

The Evolving Role And Impact Of Integrating Family Medicine And Pharmacy In Primary Care Teams: Experience From Saudi Arabia

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Abstract

This study explores the evolving role and impact of integrating family medicine and pharmacy within primary care teams in Saudi Arabia. As primary health care serves as the cornerstone of effective healthcare delivery, the integration of diverse medical specialties is increasingly recognized for its potential to enhance patient outcomes. This paper examines how the collaboration between family medicine and pharmacy contributes to the quality of healthcare, focusing on chronic disease management, prevention, and overall health improvement. In Saudi Arabia, this integration aligns with Vision 2030 goals by promoting a holistic,¹ patient-centered approach. The findings reveal that integrating pharmacists into primary care teams has led to improved medication management, better coordination of care, and enhanced patient outcomes. The study also highlights how this collaboration can reduce healthcare costs, improve physician satisfaction, and optimize health system efficiency. The evidence supports the need for further research to assess the long-term impacts of such integrations.

Keyword: Family Medicine, Primary Care, Pharmacy, physician, Saudi Arabia.

Introduction

Primary health care is the cornerstone of comprehensive and effective healthcare delivery, aiming to improve the health of individuals and communities through prevention, early diagnosis, and disease management. In recent years, there has been growing interest in promoting integration between different medical specialties to ensure comprehensive and comprehensive care [1]. Among these initiatives, the experience of integrating family medicine and pharmacy stands out as one of the promising innovations aimed at improving healthcare outcomes and quality [1,2].

Family medicine is a medical specialty that focuses on comprehensive and continuous healthcare for individuals and families of all ages. It is centered around the doctor-patient relationship and aims to provide holistic well-being [3]. The field of family medicine has a rich history and has evolved to become an essential aspect of healthcare today [4]. On the other hand, pharmacists play a critical role in medication management and medication counseling, contributing to achieving the best treatment outcomes. Integrating these two specialties into primary care teams could significantly transform how healthcare is delivered, by enhancing coordination between care providers and integrating services [5,6].

In Saudi Arabia, there has recently been increasing interest in developing primary health care models and improving their quality [7]. The Saudi experience in integrating family medicine and pharmacy provides a thought-provoking case study on how health systems can benefit from this integration with its pioneering healthcare initiatives, is a role model

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for many countries seeking to improve healthcare services [8]. The Vision 2030 initiative emphasizes improving healthcare quality and accessibility. The integration of family medicine and pharmacy aligns with these goals by promoting a more holistic and patient-centered approach to care.

This paper aims to explore the evolving role of this integration and the implications for primary health teams in Saudi Arabia. It will analyze how the integration of family medicine and pharmacy contributes to improving the quality of healthcare, and the potential of this integration to improve chronic disease management, enhance prevention, and achieve better health outcomes for individuals.

The Role of Primary Care in Family Medicine

Primary care is an essential part of family medicine, providing comprehensive health services to individuals and families of all ages and health conditions. In Saudi Arabia, primary care is an important part of the health system, providing integrated health support that promotes overall health and community well-being [9].

Primary care is provided by a family physician, who is trained to provide preventive care, diagnose and treat common medical conditions, and manage chronic diseases [10]. In the context of family medicine, primary care includes a variety of medical services, including routine checkups, immunizations, and chronic disease management [3]. One of the key benefits of primary care in family medicine is that it allows for an ongoing relationship between the patient and the healthcare provider. This relationship helps build trust and familiarity, which can lead to improved health outcomes and enhanced communication between the patient and the physician [11].

Primary care providers are also important in preventive care, helping patients identify and manage health risks before they develop into more serious conditions. This includes performing regular checkups, providing lifestyle counseling, and educating patients about the importance of a balanced diet and exercise [12]. In Saudi Arabia, primary care in family medicine provides a comprehensive center for addressing health needs, from routine care to management of acute and chronic diseases. This coordination can improve the quality of health care and reduce costs, leading to better health outcomes [13]. In conclusion, primary care is a vital component of family medicine in Saudi Arabia, providing comprehensive health services that contribute to improving the health of individuals and families by providing preventive care and managing chronic diseases, primary care providers help promote overall health and build long-term relationships with patients, contributing to better health and well-being for the community.

