope and Delivery", and its subthemes include medication administration, pharmaceutical consultations, consistent care, education, and collaborative healthcare efforts. This theme significantly impacts the effectiveness and quality of work performed by pharmacists, affecting the rural patient health outcomes positively on multiple levels, as mentioned in the subthemes.

The second theme, "Barriers to Effective Communication in Pharmaceutical Care", and its subthemes include language barriers, technological issues, language preference, lack of language proficiency, modes of communication, and a lack of electronic devices. However, the process of communication happens to be dynamic, and these barriers contributively interrupt the flow of pharmaceutical care to patients.

The third theme, "Rural Healthcare Communication and Delivery Challenges," and its subthemes include language translators, dialect varieties and comprehension challenges, and limited pharmacists. For a pharmacist to achieve effective care for a patient, they must be sufficient to accommodate the patient's healthcare while taking into cognizance that the communication process is conducted with clarity. Negligence of any of these factors mentioned in the subthemes affects the communication and delivery process of pharmaceutical care.

The fourth theme, "Communication's Effect on Pharmaceutical Care Services", and its subthemes include medication errors, misinformation, slightly improved healthcare outcomes, and adherence to healthcare information. It is arguably true that interrupted communication in the healthcare field endangers patients' quality of life. Patients often report medication errors because of misinformation about their dosage regimen.

Lastly, the fifth theme, "Pharmacist-Patient Communication Strategies and Healthcare Improvement", along with its subthemes, includes dedication to professionalism, establishing pharmacist-patient relationships, improved channels of communication, and the team-based care model of intervention. These elements significantly address the key areas where pharmacists encounter communication challenges in pharmaceutical care, which involves providing precise, accurate, and timely medication information that greatly impacts patients' health outcomes. The mentioned intervention opts to enhance communication significantly in rural health units.

#### RECOMMENDATIONS

From the study's findings and conclusions, the following recommendations were formulated:

- 1. Based on the findings, it is recommended to establish a team-based care model that promotes collaboration among pharmacists, physicians, and other healthcare professionals to enhance communication and improve patient outcomes.
- 2. A mixed-methods research approach is recommended for future studies to re-evaluate the findings, including possible application in urban health unit settings.
- 3. It is recommended that future researchers consider conducting psychological assessments of participants to account for their mental state when undertaking similar studies.
- 4. It is recommended that the government and private sectors, including public and private institutions, implement curriculum enhancements related to language and cultural sensitivity. These institutions should train pharmacists in commonly used tribal languages in rural areas to facilitate better communication and provide accurate patient counselling.
- 5. It is recommended that the government strengthen technological communication systems in rural areas to support consistent and reliable pharmaceutical care services for patients.



