

Synergistic Collaboration of Pharmacists and Nurses in Enhancing Patient Care

Fadiyah Jadid Alanazi^{1,2}, Hafeezullah Wazir Ali³, Abeer Nuwayfi Alruwaili⁴,
Afrah Madyan Alshammari⁵, Neelam Singla⁶, Muhammad Irfan Siddique⁷,
Mohd Imran^{2,8}, Abida^{2,8}

¹Department of Public Health Nursing, College of Nursing, Northern Border University, Arar, Saudi Arabia, ²Center for Health Research, Northern Border University, Arar, Saudi Arabia, ³Department of Physiology, College of Medicine, Northern Border University, Arar, Saudi Arabia, ⁴Department of Nursing Administration and Education, College of Nursing, Jouf University, Al Jouf City 72388, Saudi Arabia, ⁵Department of Maternal and Child Health Nursing, College of Nursing, Jouf University, Sakaka, AL-Jouf 72388, Saudi Arabia, ⁶Department of Pharmacy, Suresh Gyan Vihar University, Jaipur, Rajasthan, India, ⁷Department of Pharmaceutics, College of Pharmacy, Northern Border University, Rafha, Saudi Arabia, ⁸Department of Pharmaceutical Chemistry, College of Pharmacy, Northern Border University, Rafha, Saudi Arabia

Abstract

Collaboration between pharmacists and nurses is widely seen as an important synergistic collaboration in enhancing patient care by addressing issues such as drug mistakes, growing healthcare expenditures, and complex illness management. Their combined expertise enhances patient care by optimizing drug therapy, improving patient education, and reducing preventable medication-related issues. This article reflects the synergistic collaboration of pharmacists and nurses in enhancing patient care. A literature analysis was done to investigate research on multidisciplinary interaction between pharmacists and nurses in diverse healthcare settings, with an emphasis on their roles in drug management, patient education, and therapy optimization to reduce any avoidable interactions. Collaboration dramatically lowers medication mistakes, increases patient adherence, and improves overall clinical results, including chronic disease management. Despite the benefits, communication gaps and ambiguous responsibilities hinder successful synergistic collaboration. Addressing these hurdles through improved training and integration of certain healthcare systems software for better collaboration is critical to maximize the advantages of this collaborative effort. Pharmacist-nurse collaboration improves patient care and safety, and overcoming current obstacles can lead to more efficient, patient-centered healthcare systems. Despite the great perks of collaboration, there are certain obstacles to smooth collaborations. These obstacles can be addressed by providing proper training and integration of AI and other technical software for a smooth collaboration. With the partnership between pharmacists and nurses, much scope will be realized to improve patient-centered care. The removal of present obstacles and incitement of closer collaboration will make it possible for healthcare systems to improve clinical results, lower prescription errors, and guarantee more effective and patient-focused care delivery.

Key words: Collaboration, healthcare, nurse, patient care, pharmacist

INTRODUCTION

The topic of patient healthcare has been one of the most widely discussed topics worldwide in the healthcare community. Due to the surge in healthcare services, there has been a rise in numerous challenges in the field too such as limited resources, increased healthcare costs, and increased drug interactions. These drawbacks have seriously affected the healthcare system foundation. There can be several approaches to deal with the shortcomings, out of

which inter-professional collaboration has proved to be one of the most effective ways to deal with this shortcoming. It also helps in improving the overall patient care.^[1]

Address for correspondence:

Abida, Department of Pharmaceutical Chemistry, College of Pharmacy, Northern Border University, Rafha, Saudi Arabia. E-mail: aqua_abkhan@yahoo.com

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The collaboration between nurses and pharmacists has been shown to significantly improve clinical outcomes and optimize patient care. Many studies have shown that synergism between nurses and pharmacists in the primary healthcare system has resulted in improved patient care and decreased drug interactions due to incorrect dosing. It has been observed recently that pharmacists have started playing an active role in this inter-departmental collaboration. In a recent Australian study, it was concluded that establishing collaboration between community pharmacists and nurses provided effective care to psychiatric patients. In this unique study, nurses were given the responsibility of maintaining patient's medical records, management, and referrals while the pharmacist ensured the management of the drugs. The results concluded that based on good communication and the use of proper computer applications for maintaining the data, the treatment turned out to be more effective and profitable as fewer discrepancies were observed. It was also concluded that collaborative efforts of nurses and pharmacists in primary healthcare improved pain management, reduced workload, reduced resource exploitation, and attained a high level of satisfaction.