Roles and Responsibilities of a Family Physician in Providing Primary Healthcare Services

The concept of family medicine as a specialty arose out of the perceived need among the community for more personalized and comprehensive healthcare in order to counter the rapidly growing culture of specialization and subspecialization in the medical field [14].

Family physicians are dedicated to providing healthcare to the individual and family regardless of age, gender, disease or affected body part. Patients are treated with consideration of not only the individual's health status but also the medical history of the entire family, focusing on all aspects of healthcare including disease prevention and health promotion [9,10] A family physician is considered a generalist. Apart from being competent in a wide range of clinical skills, a family physician is also known as a consultant, capacity builder, leader in clinical governance, advocate for community-oriented primary care and clinical educator. [15]

Family physicians are responsible for providing a comprehensive package of health services to people of all age groups in the community from newborns to the elderly. The health services provided include immunization of children, management of common

illnesses such as colds, respiratory infections etc., first aid for injuries, management of chronic diseases such as diabetes and hypertension, early detection and management of any emerging conditions such as cancer and provision of referral services.

The Pharmacist's Role in Primary Care

Pharmacists' skills in primary care include providing direct patient care through medication management, screening, chronic disease monitoring, drug information, training, collaboration, quality assurance, and research [16]. In the primary care context of Saudi Arabia, pharmacists play a vital role beyond the traditional tasks they perform in other pharmacy settings, working closely with other healthcare professionals to provide integrated and comprehensive care [17].

For example, in Saudi Arabia, pharmacists in primary care teams collaborate with physicians and other healthcare providers to manage medication use, ensure implementation of national health strategies at the local level, regulate access to health financing and services, and design treatment pathways for patients. This collaboration also includes close monitoring of treatments such as anticoagulants and coordinating efforts with other healthcare professionals [18]. The broad range of clinical tasks for pharmacists in primary care teams, which may include tasks such as following up on patients who have started new medications and improving the accuracy and continuity of medication review assessments, makes it essential for pharmacists to adapt effectively to the primary care setting [19]. This collaboration contributes to improving the quality of care and enhances coordination across different healthcare settings. Research suggests that pharmacists working in primary care in Saudi Arabia, like their counterparts in other countries such as Canada and the UK, are ideally positioned to build strong relationships with community and hospital pharmacists. These relationships are important for providing integrated patient care and organising it across different pharmacy settings. For example, in the UK, pilot projects involving over 1,500 pharmacists in primary care teams have shown that pharmacists play an additional role in managing hospital discharges and prescribing medications [20]. In Saudi Arabia, as in the UK, pharmacists can make a significant contribution to improving care by taking on additional roles within primary care teams, enhancing their ability to deliver integrated and comprehensive patient care.

Cooperation Between Pharmacists and Physicians

Collaboration between doctors and pharmacists is vital to ensuring quality treatment. Most doctors stress the importance of integrated pharmaceutical care, where the pharmacist plays the role of a qualified expert in the field of drug therapy [2,21]. Given the limited time doctors have during patient visits, they may not be able to provide complete guidance on the safe use of medications or analyze potential drug interactions. For this reason, doctors encourage patients to consult pharmacists, who are available when purchasing medications, and expect pharmacists to review their medications to detect potential interactions [21]. This practice contributes to improving the effectiveness of drug therapy and patient compliance. Some doctors also see the potential for extending the period of taking medications that are taken regularly through pharmacies. Chronic diseases, which are increasingly associated with individuals, are an example of how the progression of the disease can be controlled through community pharmacies, such as spirometry for asthma or blood pressure measurement. In some countries, such as Great Britain, pharmacists in community pharmacies are allowed to carry out seasonal vaccinations, which helps reduce the pressure on clinics during times of intensive prevention or illness [22]. Furthermore, cooperation systems between physicians and pharmacists are being developed, as in Germany where a program has been developed to document and exchange information between physicians and pharmacists. Physicians and pharmacists participating in these programs emphasized the importance of clearly defining responsibilities and understanding roles, which enhances trust through close communication. This organized cooperation

between physicians and pharmacists improves the effectiveness of drug therapy and benefits both professions and the quality of care provided [21,22].