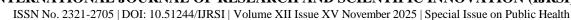
#### REFERENCES

- 1. Creswell JW., Creswell JD (2018), Research Design Qualitative, Quantitative, and Mixed Method Approaches, Fifth Edition.
- National healthcare Association (2021). Effective Communication is Vital for Pharmacy Technicians, 2. Clinical Role
- 3. Kreps G (2025). Communication and Effective Interprofessional Healthcare Teams. DOI: 10.1007/978-3-031-70106-1\_2 In book: Interprofessional Communication in Health and Social Care
- Kazdin A.E (2023). Research Design in Clinical Psychology. Tale University, 4. Connecticut. https://doi.org/10.1017/9781108976589, Pp 321-355.
- 5. Oxford Advanced Learner's Dictionary of Current English. 2004. Oxford: OxfordUniversity Press.
- Akande-Sholabi, W., & Akinbitan, A. A. (2022). Assessment of the attitude, practice, and barriersto 6. pharmaceutical care among community pharmacists in Ibadan. Nigerian Journal of Ph a r m a c e u e s e a r c h, 1 8 (1 ) 7 5 (PDF) Assessment of Pharmacists' Knowledge, Barriers and Readiness in implementing Pharmaceutical Care in Lagos state, Nigeria.
- 7. Amin, S., & McKeirnan, K. C. (2022). The physician perspective on pharmacist physician collaboration and trust. Journal of the American Pharmacists Association, 62(4),1304 -1312.https://doi.org/10.1016/j.japh.2022.02.014
- Adekunle, O. A., Olson, A. W., Schommer, J. C., & Brown, L. M. (2022). Influence 8. patientpharmacist relationship on willingness to accept pharmacist provided services. Journal of the American 63(3), 760-768.e1. https://doi.org/10.1016/j.japh.2022.12.016 Pharmacists Association,
- Andel, S. A., Tedone, A. M., Shen, W., & Arvan, M. L. (2021). Safety implications 9. forms of understaffing among nurses during the COVID-19 pandemic. Journal of Advanced Nursing, https://doi.org/10.1111/jan.14952 78(1), 121–130.
- Alshahrani S.M, Ishaqui A.A, Alavudeen S.S (2025). Job Satisfaction and Its 10. Correlation with Pharmacists' Performance and Patient Trust, DOI:10.3389/fmed.2025.1624990
- 11. Amibor, K., Agbese, B. O., & Mokwunye, C. (2022). Barriers to practice of pharmaceutical care in a tertiary hospital in Nigeria. Asian Journal of Science and Applied Technology, 11(2), 1–6. https://doi.org/10.51983/ajsat-2022.11.2.3273
- 12. Aniney F. (2025). Rural and Urban Health Units: Structure, Personnel, and Referral Systems
- Amano A, Brown-Johnson CG, Winget M, et al. (2023). Perspectives on the Intersection 13. of Electronic Health Records and Health Care Team Communication, Function, Well-Open. ;6(5): doi:10.1001/jamanetworkopen.2023.13178 being. JAMA Netw e2313178.
- Al Shamsi H, Almutairi AG, Al Mashrafi S, Al Kalbani T. (2020). Implications of Language barriers for healthcare: A systematic review. Oman Med J.;35: e122
- Alison J. Purvis, Helen M. Rodger, Sue Beckingham (2020). Experiences and perspectives of social media in learning and teaching in higher education, International Journal of Educational Research Open. https://doi.org/10.1016/j.ijedro.2020.100018.
- Al-Azayzih, A., Al-Qerem, W., Kharaba, Z., Albiss, L., Alawneh, A., Abu= 16. Dalhoum. D., Yousef, L., Al-Amreen, M., & Abedrabbo, Z. (2023). Environmentaland personal bar-riers encountered in community pharmacy settings based on public opinions. Future Science OA, 10(1), FSO933. https://doi.org/10.2144/fsoa-2023-0166
- Al-Diery T, Naz Hussain F (2025). Person-centered Care in Pharmacy: Time to 17. Walk the Talk. Journal of Pharmaceutical Policy. DOI: 10.1080/20523211.2025.2511152
- 18. Ahmed, S. K. (2024). The pillars of trustworthiness in qualitative research. Journal of Medicine, Surgery, and Public Health, 2,100051.https://doi.org/10.1016/j.glmedi.2024.100051
- 19. Austria H (2021). Pangasinan capital launches new rural health unit.
- 20. Balamurali S (2016). Chain Sampling 2016 DOI:10.1002/9781118445112.stat03091.pub2
- Parents of Young 21. Barrow D.M (2017) A Phenomenological Study of the Lived Experiences of Children with Autism Receiving Special Education Services Donna Marie Barrow Portland State University.
- 22. Burnier M. (2025). The benefits of a team-based care approach to improve drug adherence in hypertension. Explor Med; 6:1001285.





