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THE ROLE OF PHARMACEUTICAL CARE SERVICES AND NURSING CARE SERVICES IN IMPROVING THE QUALITY OF HEALTHCARE SERVICES

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Abstract

Patients, informal caregivers, the interprofessional team of healthcare professionals, and administrators of the healthcare system must all put in a large amount of work in order to provide pharmaceutical care, which is centred on optimising medicine use and improving health outcomes. Cooperation, mutual respect, and an awareness of duties throughout the complex process of pharmacological care are necessary for patients to properly benefit from modern medicine. From a nursing perspective, this study sought to investigate prospects for integrated evidence-based pharmaceutical treatment to enhance care quality and patient outcomes.

Key Words: pharmaceutical care, nursing, healthcare services.

Introduction

Medication purchases and prescriptions are crucial components of medical care. Maximizing therapeutic benefit and minimizing side effects while customizing each patient's pharmaceutical regimen can be difficult. Patients, informal caregivers, the interprofessional team of healthcare professionals, and administrators of the healthcare system must all put in a large amount of work in order to provide pharmaceutical care, which is centred on optimising medicine use and improving health outcomes. Before patients to fully benefit from contemporary medicine, cooperation, respect,

and understanding among all parties about roles throughout the intricate process of pharmacological care are required (Allemann et al., 2014).

A new resolution on pharmaceutical treatment was accepted by the Council of Europe on March 11, 2020. Pharmaceutical care is the deliberate administration of medication with the aim of achieving certain outcomes that improve a patient's quality of life. hospital admissions connected to drugs, drug abuse and underuse, possibly inappropriate or appropriate medicine, clinically important drug-drug interactions, certain outcomes that are recorded in core outcome sets include pain alleviation, adverse drug reactions, falls, medication regimen complexity, mortality, and pharmaceutical side effects. The resolution focuses on how patients and health services might benefit from the use of pharmacological treatment. In addition to being significant collaborators in their care, patients and their friends or family also set the goals of their care after consulting with medical professionals. They play a crucial role in the assessment of care and the accomplishment of planned care objectives (Beuscart et al., 2018).

In order to improve patient outcomes and treatment quality, the resolution recognizes the significance of an integrated interprofessional and multidisciplinary approach. " Health services that are administered and provided in a way that allows individuals to receive a range of services, including disease prevention, diagnosis, treatment, rehabilitation, palliative care, and health promotion, coordinated across various care settings and levels both inside and outside the health sector, and based on their needs over the course of their lives," is how the World Health Organization (WHO) defines integrated health services. Integrative care requires person- or people-centred care as a requirement. Goal-oriented care that places an emphasis on the individual rather than the patient or the illness is known as person- or people-centred care, and it can be provided even in the absence of a sickness. It encourages parity in the interactions between patients and healthcare professionals. This paradigm examines an individual's needs and expectations while taking the patient, family, and community into account. The goal of person-centred care is to give people the knowledge and resources they need to take charge of their own health and make decisions (Scerri et al., 2021).

Therefore, by definition, patient education, constant communication between patients and healthcare professionals, monitoring, and customization of interventions and care are all necessary for people-centred pharmaceutical care. The way that medication is used must be modified to take into account the aims of the patient's care as well as contextual elements such the patient's abilities, expectations for therapy, available funds, informal care, and medication-related beliefs. Intensive interprofessional collaboration is necessary for integrated care. Health care professionals must appreciate each other's contributions and competences as well as recognize common, person-centred goals in order to establish high-quality interprofessional interactions in pharmaceutical care. In order to build confidence and facilitate cooperation and communication, frameworks are required. In the context of interprofessional pharmacological care, nurses play a significant role. Policy makers and administrators must take into account practicality, equity, and cost-effectiveness in addition to the capabilities and preferences of healthcare professionals, while maintaining a constant focus on patient outcomes and quality of care (Dilles et al., 2021).

Aim Of Study

From a nursing perspective, this study sought to investigate prospects for integrated evidence-based pharmaceutical treatment to enhance care quality and patient outcomes. Additionally, it included nursing care services and their importance in raising the standard of healthcare services.

Literature Review

Two essential criteria for successful collaboration among nurses, doctors, and pharmacists to provide high-quality treatment and better satisfy patients' needs are clear responsibilities and effective team communication. Different levels of collaboration are hampered by unclear role boundaries: the standard of interprofessional communication and teamwork in routine clinical practice; international collaboration in research, teaching, and innovation; and the labour mobility of nurses. However, it's

not always possible to find a precise explanation of the roles in pharmaceutical care (PC) and medication optimization. " The role of healthcare providers in individualized treatment to maximize medication utilization and enhance health outcomes" is the definition of PC. To varying degrees, nurses replaced physicians in advanced responsibilities. The wide range of roles that nurses play demonstrated that, while nurses' contributions to PC vary across nations in both law and practice, they are already involved in clinical practice when it comes to prescribing, monitoring medication effects, monitoring medication adherence, and providing patient education and information about medications (De Baetselier et al., 2020).

