

Assessing the relationship between pharmacy quality and healthcare

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Introduction:

Pharmacy health services include the care that the pharmacist gives to patients, with a main focus on ensuring the safety, effectiveness, and health outcomes of their medications. An action or set of actions undertaken in or organized by a pharmacy, delivered by a pharmacist or other health practitioner, who applies their specialized health knowledge personally or via an intermediary, with a patient/client, population, or another health professional, to optimize the process of care with the aim to improve health outcomes and the value of health care, is defined as an example of a pharmacy health service. According to Joanna, Daniel, Fernando, and Shalom (2013). There is no universally accepted definition of pharmacy health services in the literature that addresses the full range of health care activities, services, and programs offered by pharmacists. Various terms and definitions have been used to classify these services, but they all center on the services provided by pharmacists specifically.

The provision of pharmacy services is a vital element of healthcare delivery within hospital settings. It enhances treatment results by guaranteeing the accessibility and appropriate utilization of high-quality, secure, and efficient medications. The provision of efficient pharmacy services is vital for promptly identifying and preventing medication errors, adverse drug events, and for the prevention and control of antimicrobial resistance. Additionally, it encourages the efficient utilization of limited resources, thereby enhancing the standard of care and leading to improved health outcomes. Pharmacy services should ensure that quality and safety are maintained throughout the whole service process, and prioritize client happiness as extremely important. Hospitals should provide a work environment and workflow that is convenient and inspires trust in both patients and staff.

Pharmacists have a crucial role in delivering high-quality healthcare. These individuals possess extensive knowledge in pharmaceuticals and apply their clinical skills, together with their practical experience, to deliver professional care to patients and the general public. Pharmacists are extensively educated and skilled healthcare practitioners. Pharmacists offer a range of services include distributing medications, providing guidance on the treatment of minor illnesses, promoting healthy lifestyles, conducting medication reviews, assisting with smoking cessation, administering pregnancy tests, administering

vaccinations, and overseeing the use of prescription medications.

The quality of pharmacy health services is influenced by various elements, including the personal characteristics of the pharmacist and the patient, as well as aspects related to the pharmacy healthcare organization, pharmacy health services system, and the wider environment. Supportive factors that can enhance the quality of pharmacy health services include: (1) visionary leadership and strategic planning in the pharmacy field; (2) comprehensive education and training for pharmacists; (3) access to necessary pharmacy resources; (4) efficient management of pharmacy resources; (5) competent pharmacy employees and streamlined processes; and (6) collaboration and cooperation between pharmacists and other healthcare providers. Ensuring and assessing the quality of pharmacy health services is crucial as it provides society with an indication of the performance of the pharmacy health system and ultimately leads to enhanced pharmacy services.

Measuring patient satisfaction is a way to assess the quality of healthcare and suggest areas that may be improved to make the healthcare system more effective (Al-Abri R, Al-Balushi A., 2014).

A local study conducted among patients visiting public health clinics revealed that the groups with higher levels of satisfaction were characterized by lower levels of education, older age, and belonging to Indian and Chinese ethnic groups (Ismail, A., et al., 2020). An update on parameters related to patient satisfaction was necessary as pharmacy services in public health clinics have expanded throughout the years.

These days, pharmacists still play an important role in ensuring that medications are used rationally and cost-effectively, encouraging healthy lifestyle choices, and improving clinical outcomes through direct patient care. struggling to manage the growing number of medications and health conditions experienced by the elderly (Dalton, K., & Byrne, S., 2017).

Health systems are under increasing pressure to find and execute cost-control strategies due to the growing number of medications used by the elderly and the increasing price of newer pharmacotherapies. Pharmacists play a crucial role in cost reduction by evaluating the medication of older patients with multiple chronic conditions. There are two benefits to reducing the number of medications supplied incorrectly: first, the cost of each treatment is reduced, and second, the risk of adverse drug events (ADEs)

is reduced.

Pharmacists are vital contributors to the healthcare team and have a significant impact on the use of medication and providing guidance on its appropriate usage (Sakeena, M. H. F., et al., 2018). The education and training of pharmacists might potentially impact the behavior of healthcare team members and customers, as part of a comprehensive plan to change practices and promote the appropriate use of antibiotics. They are in a favorable position to enhance the comprehension of antibiotics and educate consumers about their prudent utilization through direct interaction in both the community and hospital settings.