Pharmacists are the third-largest group of healthcare professionals worldwide, after physicians and nurses. Proper exploitation of their role can not only relieve the workload of doctors and nurses but also provide a better patient healthcare system. In addition, shared knowledge of both nurses and pharmacists has been shown to improve professional relationships, ultimately showing a positive effect on patient care. However, in developing countries such as Pakistan, pharmacists are not yet fully integrated into the healthcare system.^[2] This lack of recognition is due to several factors, including a shortage of practicing pharmacists, limited job opportunities, and poor coordination with other healthcare professionals. Nurses are pivotal in fostering collaboration with pharmacists, as they frequently communicate directly with patients.^[3] By sharing critical information about patient conditions, nurses can help pharmacists tailor therapeutic plans to better meet patient needs. The pharmacist-nurse relationship is particularly important in hospitals that use floor stock systems for medication distribution to the nursing stations in patient care areas.

ROLE OF PHARMACIST IN PATIENT CARE

Medication error has been one of the widely discussed problems in the healthcare setting. The gravity of the problem can be estimated by the simple fact that the Food and Drug Administration receives more than 100,000 cases of medication errors each year. This alarming situation causes havoc in the healthcare system. To bridge the gap in the healthcare system and to ensure a safe and effective education system, a hospital pharmacist plays an important role. Hospital pharmacist monitors the effects of medication

on the patient and counsels the patient regarding its effects.^[4] With the ever-changing healthcare system, the pharmacist's role is not confined to only dispensing the medication at the pharmacy but being a critical partner in the healthcare team to address safety concerns and possible medication interactions. For example, in the case of addictive habit-forming drugs like opioids, pharmacists play a very important role in spreading awareness among the patients about the possible side effects of the drug and ensuring that the medication is not exploited by the patients. In this case, pharmacists are the sole professionals ensuring the medication safety of the patient.^[5] Pharmacists are also increasingly taking on leading roles in opioid stewardship programs in hospitals, where they help with pain management and aim to reduce opioid abuse and related adverse events.

Pharmacists also play an important role in patient care, notably by extending their duties in drug control and patient safety measures. Conventionally, pharmacists offered only vital counseling services and spoke with patients about potential drug interactions and dangerous medicine combinations. This position has evolved to include greater participation in medication reconciliation, particularly after hospital discharge, which has been found to minimize adverse events, hospital readmissions, and even mortality rates in patients.^[6] These new duties highlight the crucial role pharmacists play in optimizing treatment results and improving patient safety.

Moreover, the pharmacist's role has also been integrated into the broader patient care workflow, where their expertise and medical knowledge are utilized at various points to prevent medication errors and improve care quality. Innovative systems, such as pharmacist-led prior authorization for prescription requests, enable prompt and appropriate medicine delivery while decreasing abuse and adverse events.^[7] In addition, pharmacists are becoming increasingly involved in the patient discharge process, where they assess the medicine orders of the patient and counsel them about their uses and side effects. It helps to reduce mistakes and resolve inconsistencies, resulting in safer transitions of care. Furthermore, pharmacists' role is critical in negotiating technological constraints, such as computerized provider order entry systems and automated dispensing cabinets, in which they serve as a key safety net, assuring drug delivery accuracy and safety.^[8]

THE ROLE OF NURSES IN PATIENT CARE

Nurses have critical responsibilities in the healthcare system, including caregiving, patient advocacy, education, and cooperation with other professions. Their responsibilities have grown with time.^[9] They primarily act as caregivers and are responsible for meeting patients' physical requirements. They keep track of their medication intake and proper food administration for easy and early recovery. They also keep track of the patient's vitals. They run a timely diagnosis

to ensure proper recovery of the patients and assure their comfort. Nurses are frequently the first to notice changes in a patient's health, making timely intervention critical, especially in emergencies. They also provide holistic care that considers patients' psychological, cultural, and spiritual well-being.^[10]

