



REVIEW ROLE OF PHARMACIST- NURSES INTERPROFESSIONAL DEVELOPING QUALITY OF CARE

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Abstract:

Pharmaceutical care requires substantial contributions from patients, informal caregivers, the interprofessional team of healthcare professionals, and health care system managers. Before patients to fully benefit from contemporary medicine, parties must collaborate, show mutual respect, and agree on duties throughout the complicated process of pharmaceutical treatment. In this position paper, we analyze the potential for integrated evidence-based pharmaceutical care to enhance care quality and patient outcomes from a nursing standpoint, drawing on literature and policy documents. Although there is agreement on the need of interprofessional cooperation, difficulties in clinical practice, research, education, and policy-making are frequently not dealt with collaboratively. Nurses are expected by healthcare professionals to communicate their observations and assessments. The essential patient information should be shared and discussed by the interprofessional team.

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Introduction:

Medications prescribed and bought are crucial components of patient care. Customizing and optimizing each patient's pharmaceutical regimen to get the most therapeutic benefits while minimizing side effects can be difficult. Pharmaceutical care, which emphasizes optimizing medication usage and enhancing health outcomes, requires substantial contributions from patients, informal caregivers, the interprofessional team of healthcare professionals, and healthcare system managers. Before patients may fully benefit from contemporary medicine, parties must collaborate, show mutual respect, and reach agreement on duties in the intricate process of pharmaceutical treatment.

The Council of Europe approved a new resolution on pharmaceutical care on 11 March 2020. Pharmaceutical care is the appropriate use of pharmacotherapy to achieve certain objectives that enhance a patient's quality of life. Core outcome sets include specific outcomes such as drug-related hospital admissions, drug overuse, drug underuse, potentially inappropriate medications, clinically significant drug interactions, health-related quality of life, pain relief, adverse drug reactions, falls, medication regimen complexity, mortality, and medication side effects. The resolution centers on the implementation of pharmaceutical care to benefit patients and health services. Patients and their families or friends are crucial collaborators in care, contributing to care objectives alongside health care practitioners. They play a crucial role in assessing care and reaching expected care objectives.

Pharmacists can enhance chronic illness care and reduce medication mistakes. Pharmacists are accountable for tasks like medication reconciliation, identifying drug interactions, monitoring drug therapy through laboratory testing, renewing prescriptions, and providing patient education. Pharmacists support patients when medications are no longer necessary or beneficial. Pharmacists have restricted time and funds for patient follow-up outside of clinic hours, yet they frequently work on nonclinical days to address treatment issues or at the request of healthcare professionals. Having pharmacists on the interprofessional care team is expected to positively influence the patient's recovery by lowering medical expenses related to prescription drugs and enhancing the appropriateness of therapy for patients with chronic conditions. The existing functions of pharmacists in this team are inadequately researched and not thoroughly examined [6].

Review:

Two of the most important criteria for effective collaboration among nurses, doctors, and pharmacists in order to provide high-quality treatment and better satisfy the needs of patients are clear definitions of responsibilities and efficient communication within the team [7]. There are several levels of cooperation that are hindered by unclear job boundaries. These levels include the quality of interprofessional communication and collaboration in everyday clinical practice, transnational collaboration in research, education, and innovation, and the mobility of nurses in the workforce [4]. On the other hand, there is not always a clear explanation of the responsibilities that are involved in pharmaceutical care (PC) and medications optimization [6]. The term "professional contribution" (PC) is defined as "the contribution of healthcare professionals to the care of persons in order to optimize the use of medications and enhance health outcomes according to this study." Both the original definition of Hepler and Strand from 1990 [8] and the definition of the Pharmaceutical Care Network Europe (PCNE), which was restricted to the contributions of pharmacists, served as the foundation for this definition. However, the PCNE's definition was confined to the contributions of pharmacists. When all is said and done, the necessity of interprofessional collaboration in the field of PC is widely acknowledged.

A cross-country comparative research that was conducted in 39 different nations revealed that there are significant differences in the functions that nurses play. Nurses have taken up advanced duties previously held by physicians in two thirds of the nations, but the amount of this change varied. There was a growing movement toward broadening the area of practice that nurses might exercise in primary care [4]. According to the findings of the EUPRON research that investigated nurses' current clinical practices in interprofessional pharmaceutical care (PC), there is a significant amount of variance in the roles that nurses play. The results of this study demonstrated that monitoring the effects of medications, monitoring the adherence to medications, prescribing medications, and providing patients with education and information about medications are already components of nurses' clinical practice. Furthermore, the participation of nurses to patient care varies from country to country, both in terms of the legislation and in terms of practice [9]. The whole range of duties, responsibilities, and activities that nurses are trained, competent, and permitted to execute is what is referred to as the