Conceptual Framework and Relevant literature:

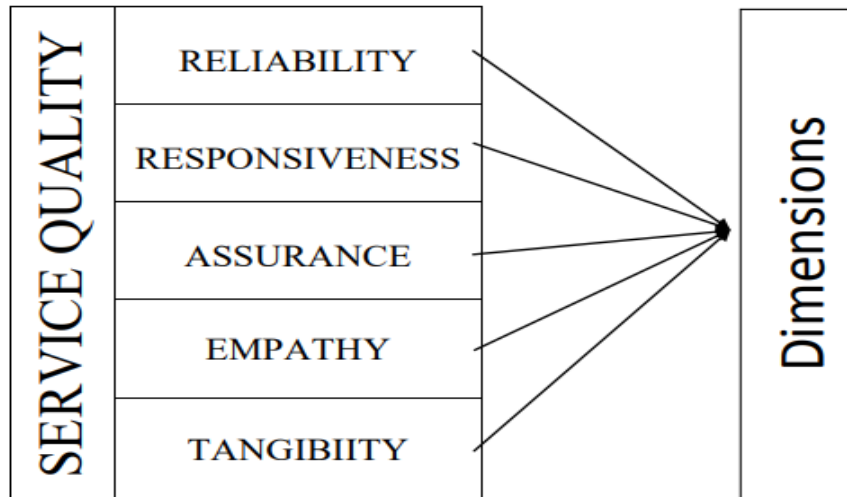
1) Service Quality Concept:

Service quality refers to the capacity to meet client requirements, and it is characterized by being intangible, diverse, and non-storable or separable. Service quality can be assessed by examining both the process and consequence of a certain service. In the health and hospital business, the relationship between service provider and client is referred to as "quality of care" rather than "quality of service". The provision of superior care as an ongoing therapy to both cure and sustain a client's quality of life, hence prolonging their lifespan.

According to "Philip Kotler and Gary Armstrong," 'service quality' refers to the service firm's capacity to retain its customers. That is, they believe that client retention is the most effective indicator of service quality.

Dimensions of Service Quality:

The word 'service quality' is not autonomous; rather, its development is contingent upon several elements associated with both the service itself and the service provider. The following factors are:



○ Reliability:

Reliability is the quality of being able to consistently and precisely deliver the promised service. Reliability, in a general sense, refers to the extent to which service firms uphold their commitments about delivery, service offerings, issue resolution, and price. Customers like to engage with companies who consistently fulfill their commitments. Therefore, it plays a crucial role in how customers perceive the quality of service and their subsequent loyalty. Therefore, service providers must be cognizant of customers' expectations regarding reliability. When it comes to financial services, the reliability aspect encompasses factors such as consistency, adherence to regularity, responsiveness to complaints, proactive communication with consumers, and adherence to established protocols (Ramya, N., et al., 2019).

○ Responsiveness:

Responsiveness refers to the inclination to assist clients and deliver timely service. This dimension emphasizes the demeanor and efficiency in addressing client requests, inquiries, grievances, and issues. Additionally, it emphasizes the importance of timeliness, presence, and professional devotion among employees or staff members. It can be determined by measuring the duration of time that consumers wait

for assistance, responses to inquiries, and so on. Enhancing the circumstances of responsiveness can be achieved by consistently monitoring the service delivery process and assessing employees' disposition towards client demands (Richey, R. G., et al., 2022)

○ **Assurance:**

The Assurance dimension is the third aspect of service quality. Customer service can be defined as the collective knowledge, politeness, and aptitude of both the company and its personnel to instill trust and assurance in their clients. The component of uncertainty is crucial in the banking and insurance industries as clients often lack the confidence to accurately assess the potential outcomes. Within certain contexts, such as insurance and stock broking services, firms endeavor to cultivate trust and loyalty between key individuals, such as insurance agents and brokers, and individual clients. In the realm of banking services, the "personal banker" assumes the crucial responsibility of being the primary point of contact. This dimension emphasizes the employees' job expertise and skill, as well as their correctness and courtesy. It also highlights the security measures implemented by the firm (Idayati, I., et al., 2020).