The entire range of duties, obligations, and tasks that nurses are qualified, skilled, and licensed to carry out is regarded as their scope of practice. A framework for nurses' ideal responsibilities in interprofessional PC within this scope of practice would enable conversations in clinical practice, education, research, international comparisons, policymaking, and legislation, as well as provide insights into current and future roles in PC. Furthermore, this framework may be utilized to create an evaluation tool for nurses' competencies in PC, as a guide for assessing nursing education, as a tool for nurses teaching, for benchmarking, and to facilitate the labour mobility of nurses (De Baetselier et al., 2021).

Pharmaceutical Care Services

The United States' sanitary system underwent a significant transformation in the 1980s as a result of an economic crisis, giving rise to the profession of pharmaceutical care. The notion of Good Pharmacy Practice serves as the foundation for the principles of pharmaceutical care, which take into account both patient care and financial considerations. The goal is to provide medication that is reasonable, evidence-based, and advantageous to both the patient and the community. Modern medications work well and specifically, but in order for patients to receive the most therapeutic benefit and prevent unintended side effects from treatment regimens, they need unbiased information. The patient, doctor, pharmacist, and other healthcare professionals work together on this procedure. Physicians can then, if they think it convenient, make changes to the prescription medication by using the vital information that community pharmacists provide in identifying drug problems or treatment failures. Therefore, it is important to consider the pharmacist's role in pharmaceutical care in the context of maximizing the advantages of medication by guaranteeing certain results that aim to enhance a patient's quality of life (Berenguer et al., 2004).

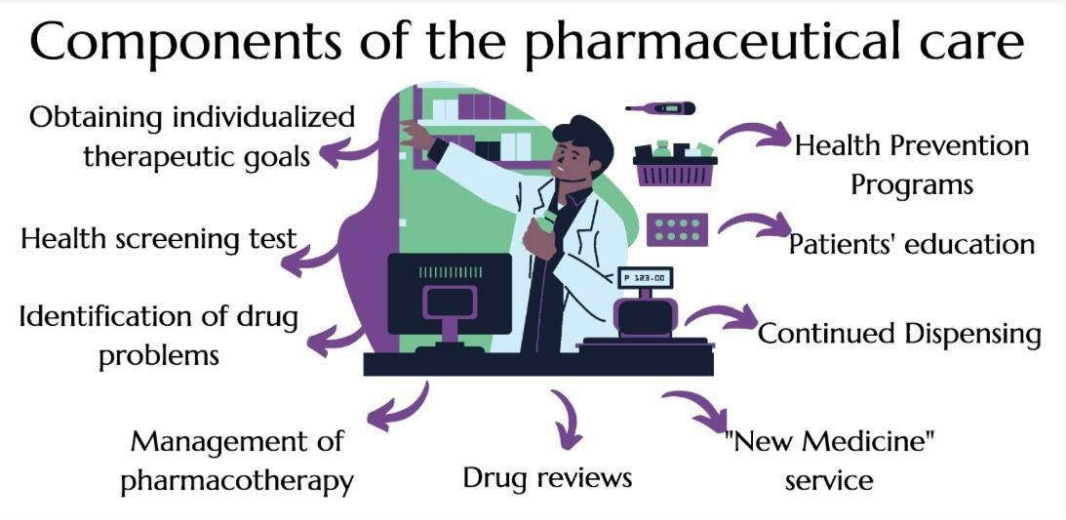

Figure 1. Proposed pharmaceutical services (Waszyk-Nowaczyk et al., 2023).

- **Medication Management**

The use of drugs is a complex behaviour that involves the patient, the doctor, and the healthcare system. Low health literacy, personal and societal opinions regarding the effectiveness of drugs, lack of involvement in the treatment decision-making process, and past experiences with pharmacologic therapy (e.g., side effects) are patient factors that impact adherence. Clinician factors include prescribing complicated and multidrug regimens without understanding nonadherence, failing to communicate advantages effectively, and not communicating well with other prescribers, which include both general care and specialty physicians. Some factors influencing the health system are co-payments for medications and insufficient coordination of care across inpatient and outpatient settings. Managing nonadherence is challenging because of the wide range of patient, physician, and health system factors involved (Kini & Ho, 2018).