Moreover, nurses also serve as advocates to ensure that patients and their families understand and are comfortable with treatment choices. They also educate them about potential side effects for the patient. They provide emotional support by assisting patients in processing their feelings and health-related problems. In a nutshell, nurses act as liaisons between patients and the larger healthcare team, ensuring that the patient's needs and preferences are expressed and respected, particularly when the patient is unable to fully comprehend or control their healthcare decisions. This advocacy also includes protecting the patient's medical, legal, and human rights, as well as collaborating with other healthcare practitioners to make informed decisions.^[11]

Moreover, nurses' continuous evaluation allows them to give critical suggestions in designing the treatment system for the patient. Hence, a synergism between nurses, physicians, and pharmacists can assist in a better caregiving environment for the patient and help in the development of personalized and effective treatment solutions, to achieve the greatest possible health results.^[12]

Education is another critical job for nurses. They ensure that patients understand their medical conditions, treatment strategies, and what to expect during their recovery. This teaching is especially important when patients are discharged and must manage their treatment at home. Nurses take the time to clarify post-discharge instructions, give options for more help, and advise patients on how to stay healthy and manage chronic diseases. Nurses empower patients and their families by providing continuing education and support, contributing significantly to treatment effectiveness and long-term health promotion.^[13]

THE INTERSECTION OF PHARMACIST AND NURSE ROLES

Both nurses and pharmacists have overlapping responsibilities in dispensing care to patients. Both professions are essential to the administration of medications, patient education, and safety.^[14]

Their roles are individual, and their collaborative roles are depicted in the Venn diagram depicted in Figure 1. Their collaboration provides the best possible patient care and chances of medication error are also reduced significantly, making them a vital team in the healthcare system. By offering advice on medicine choice, dosage, and possible drug interactions, pharmacists contribute their pharmacology

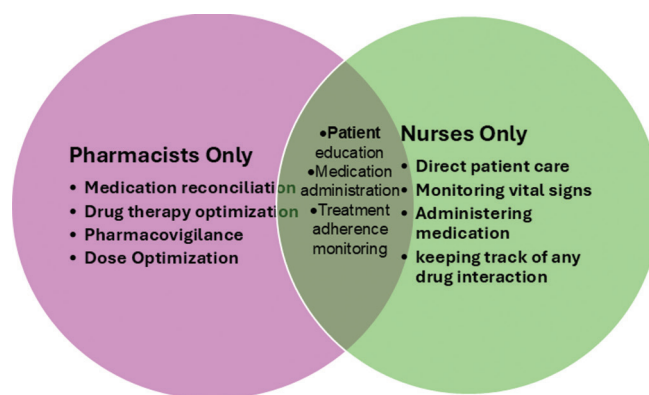


Figure 1: Venn diagram depicting the role of nurse and pharmacist in patient care

expertise, and nurses lend their skills to patient evaluation and monitoring. They work together to create and carry out efficient medication management programs, give out prescriptions, and instruct patients on how to take them and follow their instructions.^[15]

Despite so many advantages of the collaboration between nurses and the pharmacist, their synergism is not utilized to its fullest potential. It can be due to reasons such as unclear position descriptions, poor communication, and workflow issues which might make it difficult for them to collaborate. When pharmacists and nurses properly synergize, they can greatly enhance patient safety by boosting medication safety, medication adherence, and overall patient care. Together, they can proactively avoid, recognize, and handle any medication-related problems such as non-compliance, adverse drug reactions, and errors. Hence, collaborative efforts can improve patient care, reduce patient re-admission, and improve the quality of life of the patient.^[16]

Furthermore, the collaboration is not only beneficial to the patient but also to the healthcare personnel. The collaboration helps in the exchange of professional knowledge and also reduces the workload thereby increasing job satisfaction. By pooling knowledge with different healthcare professionals, they can better manage complicated medical problems and attend to varied patient demands. Through the exchange of evidence-based recommendations and best practices, pharmacists and nurses can foster a more supportive and cohesive work environment.^[17] In addition, this collaboration supports their emotional and psychological well-being, helping to reduce stress and burnout. This would thereby raise the standard of patient care.