- 23. Busetto, L., Wick, W. & Gumbinger, C. (2020). How to use and assess qualitative research methods. Neurol. Res. Pract. 2, 14 https://doi.org/10.1186/s42466 020-00059 z
- 24. Cadorna K. R, Macalalad J.J A, Santos K.C.M, Gloria1 M.A.J (2023) The Asian Association of 'Schools of Pharmacy 64 Outpatients' preference and associated factors for pharmacist counseling medium at University of the Philippines-Philippine General Hospital, JAASP http://www.aaspjournal.org Journal of Asian Association of Schools of Pharmacy 2023; 12: 64–79Research Paper
- 25. Chen W, Wenxiu S, Feifei H et al. (2024). Lost in translation: Impact of language barriers and facilitators on the healthcare of Asian American living with HIV
- 26. Cao, H., Cao, Z., Mao, Y., Li, L., Song, Y., He, X., Wu, Y., Chen, Y., Wang, Q., & Yang, H. (2025). A qualitative study on nursing professionalism: safeguarding life through a conceptual model. BMC Medical Education, 25(1). https://doi.org/10.1186/s12909-025-07595-9
- 27. Costa, F., van Mil, J., Alvarez Risco, A. (eds) The Pharmacist Guide to Implementing Pharmaceutical Care. Springer, Cham. https://doi.org/10.1007/978-3-319-92576-9 6
- 28. Costas, D. G., Sánchez, A. R., Manzorro, A. G. et al. (2023). Impact of preoperative pharmaceutical care consultation on medication errors in Expert Opinion on Drug Safety, 22(12), 1307.https://doi.org/10.1080/14740338.2023.2292710
- 29. Carandang, R. R., Puguon Jr., F., Santos, M. L.et al. (2024). Burnout and Turnover Intention Among Community and Hospital Pharmacists in Metro Manila, Philippines. Merits, 4(4), 463-474https://doi.org/10.3390/merits4040033
- 30. Chou, S., Chen, C., & Shen, Z. (2024). Examining the impact of pharmacist professionalism and celebrity endorsers on dietary supplement purchase intention: the moderating role of product knowledge. International Journal of Pharmaceutical and Healthcare Marketing, 18(4), 603–620https://doi.org/10.1108/ijphm-08-2023-0076
- 31. Chowdhury N, Naeem I, Ferdous M, Chowdhury M, Goopy S, Rumana N, et al. (2021). Unmet healthcare needs among migrant populations in Canada: exploring the research landscape through a systematic integrative review. J Immigr Minor Health.;23.
- 32. Cetintepe S.P, Bozdag F (2024). Interprofessional communication in healthcare teams, In book: Risk and crisis communication in health.
- 33. Donaldson LJ, Kelley ET, Dhingra-Kumar N, Kieny M-P, Sheikh A. Medication without harm: WHO's third global patient safety challenge. Lancet. 2017;389(10080):1680–1.
- 34. Druica, E., Ianole-Calin, R., Baicus, C., & Dinescu, R. (2021, May 11). Determinants of satisfaction with services and trust in the information received in the community Pharmacies: A comparative analysis to foster pharmaceutical care adoption. Healthcare (Basel), 9(5),https://doi.org/10.3390/healthcare9050562
- 35. Dye, T. (2025). Qualitative Data Analysis: Step-by-Step Guide (Manual vs. Automatic) Thematic. Thematic. https://getthematic.com/insights/qualitative-data-analysis/
- 36. Do Carmo, H. (2025). Use of new communication tools by pharmacists in patient support: the example of video format [CCSD]. In Sciences du Vivant [q-bio]. 2025.
- 37. Danaher, T. S., Berry, L. L., Howard, C., Moore, S. G., & Attai, D. J. (2023). Improving how Clinicians communicate with patients: an Integrative review and framework. Journal of Service Research, 26(4), 493–510. https://doi.org/10.1177/10946705231190018
- 38. De Araújo Silva, B. G., Da Nóbrega, V. M., Oliveira, R. C., Ramalho, E. L. R., Collet, N., & Vaz, E. M. C. (2025). COMMUNICATION AMONG PRIMARY CARE TEAMS IN THE CARE OF CHILDREN/ADOLESCENTS WITH CHRONIC DISEASES. Texto & Contexto Enfermagem, 34https://doi.org/10.1590/1980-265x-tce-2024-0112en
- 39. Donovan E.E, Brown L.E, Lindstadt C et al. (2021). The 12 fundamentals of highly effective communicators: Teaching theory-based professional communication to pharmacy students. DOI:10.31446/JCP.2021.1.03
- 40. Ekladious A, Bhandari R, Sudusinghe T. N (2023). Consultation with patients for whom English is not their native language
- 41. Emerson, A. M. (2021). A Phenomenological Reflection on women's Lived Experience of giving in Circumstances of Material Scarcity. Nursing Inquiry, 29(2). https://doi.org/10.1111/nin.12456





