

New integrations in patient care: the role of the pharmacist between counselling and medication adherence

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Summary

The changing scenarios in healthcare in recent years underscore the need to promote diverse, articulated, and complex care approaches capable of paying greater attention to people's vulnerability and responding to multiple care needs. A multidimensional approach to healthcare also suggests a review of the role that pharmacies can assume within the healthcare system, with particular regard to the possibility of creating a relational space with the citizen aimed at strengthening the fiduciary relationship

with him or her and promoting greater user empowerment in therapy adherence.

The promotion of this ethically relevant service could yield several benefits: greater protection of public health, rationalization of public spending, and shifts in the demand for healthcare services. This paper aims to illustrate some socially and ethically relevant aspects of collaboration between pharmacists, general practitioners, and pediatricians of free choice.

Introduction

SCIENCE AND HUMANITY

The various health emergencies that periodically occur in our society have highlighted the necessity for effective public health interventions with a global vision, fostering alliances and involving multiple contexts. This requires the utilization of diverse health and non-health skills and professionals, following an intersectoral approach [1, 2]. For some time, medicine has recognized the importance of engaging with and enriching itself through contributions from other sciences. This integration aims to better humanize health services, emphasizing the centrality of the patient in their functional choices and psycho-physical well-being [3, 4].

This acknowledgment has led to a gradual acceptance of the systemic view of the patient and a reevaluation of the role that a strong relationship and effective communication play in the therapeutic context. Notably, in Italy, the significance of attentive, sensitive, and welcoming communication in the care relationship has been explicitly recognized in a national law (Law No. 219 of 2017, "Regulations on Informed Consent and Advance Treatment Provisions").

This law establishes that "communication time is care time," representing a significant innovation by legally endorsing an ethical approach grounded in recognizing the importance of a systemic and comprehensive view of the person, founded on listening, relationship, and proximity, as well as on the recognition of the growing attention towards the will of the minor [5, 6].

Not coincidentally, this principle has been incorporated into a provision already existing for years within the Medical Deontology Code [7, 8]. The legal recognition is reinforced by explicit legislative provisions for the specific university training of physicians and health professionals in relationship and communication with patients, aimed at acquiring competence based on specific knowledge and skills.

Similar to physicians, patient education and information represent an essential ethical component of the pharmacist's activity. Given the continuity and consistency of the counseling relationship that often occurs with their clients, pharmacists can play a particularly significant role in promoting proactive health behaviors.

To emphasize the ethical and educational aspects over the commercial side, pharmacists can engage in various practical activities. For example, they can regularly host workshops or seminars focused on patient education, covering topics like disease prevention, proper medication use, and lifestyle changes, thus promoting a more community-oriented and participatory approach to health. Furthermore, offering personalized medication therapy reviews helps patients better understand their treatments, enhancing therapeutic adherence and effectively addressing their specific needs. Another crucial element is active participation in health promotion campaigns, such as vaccination initiatives or preventive screenings, while also providing tailored consultations based on community requirements.

Simultaneously, the complexity of providing adequate responses to the growing demand for health, the

progressive increase in life expectancy, and the continuous rise of chronic diseases, in the face of limited resources, necessitate the identification of articulated and multifaceted approaches, as well as new models of relationships among different health professionals. This is particularly relevant between general practitioners (GPs) and pharmacists.

In the peculiar situation of vulnerability experienced by individuals facing illness, where discomforts can be exacerbated by multiple contingencies (age, strong emotionality, absence/shortage of family and friend networks, loneliness, comorbidity, etc.), patients need to express requests, doubts, uncertainties, and emotions to competent and easily accessible professional practitioners. These professionals should provide support and guidance in their care, offering clear and understandable information and instructions.

For these reasons, it is crucial to benefit from the support of professionals with solid communicative skills (linguistic, paralinguistic, kinesic, proxemic, performative, socio-cultural, etc.) and relational skills. These professionals can promote and support local community-based medicine capable of addressing and meeting the vulnerabilities and loneliness of a significant portion of the population lacking familial or social support networks. Often, these individuals do not find attention and listening when in need.

In this new multidimensional approach to healthcare, based on the integration of scientific and humanistic expertise, attention has grown towards counseling skills considered essential for ensuring optimal therapeutic outcomes. Simultaneously, counseling plays a crucial role in empowering the patient as the main actor in managing their health, rather than being a passive recipient of treatments.