Several tactics can be used to improve collaboration even more, including placing pharmacists in designated nursing units to make them more accessible and visible, creating inter-professional education (IPE) and training initiatives, and instituting uniform communication guidelines and instruments.^[18,19] The efforts of both pharmacists and nurses can be acknowledged and valued by fostering an environment

of continuous feedback and appreciation. The following Table 1 depicts the role of pharmacists and nurses in patient care.

BENEFIT OF SYNERGISTIC COLLABORATION

In managing chronic diseases, synergistic collaboration between pharmacists and nurses has proved to be very efficient. It has been shown to improve patient safety and

lower medication errors. Their collaboration has shown even fruitful results in patients suffering from chronic conditions such as chronic obstructive pulmonary disease, diabetes, and heart disease whose treatment requires a multidisciplinary approach to care from a range of healthcare professionals, including nurses and pharmacists.^[28] Both nurses and pharmacists ensure proper medication regimen is followed by the patient for quick recovery. Pharmacists deal with dispensing the correct selection of the drug as per the patient's need and select the appropriate dosage for the patient, whereas the nurses keep an eye on patient responses and adherence. Effective patient management of

Table 1: Role of pharmacist and nurse in patient care

Aspect	Pharmacist's role	Nurse's role	Improved patient outcome	References
Medication Management	<ul style="list-style-type: none"> • Ensure accurate dispensing and verify prescriptions • Check for drug interactions and contraindications 	<ul style="list-style-type: none"> • Administer medications according to physician's orders • Record patient's reactions to medications • Record patient's vitals 	<ul style="list-style-type: none"> • Fewer medication errors • Reduced adverse drug reactions 	[20,21]
Patient Education	<ul style="list-style-type: none"> • Counsel patients on correct medication usage, side effects, and adherence • Provide information about drug regimens and changes 	<ul style="list-style-type: none"> • Educate patients about their overall care plan, medication adherence, and lifestyle modifications 	<ul style="list-style-type: none"> • Improved medication adherence • Greater patient understanding and involvement in treatment • Better patient compliance 	[22]
Therapy Optimization	<ul style="list-style-type: none"> • Adjust medication doses based on therapeutic monitoring and lab results • Review and optimize drug regimens for efficacy and safety 	<ul style="list-style-type: none"> • Monitor patient's condition (vital signs, symptoms) • Report changes in patient status to pharmacists and physicians 	<ul style="list-style-type: none"> • Enhanced therapeutic outcomes • Better management of chronic conditions 	[23]
Medication Reconciliation	<ul style="list-style-type: none"> • Review the patient's current and previous medications for potential conflicts and avoid any duplication or contra-indicated drug combination. 	<ul style="list-style-type: none"> • Record the patient's medication history • Inform pharmacists of any self-medicated treatments or herbal remedies taken by the patient 	<ul style="list-style-type: none"> • Reduced medication-related contra-indication • Better caregiving 	[24]
Collaborative Decision-Making	<ul style="list-style-type: none"> • Provide drug expertise for better clinical decisions • in interdisciplinary care meetings to tailor drug therapies according to patient's needs. 	<ul style="list-style-type: none"> • Offer insights based on close monitoring of patient vitals • Collaborate with pharmacists in developing a tailored care plan for the patient 	<ul style="list-style-type: none"> • Personalized treatment plans • Improved interdisciplinary teamwork and patient-centered care 	[25]
Discharge Planning	<ul style="list-style-type: none"> • Ensure the appropriate discharge medication regimen • Educate patients on how to use medications post-discharge and monitor for any necessary changes 	<ul style="list-style-type: none"> • Prepare the patient for discharge by ensuring they understand their care plan • Take care of follow-up plans 	<ul style="list-style-type: none"> • Reduced hospital readmission rates • Improved continuity of care post-discharge 	[26]
Monitoring and Follow-up	<ul style="list-style-type: none"> • Continuously assess the effectiveness of the given regimen and make changes if required. 	<ul style="list-style-type: none"> • Track patient progress through vital signs and health outcomes • Keep track of the patient's recovery status 	<ul style="list-style-type: none"> • Continuous improvement in patient health • Preventive interventions to avoid complications 	[27]