- 42. Ehlers, L. I. (2021). Is benevolence the pinnacle of an employment relations trust hierarchy? SA Journal of Human Resource Management, 19. https://doi.org/10.4102/sajhrm.v19i0.1655
- 43. Ellahham, Samer MD1. Communication in Health Care: Impact of Language and Accent on Health Care Safety, Quality, and Patient Experience. American Journal of Medical Quality 36(5):p 355-364, September/October 2021. | DOI: 10.1097/01.JMQ.0000735476.37189.90
- 44. Evans R. M, Bromfield L, Thomas-Brown P (2021). An investigation of knowledge, attitude, and practice of community pharmacists toward pharmaceutical care in private community pharmacies in Jamaica, Tropical Journal of Pharmaceutical Research 20(12):2587 2595, DOI:10.4314/tjpr.v20i12.19
- 45. Flynn, A. D., Scheuerle, R. L., Galgon, G., Gerrard, S. E., & Netshandama, V. O. (2019). An assessment of infant medication administration and storage practices in selected communities in the Vhembe District of Limpopo Province, South Africa. Health SA Gesondheid, 24.https://doi.org/10.4102/hsag.v24i0.1075
- 46. Fatimayin F.F (2018). What is Communication?
- 47. Fleetwood, D. (2024, February 9). Non-Probability Sampling: Types, Examples, & Advantages. QuestionPro. https://www.questionpro.com/blog/non probability-sampling
- 48. Frau E.D, Degabriel G, Luvini et al. (2024). Asking Patients if They have any Questions can Help Improve Patient Satisfaction with Medical Team Communication in the Emergency Department. EMC Emergency Medicine. DOI: 10.1186/s12873-024-01001-1
- 49. Foulon, V., Wuyts, J., Liekens, S., Tsakitzidis, G. (2019). The Role of Communication in Pharmaceutical Care. In: Alves da
- 50. Flarey, D. (2024, September 10). Understanding non-maleficence in health care ethics. AIHCP. https://aihcp.net/2024/09/10/understanding-non maleficence-in-health-care-ethics/
- 51. Goodeet, J. V., Owen, J., Page, A., & Gatewood, S. (2019, August 4). Communitybased pharmacy practice innovation and the role of the community-based pharmacist practitioner in the United States. Pharmacy (Basel), 7(3), 106. https://doi.org/10.3390/pharmacy7030106
- 52. Gonzalez, C., Graves, J. M., Ramos, J., Vavilala, M. S., & Moore, M. (2024). Language access research for community health: provider perspectives on language access techniques and the role of communication technology. Journal of Communication in Healthcare, 17(1), 7–14.https://doi.org/10.1080/17538068.2023.2237351
- 53. Hedima EW, Adeyemi MS, Ikunaiye NY. (2020). Community pharmacists: On the health service against COVID-19 in LMICs. Res Soc Adm Pharm;

  10.1016/j.sapharm.2020.04.013
- 54. Hurley-Kim, K., Unonu, J., Wisseh, C., Cadiz, C., Knox, E., Ozaki, A. F., & Chan, A. (2022). Health disparities in pharmacy practice within the community: Let's brainstorm for solutions. Frontiers in Public Health, 10. https://doi.org/10.3389/fpubh.2022.847696
- 55. Hays CA, Taylor SM, Glass BD. (2020). The Rural Pharmacy Practice Landscape: Challenges and Motivators. J Multidiscip Healthc. Mar 2; 13:227-234. doi: 10.2147/JMDH.S236488. PMID: 32184612; PMCID: PMC7060034.
- 56. Hayes, A. (2024b, July 4). Audit Trail: definition, how it works, types, and example. Investopedia. https://www.investopedia.com/terms/a/audittrail.asp
- 57. Jairoun, A. A., Al-Hemyari, S. S., Shahwan, M., Brian, G., El-Dahiyat, F., Kurdi, A., & Zyoud, S. H. (2022, May). Access to community pharmacy services for people with disabilities: Barriers, challenges, and opportunities. Research in Social and Administrative Pharmacy, 18(5), 2711–2713.10.1016/j.sapharm.2022.01.009 DOI PubMed
- 58. Jadoo, H., Klemenhagen, K. C., Freeman, K., & Philbrick, A. M. (2023). Comparison of clinical pharmacist visits based on language preference in an urban underserved clinic: A cross-sectional analysis. JACCP: Journal of the American College of Clinical Pharmacy, 6(11), 1210–1215.https://doi.org/10.1002/jac5.1860
- 59. Jansen, D. (2025, February 15). Trustworthiness in qualitative research. Grad Coach. https://gradcoach.com/trustworthiness-qualitativeresearch/#:~:text=At%20its%20core%2C%20trustworthiness%20is,exper ences%20 n%20an%20authentic%20way%3F