Inappropriate prescription practices and medication errors are acknowledged as significant issues for the healthcare system from a clinical and financial standpoint. They can significantly affect patient morbidity and death as well as adverse drug responses (ADRs) and adverse drug events (ADEs), particularly in older patients. Adverse drug experiences (ADEs) may lead to higher healthcare consumption and longer hospital stays, which will raise medical expenses. Healthcare systems bear a heavy financial burden from medication errors, many of which are avoidable. By avoiding hospital admission or shortening hospital stays, pharmacists have been shown to have a positive impact on preventing pharmaceutical errors and restricting improper prescribing, which lowers healthcare costs (LOS). A crucial part of the multidisciplinary team directly involved in patient-centred care is made up of hospital pharmacists. Pharmacist-managed pharmaceutical therapy has been linked to lower rates of medication mistakes, adverse drug reactions, death, and length of stay (LOS) when provided as a fundamental clinical service. Hospital pharmacists are working at advanced clinical levels in a

variety of specialized roles in many developed nations. They are also working with more independent and/or supplemental pharmacist prescribers. Specialization enables pharmacists to serve patients or a specific patient group with improved care; as a result, it may help save costs for healthcare provider (Dalton & Byrne, 2017).

- **Patient Education**

A significant portion of transitional care's information and education component can be fulfilled by pharmacists. Prior research indicates that the participation of pharmacists in the discharge procedure can lower the frequency of adverse drug events (ADEs) and improve patient satisfaction. Regarding the impact of thorough medication education and follow-up calls by pharmacy team members on medication errors (MEs) and adverse drug events (ADEs), there are contradicting statistics. Reducing or ceasing medication that is no longer needed or that could be harmful is known as deprescribing. Primary care physicians list several obstacles to deprescribing, including a lack of time, a lack of knowledge about the risks associated with drugs, fear of withdrawal symptoms, and patient backlash. When it comes to maximizing drug management in older persons, pharmacists can help doctors. It has been demonstrated that safer prescribing practices arise from pharmacist assessments of medications followed by direct communication to the prescribing physician (Phatak et al., 2016).

- **Monitoring and Follow-up**

Raising the complexity of the patient (multimorbidity) and the therapy (polypharmacy) increases the likelihood of drug-related issues such as adverse events and medication errors. Avoidable issues typically stem from inefficient systems rather than personal misbehaviour. These hazards' consequences, including drug-related morbidity, are linked to high healthcare expenditures. Drug-related problems (DRP) are more likely to occur in situations involving polypharmacy, substantial changes in medication therapy or changes in pre-existing diseases, inadequate response to medication, suspected absence of therapy, side effect symptoms, and hospital discharge with a changed medication regimen. A method to lower the likelihood of having DRP is to perform drug reviews. There's a global shift in the role of pharmacists in the workplace. Pharmacists carry out patient care duties and are involved in clinical procedures on a growing basis. Co-responsibility for achieving therapeutic success, cost effectiveness, and preventing drug-induced (re)hospitalization is part of this profession's evolution (Messerli et al., 2016).

Along with reforms to pharmacists' pay that tie payments to services rendered rather than just the amount of medications dispensed, a postgraduate education program and required continuing education were introduced. The current compensation structure was implemented in 2010 and establishes a schedule of fees for nine different services. Among these services, the "Poly medication Check" (PMC) was just unveiled as the first cognitive service for patients on at least four prescribed medications used over at least three months that pharmacists would provide without consulting the clinician. Among other actions, the pharmacist may also recommend giving the medications in a weekly dosing aid (WDA) that is supplied by the pharmacy. The basic insurance plan of the health insurance pays for both the PMC and the weekly dosage aid filling by the pharmacist. Furthermore, for a maximum of 12 months, the existing legislation permits the repeated dispensing of prescription medications. " an assessment of a patient's prescription regimen with the aim of maximizing drug

usage and enhancing health results" is what a medication review entails. This comprises identifying drug-related issues and suggesting appropriate courses of action. An inventory of existing medications, a history of complaints and their progression, a patient's worries, and specific support needs are all part of the analysis in a medication review. When it comes to the pharmaceutical care process, the medication review is the first step that leads to solution suggestions, intervention planning and execution, and outcome evaluation (Viswanathan et al., 2015).

- **Promoting patient safety**

There is inadequate patient safety when it comes to pharmaceutical care. Standardized international pharmacotherapy curricula and assessments for pre- and post-registration nurse education should be adopted in order to allow nurses to fulfil practice requirements and realize their full potential while maintaining comparable standards of care at the national, European, and global levels. A focus on patient outcomes is necessary to prevent dangerous pharmaceutical practices, minimize preventable harm caused by medications, and satisfy the WHO's third patient safety challenge (Newman, 2011).