chronic illnesses, prevention of prescription mistakes, and optimization of therapeutic outcomes are all dependent on this cooperative approach.^[29] It has been demonstrated that integrating pharmacists into interprofessional healthcare teams, where they work closely with nurses, improves patient outcomes and lowers the frequency of problems connected to medication.

In the case of chronic disease treatment, the collaboration between healthcare professionals helps in providing much-needed care and attention to the patient for early recovery. Pharmacists can help to modify the treatment from time to time as per the requirement of the patient and as per the insights given by the nurses based on the response of daily monitoring.^[30] This partnership enables a more personalized approach to care, guaranteeing that treatment programs are not only successful but long-lasting as well. In the management of complicated chronic illnesses, where a multidisciplinary approach is required to address the different components of patient care, such as lifestyle adjustments, adherence to medication, and continuing monitoring, the synergy between these two professions is especially apparent. Moreover, pharmacists can also participate in medication reconciliation.^[31]

The cooperative efforts of pharmacists and nurses not only improve clinical outcomes but also greatly increase patient happiness and trust in the healthcare system. A smooth collaboration and communication between pharmacists and nurses can significantly enhance a patient's overall experience.^[32] Patients are more likely to feel encouraged and confident in their care when they perceive which also in turn helps in faster recovery.^[33] In addition to raising the standard of care, this multidisciplinary approach promotes a patient-centered atmosphere where all aspects of care are coordinated and complete. Patients are therefore more inclined to follow

their treatment regimens, which improves their health and increases their trust in the medical professionals who are providing their care.^[34]

CHALLENGES OF SYNERGISTIC COLLABORATION

Despite so many advantages of the collaboration, the effects are not seen to their full potential due to several factors, especially when it comes to the relationship between pharmacists and nurses [Figure 2]. The lack of sincere dedication by both parties and drive on the part of healthcare administrators is one of the main issues noted.^[34] Efforts can be put into proper training and educating the pharmacists and nurses about collaboration to improve cooperation. But sadly, such training programs are deeply underfunded and lack proper training centers or proper infrastructure, for example, integrated information systems which are necessary to enable productive teaming in the absence of strong leadership backing. Another major obstacle to smooth collaboration is rigidity in the roles of healthcare professionals. Rigid procedures and vertical organizational structures can hinder professional collaboration by limiting communication, limiting access to essential resources, and isolating work settings.^[35] Collaboration efforts are further complicated by cultural hurdles such as professional envy, a superiority complex, fear of change, and individualistic work habits.

Another significant obstacle that prevents pharmacists from working effectively with other medical professionals is the community pharmacy's isolation. It often becomes difficult for the pharmacist to physically work in close relationships with other healthcare professionals due to these physically isolated work locations. Moreover, this seclusion adds to the