scope of practice—a term that is often used in the nursing profession [10]. In the context of this scope of practice, a framework for nurses' ideal responsibilities in interprofessional PC would make it possible to get insights into present and potential roles in PC, as well as enable conversations in clinical practice, teaching, research, international comparisons, policy-making, and legislation. Furthermore, this framework has the potential to be utilized for the development of an evaluation to assess nursing competencies in personal care, as a guide for evaluating nurse education, as a tool for nurse educators, for benchmarking, and for the purpose of facilitating nurse labor mobility. Despite our best efforts, we have not been able to locate a framework of this kind in the published literature. For the purpose of developing a robust framework that is tailored to the requirements of clinical practice, it is crucial to get insights into the preferences of the most significant stakeholders, which include nurses, physicians, and pharmacists. Conducting in-depth qualitative research is necessary in order to investigate their preferences. Community health professionals, care managers, and social workers are all members of interprofessional healthcare teams. These individuals collaborate directly with patients to guide and manage complex systems, as well as to address health-related needs and minimize barriers to good health. For the purpose of determining whether or not patients are eligible to receive standard care and ensuring that patients adhere to their treatment, interprofessional healthcare teams construct educational interventions that span many disciplines, including nursing, physical therapy, and nutrition. Each individual working in the healthcare industry ought to have a favorable attitude toward the other professionals who are a part of the team, and they should feel at ease in the event that a certain service is carried out by another healthcare expert [11].

In one of the working groups, clinical pharmacists and pharmacist administrators worked together with medical professionals and nursing staff leaders to identify patient demographics who were at a high risk of experiencing adverse effects and to make it easier to prescribe and dispense naloxone solutions. The presence of an interprofessional healthcare team, which includes physicians, pharmacists, nurses, and social workers, led to patients expressing a preference for a certain healthcare venue for the provision of their treatment [12].

Several different kinds of vocations were represented on the team, and the members of the team worked together to accomplish their goals. In

order to successfully collaborate, it was necessary to have a certain degree of openness, a willingness to compromise, and a clear awareness of the roles that each individual played. The partnership that is developed within an interprofessional healthcare team may not only involve a variety of organizations, but it may also include individuals of a variety of age groups. Through the establishment of distinct channels of authority within the nursing profession, a junior doctor and a senior nurse were able to disseminate information on health and patient care. Another sort of professional who was also a member of the interprofessional health care team was a pharmacist who took part in team-based treatment in order to establish network connections with other health providers (for example, physicians and nurses working in health and social service institutions) [13].

As members of an interprofessional healthcare team, pharmacists have proven to be beneficial in the management of chronic illness conditions such as hypertension, diabetes, and hyperlipidemia, as well as in the provision of assistance to smoking cessation programs. Those medical professionals who were also members of the interprofessional healthcare team, such as physicians and nurses, reached out to pharmacists in order to adopt interprofessional treatment adherence methods for patients who were not complying with their prescribed medications in their medical practice at their hospital. Through the process of aligning and reinforcing the importance of nutrition in all areas of expertise, medical professionals such as physicians, nurses, pharmacists, dentists, occupational therapists, physical therapists, and speech and language pathologists have the potential to favorably affect patient care [14].

An interprofessional healthcare team, which is comprised of both prescribers and non-prescribers, was established in order to conduct a complete evaluation of prescription procedures. This team is comprised of interprofessional and multidisciplinary healthcare providers of various disciplines. Individuals who were suffering from chronic conditions such as chronic obstructive pulmonary disease (COPD) and heart failure were treated by a multidisciplinary healthcare team that included physicians, pharmacists, nurses, medical assistants, and health coaches. Self-management kits for chronic obstructive pulmonary disease (COPD) and heart failure were submitted for examination and approval by the team [15].

Partnerships were developed between hospital-

based multidisciplinary teams, which are comprised of specialists who have specialized knowledge in a particular health issue, and the parents of children who have chronic diseases, such as chronic kidney disease. The physicians followed up on the recommendations made by the pharmacists about the administration of medications and advised lessening the division of powers. This was due to the fact that the physicians viewed the pharmacists to be potential partners. The interprofessional healthcare team developed collaborative methods in order to give appropriate support for adjustments in a patient's lifestyle in order to facilitate a more rapid recovery and return to health [15].