○ **Empathy:**

The Empathy dimension is an additional aspect of service quality. Customer service is the provision of personalized and attentive care to customers by banks or service organizations. This dimension aims to communicate the significance of personalized or tailored services, emphasizing that clients are regarded as distinct and special by the company. This dimension emphasizes the range of services available to meet the diverse demands of clients, including specialized or personalized services. In this scenario, the service providers must possess knowledge about the clients' individual requirements, desires, and preferences (Bas-Sarmiento, P., et al., 2020).

○ **Tangibility:**

Tangibility is the fifth dimension of service quality, referring to the visual and physical aspects of facilities, equipment, communication materials, and technology. All of these factors offer sufficient indications to customers regarding the caliber of service provided by the company. Additionally, this dimension improves the perception of the company. Therefore, the tangible aspect is crucial for

companies, and they must allocate significant resources to establish physical infrastructure (Fatima, I., et al., 2019).

Community pharmacy:

Pharmacists have a long and illustrious history of serving the public by dispensing medications in response to doctors' orders and by offering advice to those suffering from less serious illnesses (a practice known as "counter prescribing"). Pharmacists likely have been less directly affected than other health professionals by the recent upheavals in primary and community care. But pharmacists are eager to adapt to these changes, and they are already thinking about ways to improve patient care in accordance with government health care aims and existing health care goals. New difficulties have arisen as a result of these changes for pharmacists. They have to keep an eye on and assess the quality of the services they provide in addition to adjusting their jobs to accommodate these changes (Rutter, P., 2020).

There has been a failure to properly utilize the potential of community pharmacists as primary health professionals. Financial incentives are driving these developments. In the United Kingdom, community pharmacists work as independent practitioners under contract with health boards; in Scotland and Northern Ireland, they are employed by the family health services authority. The NHS pays them based on the amount of prescriptions they write, but in recent years, they've diversified their bases of payment to include payments for services provided to residential homes and payments for keeping computerized records of drug treatment for their regular clients. To promote a more diverse role in meeting current health care goals, such as providing advice and encouraging health, their compensation may be reformed in the future. Dispensing charge reductions will supply the necessary funds. At this very moment, Scotland is leading the way.

Evolving Role of Pharmacists in the Context of Healthcare Reform:

Traditionally, pharmacists have primarily focused on dispensing prescriptions as prescribed and verifying the correct distribution of medications to patients. Pharmacists have typically utilized their clinical expertise to examine recommended drug regimens in order to prevent incorrect dosages and reduce the occurrence of drug interactions. Pharmacists have conducted drug regimen evaluations for

patients in the long-term care (LTC) environment since the 1970s in order to comply with federal requirements imposed on facilities. Pharmacists' responsibilities have broadened to encompass a greater level of direct patient care. Since the 1960s, pharmacists have been delivering primary care and disease management services as part of certain government healthcare initiatives.

Pharmaceutical Care and the Health Service:

health systems are facing a number of challenges, including rising demand, rising healthcare costs, unfavorable medical outcomes, and international public health crises. The characteristics of high-quality health care are the following: a focus on the individual, equity, effectiveness, integration, safety, timeliness, and efficiency. Important parts of good healthcare are high-quality pharmaceuticals and methods for taking those medications. Despite health services acknowledging the importance of high-quality pharmaceuticals, they continue to be burdened by a persistently poor pattern of medication usage across Europe.

Pharmacists safeguard and uphold health services by managing and overseeing the use of medicines, including antimicrobial stewardship. They provide information and guidance on medication and treatment procedures, customized to ensure the proper use of medicines by both patients and professionals. Pharmacists also operate pharmacovigilance systems to identify and address any negative effects caused by medicines.

Additionally, they work to mitigate risks associated with medicine shortages and counterfeit medicines. In Europe, pharmacists offer patient services, albeit only a limited number of these services are backed by health services. This lack of support hinders the sustainability and effectiveness of these services. The regulation of pharmacists' scope of practice is extensive across Europe. However, these regulations often fail to embrace or acknowledge the role of pharmacists in patient care as understood by health services. As a result, the potential impact of pharmaceutical care has been disregarded in most European countries (Henman, M.C., et al., 2024)

Pharmacy quality measures:

Pharmacy quality measures (PQMs) are standardized, evidence-based metrics that assess many aspects of pharmacy performance. These metrics include evaluating the percentage of persons who were prescribed a dosage exceeding the recommended daily amount for diabetes meds or were given prescriptions that are known to potentially interact with other drugs. Although the idea of measuring healthcare quality is not new, there is a growing interest in specifically evaluating it.