Rollo May, considered one of the most important representatives of humanistic-existential psychology and, along with Carl Rogers, Abraham Maslow, and Thomas Gordon, one of the founding fathers of counseling, defines the counselor through his goal: "The counselor's task is to assist the client in the search for their true self and then to help them find the courage to be that self" [9]. This non-directive approach is based on the recognition of the latent capacity of the human being, albeit not manifested, to understand oneself to the extent required for solving one's problems. It also acknowledges the capacity to reorganize one's personality to achieve the level of satisfaction necessary for proper functioning.

The counselor's task, therefore, is to foster the development and utilization of the potentialities inherent in the person assisted, using the tools of listening and dialogue. The goal is to accompany the person in self-discovery and aid them in overcoming personality issues that prevent them from fully and freely expressing themselves in the external world.

Counseling finds application in various healthcare settings, particularly in genetic disease centers, oncology facilities, and coronary units [10-12].

Moreover, counseling represents one of the most important

services that the pharmacist, freed from a merely technical role, can offer to enhance personal resources, especially for those who are more vulnerable, such as the elderly, disabled individuals, and those who, for various reasons, require special attention and protection.

The increasing role of pharmacists in providing counseling and collaborating with general practitioners has undoubtedly expanded their responsibilities. However, it is essential to recognize that this increased workload, along with the additional time required for counseling and coordination, needs to be adequately compensated [13-15].

Failure to address this aspect could risk undermining the sustainability of these expanded roles within the healthcare system.

To further substantiate the value of pharmacists' contributions, a cost-benefit analysis should be conducted, exploring the long-term economic and health advantages of these services. Such analysis should consider not only the potential cost savings achieved through improved medication adherence and reduced hospitalizations but also the investment needed for the continuous and specific professional development required for pharmacists to stay updated and effective in their roles.

Additionally, recognizing the financial impact of expanded responsibilities on pharmacists' professional commitments is crucial. Adequate compensation and funding for continuous education initiatives are essential to ensure pharmacists can provide high-quality, patient-centered services without facing undue financial or professional strain.

This financial and professional recognition would ensure the sustained integration of pharmacists into the broader healthcare framework, enabling them to provide high-quality, patient-centered services while addressing the challenges associated with their expanded scope of practice.

However, as pharmacists take on a more active role in counseling patients, it is essential to acknowledge the ethical and medico-legal challenges that may arise in this context.

One of the primary concerns is the risk of overstepping professional boundaries, as pharmacists must be careful to provide guidance without encroaching on areas that fall strictly within the physician's domain, such as medical diagnosis or treatment decisions. Without clear distinctions, there is a potential for legal repercussions, making it crucial for pharmacists to adhere to well-defined professional limits. Another significant challenge is ensuring confidentiality during counseling sessions, particularly in open pharmacy settings. The increasing role of pharmacists in providing counseling and collaborating with general practitioners has undoubtedly expanded their responsibilities. However, it is essential to recognize that this increased workload, along with the additional time required for counseling and coordination, needs to be adequately compensated. Failure to address this issue could jeopardize the sustainability of these expanded roles within the healthcare system.

To further demonstrate the value of pharmacists' contributions, a cost-benefit analysis should be conducted to explore the long-term economic and health advantages of these services. This analysis should consider not only the potential cost savings achieved through improved medication adherence and reduced hospitalizations but also the investment needed for continuous and specific professional development to ensure that pharmacists stay informed and effective in their roles.

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Another significant challenge is ensuring confidentiality during counseling sessions, particularly in open pharmacy settings where private conversations can be inadvertently overheard. Protecting sensitive patient information is fundamental to maintaining trust and complying with privacy regulations.

Pharmacists must also navigate potential conflicts of interest, especially when advising patients on products that may provide financial incentives. Maintaining neutrality and prioritizing patient well-being over commercial interests is essential to uphold the ethical integrity of the profession. To effectively mitigate these risks, pharmacists should adopt standardized protocols that clearly define the scope of their counseling role, helping patients understand the distinction between pharmaceutical guidance and medical consultation.

Additionally, ongoing professional training in ethics, communication, and legal compliance will be vital in helping pharmacists address these challenges with confidence and professionalism. Where private conversations can be inadvertently overheard, the ability to protect sensitive patient information is fundamental to maintaining trust and complying with privacy regulations.

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THE ROLE OF COUNSELING IN PHARMACY

In pharmacy, the role of the counselor can be defined as follows: "It means pharmacists talking with patients and listening to them about the medications and the lifestyle modifications they are intended to take, in order to educate them about medications and lifestyle-related issues and to help them get the most benefit from therapy... There are both helping and educational goals of patient counseling in pharmacy..." [16].