Conclusion:

In addition to providing patients with education and information, nurses have an active role in monitoring patients for the impact of their medications, which includes assessing adherence, making choices on medications, and monitoring patients. It has been claimed that there are a variety of duties that fall under these responsibilities; nevertheless, it is necessary to take into consideration the aspects of context, knowledge, and training before nurses may fulfill this ideal function. The most significant challenges that nurses face in the field of personal care are a lack of time, a scarcity of nurses, the absence of a legislative framework, and a lack of education and expertise. The fact that nurses took up responsibilities in PC was, however, connected with a beneficial influence on the quality of care provided to patients and the results of their treatment. It is possible that the observations and evaluations made by nurses will result in the interprofessional team sharing and addressing an important piece of information regarding patients. If nurses were to take on additional responsibilities in primary care, it could have a positive impact on the quality of care and the outcomes for patients. This could include an increase in the amount of professional support that is provided to patients (including in areas where there are few physicians available, such as rural or post-industrial areas), a substitute for the input that physicians provide, a reduction in the amount of time that patients have to wait and the amount of stress that they experience, and, in the case of nurse prescribing, the facilitation of prescription changes in emergency situations.

References:

1. Allemann S.S., van Mil J.W.F., Botermann L., Berger K., Griese N., Hersberger K.E. Pharmaceutical care: The PCNE definition

2013. *Int. J. Clin. Pharm.* 2014;36:544–555. doi: 10.1007/s11096-014-9933-x.
2. Hepler C.D., Strand L.M. Opportunities and Responsibilities in pharmaceutical care. *Am. J. Hosp. Pharm.* 1990;47:533–543.
 3. Beuscart J.B., Knol W., Cullinan S., Schneider C., Dalleur O., Boland B., Thevelin S., Jansen P.A.F., O'Mahony D., Rodondi N., et al. International core outcome set for clinical trials of medication review in multi-morbid older patients with polypharmacy. *BMC Med.* 2018;16:21. doi: 10.1186/s12916-018-1007-9.
 4. Rankin A., Cadogan C.A., In Ryan C., Clyne B., Smith S.M., Hughes C.M. Core Outcome Set for Trials Aimed at Improving the Appropriateness of Polypharmacy in Older People in Primary Care. *J. Am. Geriatr. Soc.* 2018;66:1206–1212. doi: 10.1111/jgs.15245.
 5. De Baetselier E., Van Rompaey B., Batalha L.M., Bergqvist M., Czarkowska-Paczek B., de Santis A., Dijkstra N.E., Fernandes M.I., Filov I., Grondahl V.A., et al. EUPRON: Nurses' practice in interprofessional pharmaceutical care in Europe. A cross-sectional survey in 17 countries. *BMJ Open.* 2020;10:e036269. doi: 10.1136/bmjopen-2019-036269.
 6. Dilles T., Stichele R.V., van Rompaey B., van Bortel L., Elseviers M. Nurses' practices in pharmacotherapy and their association with educational level. *J. Adv. Nurs.* 2010;66:1072–1079. doi: 10.1111/j.1365-2648.2010.05268.x.
 7. Logan V., Keeley S., Akerman K., de Baetselier E., Dilles T., Griffin N., Matthews L., van Rompaey B., Jordan S. Did we do everything we could have? Nurses' contributions to medicines optimization: A mixed-methods study. *Nurs. Open.* 2020;8:592–606. doi: 10.1002/nop2.664.
 8. Vanwesemael T., Dilles T., van Rompaey B., Boussery K. An Evidence-Based Procedure for Self-Management of Medication in Hospital: Development and Validation of the SelfMED Procedure. *Pharmacy.* 2018;6:77. doi: 10.3390/pharmacy6030077.
 9. Dijkstra N.E. Potential Clinical Consequences of Medication Process Problems in Older Home Care Patients. *J. Geriatr. Med. Gerontol.* 2020;6:84.
 10. Dilles T., Van Rompaey B., van Bogaert P., Elseviers M.M. Resident and nurse reports of potential adverse drug reactions. *Eur J. Clin. Pharmacol.* 2015;71:741–749. doi: 10.1007/s00228-015-1848-5.
 11. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews

- and focus groups. *Int J Qual Health Care*. 2007;19(6):349–357. 10.1093/intqhc/mzm042
12. Stringer B, van Meijel B, Karman P, Koekkoek B, Hoogendoorn AW, Kerkhof AJ, et al. Collaborative Care for Patients With Severe Personality Disorders: Preliminary Results and Active Ingredients From a Pilot Study (Part I). *Perspect Psychiatr Care*. 2015;51(3):180–9. 10.1111/ppc.12079
13. Kotel S, Acheson S, Melchiorre S. Stroke prevention in southeastern Ontario: the nursing role and implementation of evidence-based practice. *Axone*. 2007;28(3):14–9.
14. Jack S, Ford-Gilboe M, Wathen C, Davidov D, McNaughton D, Coben J, et al. Development of a nurse home visitation intervention for intimate partner violence. *BMC Health Serv Res*. 2012;12:50. 10.1186/1472-6963-12-50
15. Vaismoradi M, Turunen H, Bondas T. Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nurs Health Sci*. 2013;15(3):398–405. 10.1111/nhs.12048