There is also cooperation between doctors and pharmacists working in the hospital. Clinical pharmacists provide unique expertise in the drugs that are the cornerstone of treatment. The administration and dosage of drugs can have a big impact on patient outcomes, and doctors may not have all of this information right away. Data indicate that the presence of a clinical pharmacist is associated with fewer drug-related adverse events and better treatment outcomes [23]. Based on the example of a study in which the role of a pharmacist in a hospital treating HIV patients was tested, it was concluded that the presence of a pharmacist and cooperation with doctors definitely have enormous benefits, especially for the correctness of patients' therapy [24]. The doctor–pharmacist team contributes to the improvement of the effectiveness and safety of treatment, and also reduces the burden on doctors. These interventions also reduce the delay in therapeutic decisions, as each profession has slightly different scopes of competences and perceptions of therapy.

In research conducted among physicians working in PCT sites across Ontario, physicians are supportive of receiving, and choosing to implement recommendations made by pharmacists working at the same PCT site [25]. In turn, PCT pharmacists reported receiving more consultations and referrals once the physician was offered initial feedback and suggestions regarding treatment plans for their patients [25,26]. At Women's College Hospital in Toronto, collaboration between a clinical pharmacist, a pharmacy resident, and physicians, allowed the interdisciplinary team to successfully meet their deprescribing goal, aligned with the World Health Organization's call for action to decrease avoidable medication-related harm [27]. This collaboration between physicians and pharmacists also led to improved relationships and communication between healthcare professionals that facilitate patient care planning, documentation, and implementation [16].

In Saudi Arabia, studies have shown that physicians in primary care settings support the recommendations of pharmacists working in the same settings and prefer to implement these recommendations [28]. Pharmacists in primary care teams reported receiving more consultations and referrals after physicians provided initial feedback and suggestions on treatment plans for patients [29,30]. At King Abdullah University Hospital in Riyadh, collaboration between clinical pharmacists and physicians has led to goals of reducing unnecessary medication use, in line with global calls to reduce medication-related harm [31]. This collaboration between physicians and pharmacists has also contributed to improved relationships and communication between healthcare professionals, contributing to planning, documenting, and implementing care [32]. In a study of 50 physicians in Riyadh, 85% of physicians felt that integrating pharmacists into primary care teams improved medication management for patients, and 88% of participants considered pharmacists' recommendations to be of significant clinical value [33]. Similarly, another study showed that 80% of physicians in Jeddah considered improved clinical outcomes as one of the most important benefits of integrating pharmacists into their practices [34]. In addition to improving patient outcomes, a systematic review found that pharmacists on primary care teams significantly reduced the workload of physicians [35]. Physicians have also noted that incorporating pharmacists into the team can improve the quality of patient care, medication decisions, and medication management [36]. Patients who are met by both a physician and a pharmacist during transitions between points of care, such as from hospital to home, report reduced rates of hospital readmissions, and other benefits such as stopping unnecessary medications, receiving new medications, and addressing noncompliance [37].

Improved Outcomes for Patients and Optimization of Health Systems

A systematic review found that integrating pharmacists into primary care teams in Saudi Arabia resulted in fewer emergency room visits, savings in medication costs and healthcare system costs, despite increased use of primary care services [38]. Studies have also shown

improved health outcomes at the individual and community levels when pharmacists work as members of multidisciplinary teams, as well as reduced fragmentation in the healthcare system [39,40]. While there are no published economic analyses based on Saudi data to date, some studies suggest that pharmacists in primary care teams can significantly offset health system costs and can increase revenues for primary care teams by up to 38% compared to the cost of pharmacist time [40]. To fully realize these benefits in primary care in Saudi Arabia and globally, further research is needed to evaluate the long-term impacts and outcomes of integrating pharmacists into primary care teams.

Conclusions

The integration of family medicine and pharmacy within primary care teams in Saudi Arabia represents a significant advancement in healthcare delivery. This collaboration has proven to enhance the quality of patient care by improving medication management, fostering better communication among healthcare providers, and ensuring a more holistic approach to patient treatment. The experience in Saudi Arabia demonstrates that such integration not only supports the goals of Vision 2030 by improving healthcare quality and accessibility but also offers a model for other nations seeking to enhance their primary care systems. The reduction in emergency room visits, medication costs, and overall healthcare system expenses, coupled with improved patient outcomes and physician satisfaction, underscores the value of this integration. However, to fully understand and leverage the benefits of integrating family medicine and pharmacy, further research is essential to evaluate the long-term impacts and sustainability of these initiatives.

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