- 60. Kilova, K., Mihaylova, A., & Peikova, L. (2021). Opportunities of information communication technologies for providing pharmaceutical care in the COVID-19 pandemic. Pharmacia, 68(1), 9–14.https://doi.org/10.3897/pharmacia.68.e56987
- 61. Khatri, R.B., Assefa, Y. (2022). Access to health services among culturally and linguistically diverse populations in the Australian universal health care system: issues and challenges. BMC Public Health 22, 880https://doi.org/10.1186/s12889-022-13256-z
- 62. Koster, E. S., Philbert, D., & Bouvy, M. L. (2021). Impact of the COVID-19 epidemic on the provision of pharmaceutical care in community pharmacies. Research in Social and Administrative Pharmacy, 17(1). https://doi.org/10.1016/j.sapharm.2020.07.001
- 63. Kandala N-B, Ekirapa-Kiracho E, Mayora C, Kitutu FE, Peterson SS, Wamani H. (2018). Private retail drug shops: what they are, how they operate, and implications for health care delivery in rural Uganda. BMC Health Serv Res. 18:532
- 64. Kiflu, M., Tsega, S.S., Alem, H.A. et al. (2024). Barriers to pharmaceutical care provision in the community and hospital pharmacies of Motta town, Northwest Ethiopia: a cross-sectional study. BMC Health Serv Res 24, 1082 https://doi.org/10.1186/s12913-024 11538-3
- 65. Khanal, S.K. (2025). Language barriers and their consequences in healthcare: a qualitative case study of Nepali migrants in Finland. BMC Health Serv Res **25**, https://doi.org/10.1186/s12913-025-12757-y
- 66. Kharaba Z.J,Al-Azayzih A, Al-Azzam S, et al (2025). Barriers to effective communication in UAE community pharmacies: general public perspectives on enhancing patient pharmacist interaction and policy development, Journal of Pharmaceutical Policy and Practice 18(1):2460744, DOI:10.1080/20523211.2025.2460744
- 67. Kharaba, Z., Farhat, J., Mahboub, B. S., Buabeid, M. A., Alfoteih, Y., Al-Worafi, Y., Jaber, A., & AlAhmad, M. (2022). Current views of community and hospital pharmacists on pharmaceutical care services in the United Arab Emirates: A mixed methodological study. F1000Research, 11, 694.10.12688/f1000research.110102.2 DOI PMC PubMed
- 68. Lawal O.P, Oyebamiji H.O, Kelenna I.J et al. (2025). A Review on Usage of Digital Health Literacy to Combat Antibiotic Misuse and Misinformation in Nigeria: Review Article. Journal of Pharma Insights and Research, 3(2), 258-269. https://doi.org/10.69613/dja1jc18
- 69. Lim R, Bilton R, Dorj G, Bereznicki L, Rowett D, Ho JN, Freeman A, Roughead EE. (2023). Pharmacists as patient advocates: A series of case studies illustrating the impacts of a regular pharmacist service in residential aged care (nursing homes). Explor Res Clin Soc Pharm. Apr 14;10:100268. doi: 10.1016/j.rcsop.2023.100268.
- 70. Liwanag HJ, Wyss K.(2020). Who should decide for local health services? A mixed methods study of preferences for decision-making in the decentralized Philippine health system. BMC Health Serv Res. 2020 Apr 15;20(1):305. doi: 10.1186/s12913-020-05174-w. PMID: 32293432; PMCID:PMC7158124.
- 71. Loh P, Chua SS, Karuppannan M. (2021). The extent and barriers in providing pharmaceutical care services by community pharmacists in Malaysia: a cross-sectional study. BMC Health Services Research. Aug;21(1):822. DOI: 10.1186/s12913-021-0 6 8 2 0 7 . P M I D : 3 4 3 9 9 7 4 9 ; P M C I D : PMC8365940.
- 72. Massi DG, Mbouleup FTN, Dissongo JI, Mapoure YN. (2024). Epidemiology, clinical features and outcome of stroke in rural versus urban hospitals in Cameroon. Journal of Stroke and Cerebrovascular Diseases. 2024 Apr 1Jul31];33(4).
- 73. Merriam, S. B., & Tisdell, E. J. (2016). Qualitative Research: A Guide to Design and Implementation (4th ed.). San Francisco, CA: Jossey Bass.
- 74. Mtisi, S. (2022). The Qualitative Case Study Research Strategy as Applied on a Rural Enterprise Development Doctoral Research Project. International Journal of Qualitative Methods, 21.https://doi.org/10.1177/16094069221145849
- 75. Michael Trisolini, Ma. Elena Javier, Melvin Jabar, Cristina Rodriguez, Jessie Varquez, Omega Diadem Danganan, Rosario Marilyn Benabaye, Chris Angelo Reynaldo (2023). Improving the Quality of Family Planning Services in the Philippines: Barriers and Opportunities.
- 76. Morillo- Verdugo R, Calleja-Hernandez M.A, Robustillo- Cortes M De las et al. (2020). A new definition and refocus of pharmaceutical care: The Barbate Document.





