Integration of Community pharmacy and pharmacists in primary health care policies in Argentina

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Published online: 22-Oct-2020

Abstract

Argentina is a federal republic with approximately 44 million people, divided into 23 provinces and an autonomous city, Buenos Aires. The health system is segmented into public, social security and private subsystems. The social security and private sectors cover more than 60% of the population. Total health expenditure in 2017 was 9.4% of gross domestic product. Primary health care (PHC) was considered as the principal strategy for universal coverage policy for health system reform in Latin America at the end of 20th century. The most remarkable characteristics of the Argentinian health system are its fragmentation and disorganization. An increase of public sector demands, due to a socioeconomic crisis, led to the subsequent collapse of the system, caused primarily by a sustained lack of investment. First care level decentralization to the Integral Health Service Delivery Networks (IHSND) becomes the cornerstone of a PHC-based system. Pharmacists and community pharmacies are not formally mentioned in PHC policies or IHSND. However, pharmacies are recognized as healthcare establishments as part of the first care level. Community pharmacists are the only health care professional whose profit comes from the margin on product sales. Contracts with social security and private insurances provide small margins which reduce the viability of community pharmacies. There is a preference by community pharmacies to diversify product sales instead of providing professional services. This is driven by marketing and economic pressures rather than patient care and health policies. Dispensing is the main professional activity followed by management of minor illness and associated product recommendations. Currently, there are no national practice guidelines or standard operating procedures for the provision of pharmaceutical services and there is no nationally agreed portfolio of services. National pharmacy organizations appear to have no official strategic statements or plans which would guide community pharmacies. There are some isolated experiences in community pharmacies and in public first care level pharmacies that demonstrate the possibilities and opportunities for implementing pharmaceutical services under the PHC approach. There is a real lack of integration of community pharmacies and pharmacists in the healthcare system.

Keywords
Pharmacies; Primary Health Care; Delivery of Health Care, Integrated; Ambulatory Care; Community Health Services; Pharmacists; Community Pharmacy Services; Professional Practice; Argentina

HEALTH SYSTEM AND PRIMARY HEALTH CARE: AN OVERVIEW

Argentina is a federal republic, subdivided into 23 provinces and an autonomous city, Buenos Aires. The last official census in 2010 reported a population of 40 million people and 64% having social security services or private care for health coverage. Social security is mandatory for workers with formal employment contracts. The remaining 36% of the population i.e. those with informal contract workers, day laborers and unemployed persons depend exclusively on the public health system. The distribution of health coverage by insurances varies across the country ranging from 40% to 80%, with the right to health care access depends on the jurisdictional government laws at national, provincial or local level.

Argentina, similar to other Latin American countries, has a segmented and fragmented health system. The health system is segmented into three subsystems: public, social security and private. The public subsystem is fragmented in three jurisdictional levels, with three health care levels. In general, it is organized by complexity from first (low) to thirdly (high) level of care. The jurisdictional levels are national, provincial, and municipal or communal. The social security subsector includes more than 300 National Social Insurances [Obras Sociales Nacionales] (OSN), the 24 Provincial Social Insurances [Obras Sociales Provinciales (OSP)], and the National Institute of Social Services for Retired workers and Pensioners [Instituto Nacional de Servicios Sociales para Jubilados y Pensionados] (INSSJP). In 2017, total health expenditure was calculated as 9.4% of gross domestic product (GDP). Social security expenditure represented 41.8% (3.9% of GDP), while the public and private were 28.7 % and 29.5 % (<3% of GDP each), respectively.

From 1990, reforms of health systems have occurred in most Latin-American countries guided by neoliberal policies, with efficiency, control of expenses, de-regulation of the labor market, decentralization and privatizations as main drivers. The philosophy driving health care decentralization was to empower the local governments and their communities with the responsibility for meeting local primary care needs. Primary health care (PHC) was considered the principal strategy to deliver universal coverage. Nevertheless, there are some issues associated with the decentralization process which have had a negative impact. These issues included inadequate management systems, and a reduced health budget which met only personnel salaries. First Level of Health Care was
delegated to the public subsector at local governments (municipalities or communes) from provincial or national jurisdictions. However, this delegation of responsibility was not associated with medicines or pharmaceutical policies. Generally, there is a lack of pharmacists at the First Care Level (FCL), and thus they have rarely been included in health care team.2–4