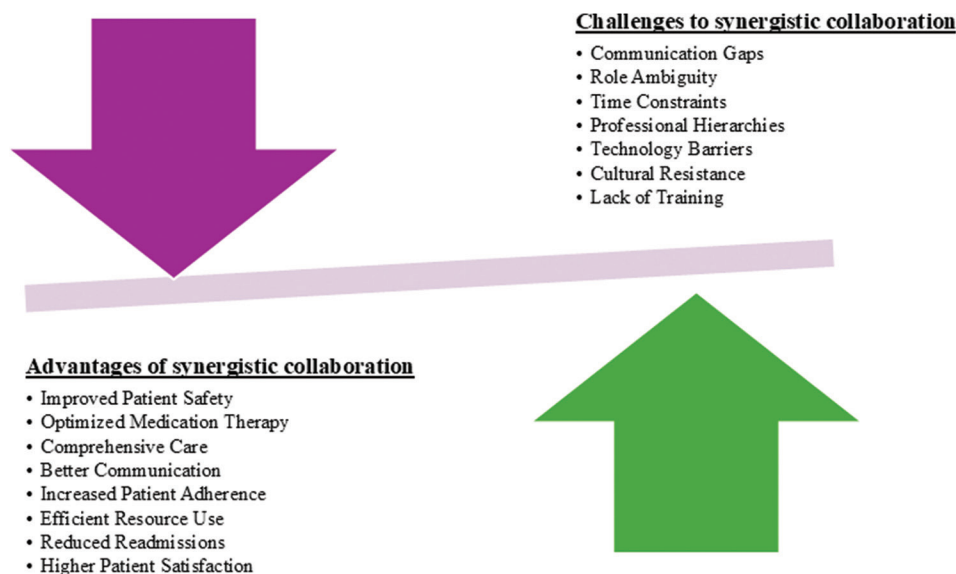


Figure 2: Advantages and challenges in nursing and pharmacist collaboration

Table 2: Challenges of synergistic collaboration between nurses and pharmacists

Barrier	Pharmacist perspective	Nurse perspective	Impact on patient care	Suggested solutions	References
Communication Gaps	<ul style="list-style-type: none"> Lack of timely access to patients' reports like lab results, and diagnosis. Difficulty in receiving feedback from nurses on medication effects. 	<ul style="list-style-type: none"> Limited direct interaction with pharmacists due to workload or shifts. Delays in receiving clarification on medication changes or dosage adjustments. 	<ul style="list-style-type: none"> Delayed interventions and care adjustments. Increased risk of medication errors due to lack of coordination. 	<ul style="list-style-type: none"> Implement shared Electronic Medical Records (EMRs) for real-time access to patient data. Schedule regular interdisciplinary meetings or rounds to discuss cases. Training programs for dividing roles between the nurse and pharmacist. 	[39]
Role Overlap	<ul style="list-style-type: none"> Ambiguity in responsibilities, especially regarding patient education and medication management. 	<ul style="list-style-type: none"> Unclear boundaries regarding medication administration and patient counseling. Confusion of roles may lead to duplicated efforts in educating patients on drug usage. 	<ul style="list-style-type: none"> Confusion among healthcare providers, potentially leading to inconsistent patient advice. 	<ul style="list-style-type: none"> Define clear roles and responsibilities through policies and training sessions. Promote collaborative training on shared tasks like patient education. 	
Time Constraints	<ul style="list-style-type: none"> Limited time to counsel patients directly due to the volume of prescriptions and clinical tasks. Difficulty in coordinating with nursing staff during busy shifts. 	<ul style="list-style-type: none"> High patient-to-nurse ratio leaves little time for collaboration or seeking pharmacist consultations. 	<ul style="list-style-type: none"> Decreased patient education and follow-up care. Increased potential for rushed decisions and missed medication checks. May result in missing important information. 	<ul style="list-style-type: none"> Streamline workflows to allow time for collaborative activities (e.g., joint patient rounds). Implement time-efficient communication tools (e.g., instant messaging in EMRs). Employ more nurses and pharmacists to reduce the work burden 	[40]
Hierarchical Structures	<ul style="list-style-type: none"> Often excluded from key decision-making processes, leading to underutilization of their expertise in medication therapy. 	<ul style="list-style-type: none"> Feel less empowered in decision-making, particularly in complex medication management cases. 	<ul style="list-style-type: none"> Potential delays in optimizing patient treatment plans. Missed opportunities for leveraging interdisciplinary expertise. Clashes between nurses and pharmacists for job supremacy 	<ul style="list-style-type: none"> Foster a culture of mutual respect and equal contribution to care plans. Encourage team-based care models with shared accountability. 	[41]

(Contd...)