- 77. MacDougall C, Gross AE. (2020). Roles of the clinical pharmacist during the COVID-19 pandemic. J Am Coll Clin Pharm; 3:564–6. Available:https://doi. org/10.1002/jac5.1231
- 78. Marian C. (2021). The Research Audit Trail: Methodological Guidance for Application in Practice. Electronic Journal of Business Research Methods, 18(2). https://doi.org/10.34190/jbrm.18.2.008.
- 79. McIntosh MJ, Morse JM. (2015). Situating and Constructing Diversity in Semi Structured Interviews. Glob Qual Nurs Res. Aug 14;2:2333393615597674. doi: 10.1177/2333393615597674. PMID: 28462313; PMCID: PMC5342650.
- 80. Mongelli, F., Georgakopoulos, P., & Pato, M. T. (2020). Challenges and opportunities to meet the mental health needs of underserved and disenfranchised populations in the United States. Focus, 18(1), 16-24.
- 81. Njohjam, M. N., Falonne, N. T., & Ngoule, M. O. (2025). Barriers to medication adherence for secondary stroke prevention in rural communities in Cameroon: a qualitative study. BMC Primary Care, 26(1). https://doi.org/10.1186/s12875-025-02842-w
- 82. Nair L B (2023). Conducting qualitative management research with semi structured interviews. DOI: 10.4324/9781003107774-10
- 83. Ng, Y. K., Shah, N. M., Loong, L. S., Pee, L. T., & Chong, W. W. (2021). Barriers and facilitators to patient-centred care in pharmacy consultations: A qualitative study with Malaysian hospital pharmacists and patients. PLoS ONE, 16(10), e0258249.https://doi.org/10.1371/journal.pone.0258249
- 84. Ong, A. K. S., Kurata, Y. B., Castro, S. a. D., De et al. (2022). Factors influencing the acceptance of telemedicine in the Philippines. Technology in Society, 70, 102040. https://doi.org/10.1016/j.techsoc.2022.102040
- 85. Ogbewele, N. E. G., Mbata, N. a. O., & Nwosu, N. N. T. (2024). Advancing pharmaceutical care in rural and underserved communities: Strategies for improving global healthcare access. International Journal of Applied Research in Social Sciences, 6(10), 2447–2461.https://doi.org/10.51594/ijarss.v6i10.1641
- 86. Okeke A.A, Ameh C.O, Omeje A.C, Dombin D.T (2024). Assessment of Pharmacists' Knowledge, Attitudes, Barriers and Readiness in Implementing Pharmaceutical Care in Lagos State, Nigeria, Nigerian Journal of Pharmacy, https://doi.org/10.51412/psnnjp.2024.13
- 87. Othman M.I., Najib M.N.M., Sulaiman S. (2023). Drug Dispensing and Counselling:Challenges and Practices in Patient-Pharmacist Communication,International Journal of Academic Research in Progressive Education and Development 12(2):2226-6348, DOI: 10.6007/IJARPED/v12-i2/16802
- 88. Panganiban JMS, Loreche AM, De Mesa RYH et al. (2024). Promoting equitable and patient-centred care: an analysis of patient satisfaction in urban, rural and remote primary care sites in the Philippines. BMJ Open Qual. Mar 5;13(1):e002483. doi: 10.1136/bmjoq-2023-002483. PMID: 38448041;PMCID: PMC10916135.
- 89. Renn BN, Hoeft TJ, Lee HS, Bauer AM and Areán PA. (2019). Preference for in person psychotherapy versus digital psychotherapy options for depression: survey of adults in the U.S. NPJ Digit Med; 2: 6. doi: 10.1038/s41746-019 0077-1
- 90. Quan-Haase A, Harper MG, Wellman B. (2021). The role of communication technology across the life course: A field guide to social support in East York. J Soc Pers Relat. 2021 Dec;38(12):3497-3517. doi: 10.1177/02654075211056898. Epub Nov 19. PMID: 35431394;PMCID: PMC9006389.
- 91. Rehman U, Sohail A. (2023). Exploring the Role of Verbal and Non-verbal Communication Skills of Nursing in Patients Healing.
- 92. Sdistef. (2025, February 25). Strength in collaboration: nurse practitioner and pharmacist care models. Johns Hopkins School of Nursing.https://nursing.jhu.edu/magazine/articles/2025/01/strength-in collaboration-nurse-practitioner-and-pharmacist-care-models/
- 93. Sheehan, J., Laver, K., Bhopti, A., Rahja, M., Usherwood, T., Clemson, L., & Lannin, N. A. (2021). Methods and Effectiveness of Communication between hospital allied health and primary care Practitioners: A Systematic Narrative review. Journal of Multidisciplinary Healthcare, Volume 14, 493 511. https://doi.org/10.2147/jmdh.s295549
- 94. Santos JP, Abad JC, Aldea AA, Itay SD, Laureta VVO, Tadena RA, Turingan RA, Catacutan KJA, Tindowen DJC. Health System Responsiveness of Rural Health Units in the Cagayan Valley