By the end of 2001, the social and economic crisis negatively affected both health care and access to medicines for low income, unemployed persons and their families, widening the accessibility gap between rich and poor. A sudden increase in public sector demands caused a general deterioration of the health system, and provoked a total collapse. As a result the National Health Ministry deployed an emergency plan called “Remediar” with the aim of restoring accessibility to essential medicines to the whole population and concurrently forcing the use of generic drug names by law.7 In Argentina, there are not bioequivalent “generic medicines” defined by regulation, but pharmaceutical equivalents or similar medicine do exist. There are only a few active pharmaceutical ingredients that have demonstrated bioequivalence.8 Prescription using generic names allow the dispensing of pharmaceutical equivalents to the patients.7

The emergency plan was successfully implemented through the PHC centers -named CAPS in Spanish [Centros de Atención Primaria de Salud] at the FCL, but the medication program “Remediar” was undertaken without pharmacists' participation. Adjustments were made to adapt and account for the lack of trained personnel in drug supply, including modifications of the procedures and contents of the handbook. These modifications were necessary due to the absence of pharmacists. These handbooks can be compared to “how-to-do books” with instructions on drug supply available through the program. A training program was originally developed for physicians to encourage a rational therapeutic approach in PHC [Terapéutica Racional en Atención Primaria de la Salud] (TRAPS), later extended to other professionals of the health team, such as nurses, pharmacists and dentists. Currently, there is an Essential Medicines Guide in the First Care Level and several online “Remediar” courses are available from the official website. The Essential Medicines Guide is composed of 90 drugs or combinations, in different formulations, which are intended to deal with 80% of consultations in the FCL.9–11 From 2007 to 2013, a series of documents, promulgating and renewing primary health care (PHC) were released by the Pan American Health Organization (PAHO).12,13 PAHO declared that: “A PHC-based health system requires a sound legal, institutional, and organizational foundation as well as adequate and sustainable human, financial, and technological resources. It employs optimal organization and management practices at all levels to achieve quality, efficiency, and effectiveness, and develops active mechanisms to maximize individual and collective participation in health. A PHC-based health system develops intersectoral actions to address other determinants of health and equity”. This statement redefined PHC in South America. One of the reasons for redefining PHC was to consider it equivalent to FCL, with low complexity, ambulatory care, and excluding inpatient facilities and the use of specialized human resources from the other health care levels.

The PAHO document pointed out the leading causes of fragmentation to be institutional segmentation and decentralization of health system and services. It additionally suggested targeting specific diseases, assessing risks and populations (vertical programs) with a model of care centered on disease; acute and episodic; reducing discontinuation of care. Consequently, it focused on universal coverage and access i.e., the main entry point being first contact with the health system, providing “comprehensive, integrated and continuous care, appropriate care, optimal organization and management, family and community orientation, and intersectoral action, among others”.14 IHSDN have clearly identified responsibilities and an approach which recognizes epidemiologic needs over spontaneous demands. It requires proactive behaviors and collaborative work.4–14

As Argentina is a federal republic, each province has regulatory authority on health matters and policies. The role of the National Health Ministry is primarily to coordinate health policy and the actions in attempt to have a national approach i.e. federal health system.15 Some provinces have responsibility over all three health care levels, while others delegate the FCL to the municipalities and communes. For example, in the Province of Córdoba a resolution was passed two years later from Provincial Health Ministry (1997) describing the health system organization, and a Healthy Guarantees Law, in 2003.16,17 The concepts of nominated responsibility and IHSDN were included in law.

Currently, the FCL workforce consists of 70,000 employees, mostly professionals or trained personnel. PHC is characterized by conflicting local disorganized models. However, there is a new interest on access to medicines, as an indicator of drug policy.3,11 Pharmacists are still scarce in the FCL.

PHARMACISTS, COMMUNITY PHARMACY AND PROFESSIONAL SERVICES

In 2013, the PAHO defined pharmaceutical services as the set of actions in a health care system that guarantees a comprehensive, integrated and continuous care meeting the needs of both the individual and population. Accessibility and rational use of medicines are seen essential elements. The delivery of pharmaceutical services is considered a key process as it provides direct contact with the population to obtaining definite health outcomes. Some of these services, such as drug dispensing or pharmacotherapy follow-up, should be offered directly to the individual while others, such as health promotion, are aimed at the individual, or groups of individuals and the community.11

Legal issues and ownership

There are national laws related to pharmacy and medicines, which apart in the Autonomous City of Buenos Aires, are solely used as indicative by other levels of government. Provincial laws are mandatory in each territorial jurisdiction.19 All provinces have specific laws for
authorizing community pharmacies and pharmacists in charge, referred as technical director [Director técnico]. A pharmacy is considered to be a healthcare establishment as part of the FCL. However, and critically, pharmacists and community pharmacies are neither formally mentioned in health policies nor in IHSDN.