In recent years, pharmacists have significantly expanded and diversified the care services offered to users, healthcare companies, and physicians, thereby becoming an increasingly central profession in the multidisciplinary configuration of quality healthcare.

While in the past, the pharmacist's activity was primarily confined to the laboratory for galenic preparation or the sale of drugs and therapeutic products, today, the pharmacist also plays a key role as a consultant in the distribution of medicines, the use of devices, and necessary lifestyle changes. In this context, their activity takes on strong ethical significance, engaging their professionalism and moral responsibility in safeguarding the health of those who seek their assistance.

The increasing clinical focus on the patient, as opposed to a drug-centered approach, has progressively brought the pharmacist into closer contact with both the patient and other healthcare professionals, fostering a relationship of constant interaction. Beyond the perspective of mere commercial activity, the professionalism of the pharmacist necessitates a profound understanding of the patient's personal issues, as well as a commitment to fundamental ethical aspects related to the life and dignity of the human person.

The opportunity to establish a "space of communication" and listening with the citizen, aimed at cultivating an ongoing, relational, and trusting relationship, supports the patient in their pharmacological pathway. This approach aligns with the growing sensitivity towards a care model centered on the individual, emphasizing respect for the person's cultural, social, and belonging background, and, more broadly, advocating for the humanization of care.

In a society characterized by diversity and a plurality of values and cultural references, access to a personalized care and support service for one's therapeutic journey, based on the uniqueness of the relationship, can serve as a crucial tool for overcoming inequalities and promoting well-being.

Indeed, the growing attention to the ethics of care and

a multidimensional view of the person necessitates a network of material and relational support that can establish a territorial medicine of proximity. This approach is closer, more capable of protecting, and providing for care needs through articulated, differentiated, and integrated supports.

In Italy, the Ministry of Education, University and Research, in collaboration with the Ministry of Health, introduced patient counseling during drug dispensing as one of the compulsory professionalizing activities within Hospital Pharmacy. This was outlined in the Interministerial Decree no. 68 dated February 4, 2015, concerning the reorganization of healthcare specialization schools.

Furthermore, international literature provides extensive and significant evidence supporting the importance of counseling in the pharmacist profession, both in hospital and community settings [17].

Similar to the necessity for physicians to integrate “to cure” with “to care,” for pharmacists, it is essential to transition from an approach based on compliance to one founded on adherence. This shift aims to achieve therapeutic recognition and reconciliation.

The increasing prevalence of drugs, including generics, the frequent presence of comorbidities, and polypharmacotherapy, often involving multiple healthcare professionals operating in different settings (hospital/private/practice/outpatient) and providing different prescriptions, leads to increased complexity in therapy management. This complexity easily generates doubts and uncertainties. In this context, the pharmacist can be a privileged and competent interlocutor, providing all the necessary and accurate information about prescribed medications, potential side effects, their optimal management, and the adoption of healthy behaviors.

Simultaneously, having access to a space for listening and attention outside the traditional healthcare environment can be perceived as more protected. This can encourage patients to freely express various issues that could impact the correct adherence to therapy.

The pharmacist, when adequately trained in active listening to the patient’s needs, values, and cultural background, can effectively integrate with other healthcare professionals. This integration helps in patient care, supporting individuals in making responsible choices regarding their treatment.

Farsaei et al. demonstrated how clinical pharmacist education sessions and medication adherence programs (utilizing pillboxes, diary logs, and follow-up calls) were helpful in significantly reducing average glucose levels in 2011 [18]. Additionally, Ibrahim et al. presented high-quality evidence of the impact of telepharmacy on COVID-19 patients’ access to pharmaceutical care and safe medication dispensing [19].

Research indicates that patients suffering from chronic diseases are at a higher risk of medication errors [20]. Non-adherence to medication not only affects their health, leading to reduced desired effects and adverse events such as disease exacerbation, increased hospitalizations,

decreased quality of life, and elevated mortality rates, but also impacts healthcare systems through inefficient resource utilization and increased expenditure resulting from the consequences of non-adherence [21-24].

Eliasson et al. demonstrated that in clinical practice, up to 50 percent of patients do not take their medications as prescribed. Non-adherence accounts for up to 48% of asthma deaths, an 80% increase in the risk of death from diabetes, and a 3.8-fold increase in the risk of death in the year following a heart attack [25].