Region: A Cross-sectional Study. Acta Med Philipp. 2025 Jul 15;59(9):72-82. doi: 10.47895/amp.vi0.9808. PMID: 40809703; PMCID: PMC12340446.

- 95. Serafica, R., Reyes, A. T., Cacciata, M. C., Kawi, J., Leyva, E. W. A., Sy, F. S., &Evangelista, L. S. (2024). Bridging the gap: reducing health inequities in access to preventive health care services in rural communities in the Philippines. Journal of Transcultural Nursing, 36(1), 24–33.https://doi.org/10.1177/10436596241271270
- 96. Sousa Pinto G, Hung M, Okoya F, Uzman N. (2021). FIP's response to the COVID

  19 pandemic: Global pharmacy rises to the challenge. Res Social Adm Pharm.;17(1):1929-1933.
- 97. Speziale, H.J. and Carpenter, D.R. (2007). Qualitative Research in Nursing:Advancing the Humanistic Imperative, (4th ed.). Philadelphia. Lippincott, Williams and Wilkins
- 98. Sharkiya, S.H. (2023). Quality communication can improve patient-centred health outcomes among older patients: a rapid review. BMC Health Serv Res 23, 886 https://doi.org/10.1186/s12913-023-09869-8
- 99. Saito, S., Harris, M.F., Long, K.M. et al. (2021). Response to language barriers with patients from refugee background in general practice in Australia: findings from the OPTIMISE study. BMC Health Serv Res 21, 921 https://doi.org/10.1186/s12913-021-06884-5
- 100. Smith, J. A., & Fieldsend, M. (2021). Interpretative phenomenological analysis. In P. M. Camic (Ed.), Qualitative research in psychology: Expanding perspectives in methodology and design (2nd ed., pp. 147–166). American Psychological Association. https://doi.org/10.1037/0000252-008
- 101. Shrestha S, Iqbal A, Teoh S.L et al. (2024). Impact of Pharmacist-delivered Interventions on Pain-related Outcomes: An Umbrella Review of Systematic Reviews and Meta-analyses. Research in Social and Administration, DOI: 10.1016/i.saphram.2024.03.005
- 102. Sarmiento R.F R, Overgaard S.M, Gai C et al.(2025).Guiding responsible AI in healthcare in the Philippine
- 103. Tan A. C. W, Emmerton L, Hattingh L (2012). A review of the medication pathway in queensland, Australia. International Journal of Pharmacy Practice 20(5):324-39, DOI: 10.1111/j.2042-7174.2012.00193.x
- 104. Tolabing, M. C. C., Co, K. C. D., Mendoza, O. M., Mira, N. R. C., Quizon, R. R., Tempongko, M. S. B., Mamangon, M. a. M., Salido, I. T. O., & Chang, P. W. (2022). Prevalence of limited health literacy in the Philippines: First national survey. HLRP Health Literacy Research and Practice, 6(2).https://doi.org/10.3928/24748307-20220419-01
- 105. Terry, D., Phan, H., Peck, B. et al. (2021). Factors contributing to the recruitment and retention of rural pharmacist workforce: a systematic review. BMC Health Serv Res 21, 1052 https://doi.org/10.1186/s12913-021 07072-1
- 106. Tan-Lim CSC, Marfori JRA, Sanchez JT, et al. (2024). Role of mixed healthcare providers networks in strengthening primary care systems: a case study of a rural primary care site. BMJ Open Qual. 2024 Sep 24;13(3):e002786. doi: 10.1136/bmjoq--002786. PMID: 39317471; PMCID: PMC11423753.