Table 2: (Continued)

Barrier	Pharmacist perspective	Nurse perspective	Impact on patient care	Suggested solutions	References
Lack of Inter-professional Education	<ul style="list-style-type: none"> • Insufficient training in how to collaborate effectively with nursing staff. • Limited understanding of the nursing scope of practice. 	<ul style="list-style-type: none"> • Limited exposure to pharmacological principles in nursing education. • Uncertainty about when to consult pharmacists for medication-related questions. 	<ul style="list-style-type: none"> • Missed opportunities for collaboration due to lack of knowledge on when and how to engage. 	<ul style="list-style-type: none"> • Implement joint training programs on collaboration and communication. • Conduct workshops on understanding each other's roles and scopes in patient care. 	[42]
Technology and System Barriers	<ul style="list-style-type: none"> • Difficulty in accessing updated patient data across systems, especially during handovers. • Reliance on paper-based records in some settings which may lead to confusion. 	<ul style="list-style-type: none"> • Inconsistent use of technology platforms, leading to delays in accessing prescription changes or updates. 	<ul style="list-style-type: none"> • Fragmented information flow, leading to errors in medication administration. 	<ul style="list-style-type: none"> • Invest in integrated health information systems (EMRs) that streamline pharmacist-nurse communication. • Standardize the use of digital tools for medication updates and patient records. 	[43]

communication barrier and poor coordination between nurses and pharmacists in primary healthcare settings. Furthermore, this seclusion not only makes it more difficult to efficiently coordinate patient care, but also keeps healthcare personnel from fully comprehending the responsibilities, duties, and competencies of one another.^[36] Collaboration difficulties might be aggravated by mistrust resulting from misunderstandings and previous conceptions from both nurses and pharmacists. As a result, the two professionals can frequently experience a fear of intrusion and professional conflicts due to this lack of mutual understanding because they may believe that their professional autonomy or authority is in danger.

Henceforth, it becomes very important to train and educate the healthcare professionals about the collaboration. Without common educational experiences, healthcare workers might not acquire the abilities and mindsets required for productive collaboration. It is more difficult to create cohesive teams that recognize and value the contributions of all disciplines. All healthcare professionals should keep their superiority complex aside and focus on the main objective of providing the patient with the best healthcare services.^[37] Furthermore, a review of the literature about pharmacist-nurse collaborations reveals that vague job descriptions, a dearth of referrals, and a lack of cohesive team dynamics are common characteristics of poor collaboration. A deliberate effort is needed to address these problems by developing cooperative training programs, outlining precise roles and duties, and establishing integrated procedures that improve collaboration between pharmacists and nurses.^[38] By overcoming these obstacles, healthcare

systems can improve patient care, reduce medication errors, and create a more supportive and collaborative work environment. Table 2 compiles all the challenges of synergistic collaboration between nurses and pharmacists.

FUTURE DIRECTIONS AND OPPORTUNITIES

As discussed earlier, the collaboration of nurses and pharmacists ensures better patient care and reduces medication errors. However, on the downside, if not done correctly it can also lead to great chaos in the healthcare system. Notable improvements in the provision of healthcare are being propelled by new patterns of inter-professional collaboration between pharmacists and nurses. The need for integrated, team-based approaches that depend on the distinct knowledge of each profession is becoming more and more apparent as patient care gets more complex.^[44] The two most common examples of this collaborative approach are patient-centered medical homes and integrated care teams.^[45,46] To overcome the mutual ignorance and invasion anxiety that frequently impede productive collaboration, these models place a strong emphasis on developing trust between healthcare professionals and collaborative training programs.^[47] To establish these cooperative models and provide the groundwork for a more integrated and coordinated care paradigm, it is necessary to not only build trust but also to execute standardized protocols and agreed action plans that are focused on patient outcomes.^[48,49]