Data from the New England Health Care Institute indicate that 75% of Americans face difficulties taking their medications as prescribed, and this behavior reflects in healthcare costs amounting to billions of dollars [26]. Nonadherence results in approximately 125,000 deaths per year in the United States [27].

According to the AIFA report, the Italian drug agency, therapeutic categories with the highest percentages of nonadherents are uric acid inhibitor drug therapy (57.5%), statin therapy (41.6%), and antidepressant drug therapy (40.1%). Moreover, it has been observed that for treatment with statins, antihypertensive drugs, antiosteoporotic drugs, and antidepressants, both adherence and persistence to therapeutic treatment decrease with increasing age [28].

Multiple factors can contribute to poor medication adherence, including costs that may be inaccessible, difficulty in fully understanding the importance of pharmacological therapy, low health literacy, lack of comprehension of instructions, and challenges in remembering or managing multiple medications or complex regimens. These issues are often compounded by prescriptions from multiple physicians [29].

These data suggest significant opportunities for improvement in medication use, emphasizing the need to enhance patient education and competence, particularly for the most vulnerable patients. An “informed and empowered patient” stands a better chance of understanding their clinical condition, actively participating in decisions, and adhering to treatment, which is a crucial element.

Therefore, collaboration among physicians, nurses, and pharmacists can play a key role in addressing this public health issue. The counseling offered by pharmacists can be particularly valuable for intercepting possible errors in taking therapy and the occurrence of adverse side effects. Pharmacists can provide helpful advice to avoid the risk of interactions and alert the prescribing physician to any event significant for the person’s health protection. This monitoring is especially crucial for medications such as innovative drugs, where commitment to adverse event detection is paramount.

Furthermore, the literature highlights the need for patient counseling, particularly in demographic areas with high levels of illiteracy, poverty, and lack of awareness among patients [30]. The literature also identifies multiple reasons why patients seek pharmacist counseling, as well as numerous topics discussed between pharmacists and patients [31].

ITALIAN SITUATION

The current shortage of general practitioners (GPs) in the Italian territory, with numerous areas lacking this professional figure, is generating multiple difficulties in accessing primary healthcare services. This situation has prompted pharmacies to assume an increasingly important role as reference health facilities for the population, thanks to their widespread presence across the territory. In many cases, people turn to pharmacies for basic counseling, advice on the management of common ailments, and the provision of over-the-counter medications. Given the growing importance of pharmacies as a health referral point, it has become necessary to consider innovative strategies to address the challenges related to the shortage of GPs, a situation expected to persist until at least 2026.

In recent years, corrective measures have been introduced to increase the absolute number of GPs, with efforts made from a contractual and organizational perspective to significantly enhance their presence in the territory [32].

Meanwhile, there has been a hypothesis to enhance certain services, such as telemedicine, to enable people to access medical consultations remotely. This approach can help bridge gaps in healthcare coverage and provide more timely access to care, especially in areas with limited medical resources. Additionally, there has been consideration of the opportunity to strengthen counseling services at pharmacies, offering more comprehensive support and information on health-related topics. This can contribute to educating the population about preventive practices, healthy lifestyles, and the management of chronic diseases.

The GP and pharmacist are indeed two indispensable health figures in the provision of primary care and serve as privileged interlocutors for citizens in the territory. The ethical values of both professions are rooted in the principle of respect for life, the protection and promotion of people's physical and mental health, and the relief of suffering. Additionally, both professions are based on the principles of freedom, autonomy, and individual responsibility.

The increasing drive towards innovation and digitalization, the demographic shift resulting in an aging population, and the need for greater patient involvement in the therapeutic alliance, including reducing waste and preventable healthcare costs due to complications and therapeutic failures resulting from poor adherence to therapy, have significantly altered healthcare needs and the context in which GPs and pharmacists operate in their professional roles. Strengthening primary care, involving families in care processes, and providing widespread access to pharmaceutical services are strategic factors in promoting health protection, optimizing resources, and discouraging inappropriate use of emergency room services.

The aforementioned shortage of GPs (and, incidentally, also of Pediatricians of Free Choice) is substantiated by ISTAT 2021 data, indicating that in Italy, an average of 7.12 GPs per 10,000 residents are operating, with a

minimum of 6.5 for the Northwest to a maximum of 7.79 for the Islands [33].

The hardship is particularly pronounced in rural hamlets, where citizens often face onerous transfers to reach more populous and equipped healthcare centers. This challenging situation is further compounded by the progressive aging of the population and the limitations of healthcare resources.