- 107. Tamara F, Robin R, et al (2023). Barriers and facilitators experienced by migrants and refugees when accessing pharmaceutical care: A scoping review. Research in Social and Administrative Pharmacy.19 (7) pp 977-988
- 108. Viegas R, Dineen-Griffin S, Guiu J.M et al (2022). Tele-pharmacy and pharmaceutical care: A narrative review by international pharmaceutical federation
- 109. Varkey, B. (2020). Principles of Clinical Ethics and Their Application to Practice. Medical Principles and Practice, 30(1), 17–28. https://doi.org/10.1159/000509119
- 110. Waszyk-Nowaczyk, M., Guzenda, W., Kamasa, K., Pawlak, K., Bałtruszewicz, N., Artyszuk, K., ... Merks, P. (2021). Cooperation Between Pharmacists and Physicians Whether It Was Before and is It Still Ongoing Duringthe Pandemic? Journal of Multidisciplinary Healthcare, 14, 2101–2110.https://doi.org/10.2147/JMDH.S318480
- 111. Wang, D., Liu, C., Liu, C., Wang, X., & Zhang, X. (2020). Improving pharmacist patient communications based on King's theory of goal attainment: Study protocol for a cluster randomized controlled trial. Research in Social and Administrative Pharmacy, 17(3), 625–631.https://doi.org/10.1016/j.sapharm.2020.05.013



ISSN No. 2321-2705 | DOI: 10.51244/IJRSI | Volume XII Issue XV November 2025 | Special Issue on Public Health

- 112. Wilson, M. M., Devasahayam, A. J., Pollock, N. J., Dubrowski, A., & Renouf, T. (2021). Rural family physician perspectives on communication with urban specialists: a qualitative study. BMJ Open, 11(5), e043470. https://doi.org/10.1136/bmjopen-2020-043470
- 113. Wirihana, L., Welch, A., Williamson, M., Christensen, M., Bakon, S., & Craft, J. (2018). Using Colaizzi's method of data analysis to explore the experiences of nurse academics teaching on satellite campuses. Nurse Researcher, 25(4), 30–34. https://doi.org/10.7748/nr.2018.e1516
- 114. Zhao L, Echeverria V, Tan Y et al. (2024). Ordered Networked Analysis of Multimodal Data in Healthcare Simulations: Dissecting Team Communication Tactics, DOI: 102123/rs.3r. s-4916976/v1
- 115. A Review on Usage of Digital Health Literacy to Combat Antibiotic Misuse and Misinformation in Nigeria: Review Article. (2025). Journal of Pharma Insights and Research, 3(2), 258-269. https://doi.org/10.69613/dja1jc18
- 116. The U.S. Department of Health and Human Services. Disparities: Healthy People 2020. (2021). Available online at: https://www.healthypeople.gov/2020/about/foundation-health measures/Disparities
- 117. The Pharmacists' Patient Care Process JCPP. (2025, August 20). JCPP. https://jcpp.net/patient-care-process/Google Search. (n.d.-b). https://www.google.com/search?q=what+is+rural+health+unit+&sca\_esv=
- 118. Rural pharmacy and Prescription Drugs Overview Rural Health Information Hub. (n.d.). https://www.ruralhealthinfo.org/topics/pharmacy-and-prescription-drugs#access
- 119. World Health Organization: WHO. (2024, September 20). Advancing the role of pharmacists to meet changing patient and health system needs. https://www.who.int/europe/news-room/feature-stories/item/advancing-the-role-of-pharmacists-to-meet-changing-patient-and-health-system-needs