Conclusion:

Pharmaceutical care is an approach to healthcare policymaking that has the potential to lessen healthcare disparities, increase efficiency in the use of pharmaceuticals, and encourage more prudent use of healthcare resources. The safe use of pharmaceuticals is a shared responsibility of all healthcare workers, including pharmacists, and this initiative acknowledges their roles and obligations.

It is the primary responsibility of the pharmacy profession to deliver pharmacy health services of the highest quality. Recently, the health sector has witnessed the emergence of novel positions for various professions, pharmacy being particularly prominent. Historically, the pharmacist was tasked with the production and distribution of pharmaceuticals; however, in the present day, this responsibility has shifted to patient care. As health demands continue to progress, the pharmacist's contribution to patient-centered care expands. Participation by pharmacists is an essential and economical approach to overseeing medication therapies, which will influence both the standard of care provided and the ability to control costs. Nevertheless, there is considerable variation in the quality of pharmacy health services across developing nations, with certain countries falling short of anticipated standards. In developing nations, pharmacists continue to struggle with establishing their identity.

References:

- Moullin, J. C., Sabater-Hernández, D., Fernandez-Llimos, F., & Benrimoj, S. I. (2013). Defining professional pharmacy services in community pharmacy. *Research in Social and Administrative Pharmacy*, 9(6), 989-995.
- Al-Abri R, Al-Balushi A. Patient satisfaction survey as a tool towards quality improvement. *Oman Med J*. 2014; 29(1):3–7. <https://doi.org/10.5001/omj.2014.02> PMID: 24501659.
- Ismail, A., Gan, Y. N., & Ahmad, N. (2020). Factors associated with patient satisfaction towards pharmacy services among out-patients attending public health clinics: Questionnaire development and its application. *Plos one*, 15(11), e0241082.
- Dalton, K., & Byrne, S. (2017). Role of the pharmacist in reducing healthcare costs: current insights. *Integrated Pharmacy Research and Practice*, 37-46.
- Sakeena, M. H. F., Bennett, A. A., & McLachlan, A. J. (2018). Enhancing pharmacists' role in developing countries to overcome the challenge of antimicrobial resistance: a narrative review. *Antimicrobial Resistance & Infection Control*, 7, 1-11.
- Ramya, N., Kowsalya, A., & Dharanipriya, K. (2019). Service quality and its dimensions. *EPRA International Journal of Research & Development*, 4(2), 38-41.
- Ramya, N., Kowsalya, A., & Dharanipriya, K. (2019). Service quality and its dimensions. *EPRA International Journal of Research & Development*, 4(2), 38-41.
- Richey, R. G., Roath, A. S., Adams, F. G., & Wieland, A. (2022). A responsiveness view of logistics and supply chain management. *Journal of Business Logistics*, 43(1), 62-91.
- Idayati, I., Kesuma, I. M., Aprianto, R., & Suwarno, S. (2020). The Effect of Service Quality on Citizen's Expectation through Dimension of Tangible, Emphaty, Reliability, Responsiveness and Assurance (TERRA). *SRIWIJAYA International Journal of dynamic economics and business*, 241-252.
- Bas-Sarmiento, P., Fernández-Gutiérrez, M., Baena-Baños, M., Correro-Bermejo, A., Soler-Martins, P. S., & de la Torre-Moyano, S. (2020). Empathy training in health sciences: A systematic review. *Nurse Education in Practice*, 44, 102739.

Fatima, I., Humayun, A., Iqbal, U., & Shafiq, M. (2019). Dimensions of service quality in healthcare: a systematic review of literature. *International Journal for Quality in Health Care*, 31(1), 11-29.

Rutter, P. (2020). *Community pharmacy: symptoms, diagnosis and treatment*. Elsevier Health Sciences.

Henman, M.C.; Ravera, S.; Lery, F.-X. Council of Europe Resolution on the Implementation of Pharmaceutical Care—A Step Forward in Enhancing the Appropriate Use of Medicines and Patient-Centred Care. *Healthcare* 2024, <https://doi.org/10.3390/healthcare12020232>