Nursing Care Services

The quality and adequacy of healthcare services can be evaluated by looking at the views and satisfaction of patients and their families. Patient satisfaction with healthcare services is seen to be the most important indicator of the calibre of care received. By giving essential performance data, patient satisfaction measurements aided in overall quality management. Comprehensive quality control includes professional competence, application of pertinent technologies, and patient evaluation of the type and quality of care received. In today's consumer-driven healthcare markets, hospital quality management systems mostly depend on a patient-cantered indicator of satisfaction with the standard of nursing care received. Patients require a proper diagnosis, appropriate treatment, functional restoration, and/or symptom relief. Customers will switch healthcare facilities they applied to for treatment and care if the outcomes are not good (Goh, et al., 2016).

Figure 2. Nursing Care Services (SIDRAH CARE, 2020).

- **Patient Advocacy**

In standard English, advocacy has two related meanings. One meaning is "public support for or recommendation of a particular cause or policy". The other meaning is "the profession or work of a legal advocate." Numerous empirical research have looked at patient advocacy from the viewpoints of nurses and patients. These investigations have led to the following characteristics of patient advocacy: patient empowerment, client education, protection, continuity of care, follow-up, patient empathy, counselling, shielding, and whistleblowing. From the perspective of clinical nurses, advocacy is characterized by two key components: "empathy with patients," which entails comprehending, sympathizing with, and feeling a strong connection with the patient, and "protecting patients," which involves patient care, placing the patient's health first, being dedicated to seeing the patient through the entire treatment process, and defending the patient's rights. The process of advocating for patients who are at risk is intricate and calls for skilled nurses, guidelines, and understanding supervisors. This concept's analysis can aid in the creation of managerial or educational theories, tools for assessing nurses' patient advocacy efforts, tactics for enhancing patient advocacy and raising the bar and ensuring the security of nursing care delivered both outside and inside the healthcare system (Abbasinia et al., 2020).

- **Care Coordination**

Complexity is increasing the demand for more community-based primary healthcare physicians who are capable of coordinating care both within and between primary care settings. Globally, millions of people have complicated demands that go beyond what is normally offered by the healthcare system. Patients with complex needs must take primary responsibility Because health and social care services

are dispersed, people are responsible for navigating the systems on their own and see them as being daunting and complex. For these people, the integration of social and health care services and care coordination are even more crucial. Professionals from a range of backgrounds, including nursing, social work, physiotherapy, and occupational therapy, can perform the role of care coordinator in primary healthcare as long as they have the necessary education and training. The selection of a designated care coordinator is influenced by various factors such as the program's objectives, the demography of interest, and contextual circumstances. A holistic approach to care that addresses both the more general determinants of health and clinical/medical issues is, in fact, a fundamental component of care coordination. This viewpoint is what granted social workers and nurses their rightful place in planning and overseeing the care of a complex population (Karam et al., 2021).

- **Patient Education**

Healthcare institutions have implemented many techniques to enhance medication education for patients and/or caregivers before discharge. These tactics include motivational interviewing, the "teach-back" method, and providing pillboxes and reminders. One-hour instructional workshops and the provision of written materials to patients and their families are other measures. However, there is no set method for teaching patients about medications, and healthcare professionals cannot agree on who should teach them. Nurses require more education on the following topics: easily accessible resources for medication education, the significance of efficient medication education for patient safety, and chances to work in conjunction with pharmacists (Bowen et al., 2017).

- **Monitoring and Assessment**

Nurses have collected clinical and physiological data and assessed the patient's status by visiting the patient's bedside at predetermined intervals till now in order to conduct vital sign monitoring. The staff's knowledge and experience leaves room for significant variations in practice between wards and hospitals using this paradigm. Patients may significantly deteriorate in between monitoring intervals, and the system is susceptible to important data being delayed or missing during peak hours or staff-light periods, such as weekends and evenings (Cardona-Morrell et al., 2016).

- **Infection Control**

ICU nurses are essential in preventing and managing healthcare-associated infections (HAIs) because they provide basic hygienic care, clinical observation and monitoring of infection-sensitive body sites (like surgical wounds or catheter insertion sites), monitoring systemic signs of infection, organizing and carrying out quality improvement initiatives, conducting appropriate microbiological sampling, and managing antibiotic stewardship. The number of device-associated HAIs has significantly decreased as a result of ongoing infection prevention measures (Blot et al., 2022).

- **Emotional and Psychosocial Support**

Being in close touch with patients all the time, nurses are in a great position to support family members in meeting their requirements and coping with the difficult situation. Nonetheless, family members' demands are frequently disregarded because nurses are educated to concentrate largely on the nursing

needs of patients. Families and nurses placed differing priorities on the needs, however both groups highlighted the importance of family needs, which families viewed as being more significant (Shorofi et al., 2016).

Conclusion

The provision of pharmaceutical care requires a great deal of work from patients, unpaid caregivers, the interprofessional team of medical experts, and managers of the healthcare system. In order for patients to derive the maximum benefits of contemporary medicine, collaboration, mutual respect, and role clarification are necessary during the complex process of pharmaceutical care.

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