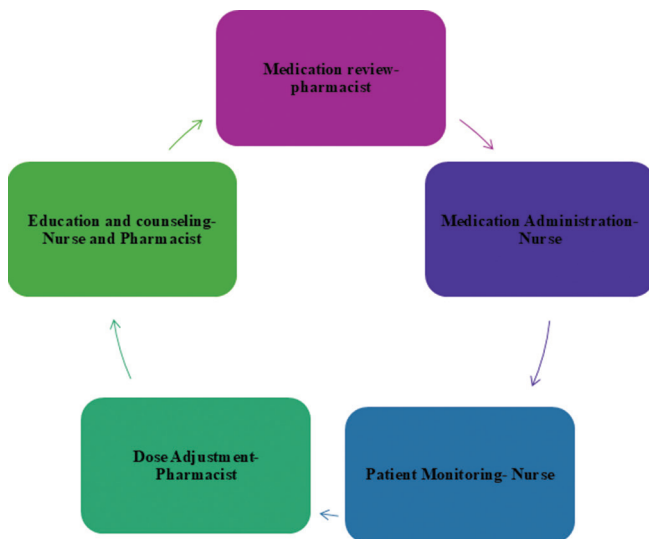


Figure 3: Responsibility of pharmacists and nurses in their synergism

Second, to break down barriers to communication and increase the effectiveness of joint efforts, technology can play a key role. Ranging from electronic prescribing systems to barcode medication administration, technology has stepped into every sphere to revolutionize the conventional way of prescribing and dispensing drugs. Electronic health records (EHRs), clinical decision support systems, and telemedicine can all work together seamlessly to provide real-time cooperation by simplifying patient information access and seamless communication between healthcare professionals.^[50,51]

Furthermore, nowadays there are certain inter-professional communication tools, like shared forums and e-prescription systems, which are crucial in facilitating faster and more seamless communication within the care team. It also helps in building a transparent system which thereby helps in reducing any medication error. In addition, using information and communication technologies, healthcare providers can access and update a patient's medical history while maintaining the necessary security protocols, improving the standard and continuity of care.^[52,53]

Research and development in a variety of areas could improve the working relationship between pharmacists and nurses even more. Establishing and assessing multidisciplinary forums and collaborative initiatives that support shared decision-making and patient-centered care is a crucial priority. Furthermore, as IPE can improve communication and cooperation abilities from the start of professional training, it is crucial to investigate how IPE affects collaborative practice.^[54] Other important areas that might incite innovation in collaborative practices include research into the establishment of joint action protocols, the optimization of communication tools, and the assessment of clinical data produced by pilot initiatives.^[55] Through more efficient and well-integrated care delivery, these initiatives will contribute to ensuring that healthcare systems are better equipped to meet the changing requirements of patients.^[56]

Figure 3 depicts the responsibility of pharmacists and nurses in their synergism.

CONCLUSION

The synergistic partnership between pharmacists and nurses shows a good potential to leverage the healthcare system and improve overall patient care. It guarantees safe and more effective treatment for the patient and prevents unnecessary medication errors. The synergism of pharmacists and nurses in collaborative care models is quintessential in healthcare systems to deal with ever-growing issues like growing costs, drug mistakes, and complex chronic conditions. When the special knowledge from both fields is merged, patient safety and mistake rates are decreased, and overall health results are improved. The advantages of this kind of inter-professional collaboration are indisputable despite several obstacles like a superiority complex, knowledge clash, confused role distribution, communication gaps, and a lack of training opportunities. Together, pharmacists and nurses can optimize drug management, customize treatment regimens, and provide comprehensive, patient-centered care. This collaboration has been widely seen in the healthcare systems of developed countries but is yet to be experimented with in developing and under-developing countries. In the coming years, developing closer relationships between pharmacists and nurses through cooperative procedures, improved communication methods, and shared learning experiences will become more and more important for the future of healthcare. Technical tools like telemedicine and EHRs can improve collaboration and guarantee that all healthcare providers have access to current, correct information. These technologies will also help in bridging the gaps between the healthcare systems and advance the understanding between healthcare professionals. Henceforth to conclude, sustaining interdisciplinary teamwork is the key to tackling the ever-increasing challenge of patient care and providing better outcomes to patients.

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ETHICAL DISCLOSURE

None required.

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