In this context, the territorial network of pharmacies provides valuable support to primary health care. Pharmacies are intricately woven into the territory, offering easier accessibility at any time of day and any day of the year. Simultaneously, within the pharmacy, there is often a veritable health services center that provides multiple healthcare services to address the continuous and growing needs of the population, including booking specialist exams, monitoring physiological parameters, and providing health information.

Due to their specialized training, often augmented by post-graduate courses in areas such as nephrology, geriatrics, and outpatient care, pharmacists can identify patients who are non-adherent to prescribed therapies. With their pharmacological knowledge, they can actively participate in developing a therapy that is appropriate and tailored to the patient. Moreover, in collaboration with the GP, they can propose changes to drug dosages for optimal personalized therapy. Possessing specific knowledge about newly approved pharmaceutical products and various guidelines for medication use enables them to serve as a particularly qualified figure in charting the most suitable therapeutic path for specific patients.

Of particular interest are some projects initiated in Italy. For example, at the Policlinico di Bari, a Home Care Program was organized for patients in Pharmaceutical Home Care, centered on counseling and the narration by patients of their disease histories. This approach made it possible to identify a high number of adverse reactions, thus strengthening the active pharmacovigilance system [34].

Another noteworthy project actively involving pharmacists in the oncological care pathway has been initiated by the Oncology Pharmacy of the IRCCS IRST "Dino Amadori" in the Emilia Romagna Region. The pharmacist dedicated to oral therapies conducts direct interviews with patients, providing detailed information about the treatment using drug cards based on health literacy. These interviews, scheduled at each drug pickup, monitor adherence to therapy, evaluate interactions with other medications, and identify any adverse effects. The pharmacist provides a therapy diary to the patient, which is filled out and returned at the subsequent pickup. Information about interactions is transferred to the physician for evaluation. The pharmacist's activities are tracked through a dedicated module in the prescription program, accessible to healthcare providers for integration into the patient's medical record [35].

In the Liguria Region, a pilot project is currently underway, initiated by the Ministry of Health, aimed at creating an algorithm for managing scarce medications—a

critical issue in recent years. This algorithm will enable physicians and pharmacists to interact on the same digital platform, avoiding prescriptions of unavailable drugs and finding alternative solutions. This approach optimizes resources and prevents citizens from having to search for medications.

The integration between GPs/pediatricians of free choice and pharmacists requires substantial changes in mentality and overcoming barriers. Without prejudicing the competencies and prerogatives of each professional, these changes involve preparing articulated, diversified, and complex operational strategies inspired by the identification of the citizen's needs and the objectives to be achieved, rather than rigid compartmentalization of the role of each healthcare professional.

Conclusions

In recent years, the expansion of professional services offered by pharmacies has underscored the pharmacist's role as a crucial element of the healthcare team. Pharmacists are capable of promoting patient care and engaging in a multidisciplinary approach to healthcare by interacting with physicians and patients. Rather than diminishing the importance of the direct doctor-patient relationship, the design of pharmacies oriented towards developing and enhancing relationships and trust with the citizen-user through counseling activities can represent a significant factor in ensuring patient empowerment and therapeutic adherence. This perspective aligns with an authentically ethical approach to integrated healthcare assistance.

The foundation of a comprehensive approach to patient care lies in the synergistic assignment and coordination of skills among various professionals involved. Through a system that allocates different tasks to different professionals, patient safety is promoted, ensuring that each contributes to the patient's well-being with a defined and specific role. In a context where interprofessional collaboration is crucial, especially considering initiatives promoted by the National Recovery and Resilience Plan (PNRR) aimed at both hospitals and communities, doctors, pharmacists, and other healthcare professionals work in harmony, respecting their respective competencies. This multidisciplinary approach not only maximizes the effectiveness of care but also contributes to ensuring a cohesive healthcare system centered on the patient. The convergence of diverse expertise, managed with care and responsibility, becomes an essential pillar for the overall health of the individual suggesting the importance of considering the implementation of shared educational moments where it is possible to address together the discussion of ethical issues [36].

The traditionally exclusive domain of physicians and nurse practitioners, counseling, can thus become an effective tool for providing more efficient healthcare in both health and economic terms. Additionally, it can be part of the solution to the shortage of family physicians.

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Conflict of interest statement

The authors declare no conflict of interest.

Authors' contributions

Both authors conceived the study and contributed to the preparation of the manuscript and approved the final version to be submitted.

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