Community pharmacy is named specifically, in legal and regulatory texts, as a dispensing pharmacy, private pharmacy or pharmacy office. Due to their number and geographical distribution, community pharmacies are well placed to provide coverage for the needs of the population. In 2019, according to data from the National Health Ministry there were approximately 13,581 pharmacies distributed throughout the country. These pharmacies can be owned by a large chain, a small chain, a trade union or an independent private owner. In 2014, chain pharmacies represented 10-12%. In 2018, 68 pharmacies of the 818 pharmacies in Cordoba were owned by chains.\(^{21,22}\)

Both, chain and private pharmacies offer the same basic drug-related services, with the difference being the range and type of products. Chains sell a diverse group of goods and services that are not related to the health. Chains have also extended opening hours and tend to be in larger premises. Pharmacy chains have a business model which incorporates medicines delivery, supermarket-style products and structure, online business orders and promote non health related consumer products. The chains are driven by marketing and economic needs rather than a health policy oriented to patient care. They also serve to health insurances, yet their business profitability is not based on medicine’s dispensing, but on other products.

Community pharmacy is dependent on the margin of products and not on the provision of health services. Contracts with Social Security and private insurances have low net profit (from approximately 30% to 10-15%). Pharmacies therefore are dependent and opt for diversification of products rather than the provision of professional services.\(^{23}\)

This economic environment favors pharmacy chains, leaving private and/or small pharmacies at a clear disadvantage, as these are dependent on the social security system remuneration. Thus, independent pharmacies focus on reduction of costs, and efficient management, attempting to maximize profitability per square meter and per employee.\(^{24}\)

**Professional organizations**

There are a number of professional organizations at national level, including the Argentine Pharmaceutical Confederation [Confederación Farmacéutica de Argentina] (COFA) and the Pharmaceutical Federation of the Argentine Republic [Federación Farmacéutica de la República Argentina] (FEFARA).\(^{25}\) COFA was founded in 1935, and groups various provincial professional associations with about 16,000 member pharmacists who are employed in several settings as hospitals, industries, academy, etc. About 80% of these pharmacists are employed in community pharmacies. COFA mission is to position pharmacists as contributors to the healthcare of the population and to continuously improve professional practice.\(^{24,26}\) FEFARA, which was founded in 2005, groups only nine provincial professional associations and is focused on defending the economic viability of the pharmacies and the accessibility, safety, quality, and effectiveness of the pharmaceutical services.\(^{27}\)

There are other organizations such as Argentine Federation of Pharmacy Chambers [Federación Argentina de Cámaras de Farmacia] (FACAF) and Association of Mutual and Trade Union Pharmacies [Asociación de Farmacias Mutuales y Sindicales de la República Argentina] (AFMSRA) that include governmental and non-governmental non-profit pharmacists’ institutions.\(^{28,29}\) However, the influence on professional decisions at the national level are less visible than COFA or FEFARA.

These organizations, for instance COFA, FEFARA and FACAF, act as intermediaries for payment to pharmacies of medicines reimbursed by health insurance companies from the public, social security, or private health systems. The health subsystems do not pay the medicines directly to the pharmacy. When the insured patient obtains his/her medicine from a pharmacy, he/she pays a percentage of the retail price. The difference (in price) is paid through the organizations to the pharmacy by the health insurance (30, 60 or 90 days later).

In recent years, a wide variety of programs and training courses on pharmaceutical care and professional services have been developed, mainly coordinated by pharmacists’ associations such as COFA and FEFARA, universities and provincial or local professional associations. Although pharmacists have access to these courses, no significant advances are seen in the provision of pharmaceutical services in practice.\(^{30}\)

At the national level both, COFA and FEFARA, have implemented a voluntary professional certification and recertification system.\(^{31,32}\) This system is focused on continuous professional development.

In February 2020, COFA signed the Brasilia Statement for the renewal of Pharmaceutical Services Based on PHC.\(^ {34}\) This document, prepared in August 2019, sets out objectives and key elements of action in relation to pharmaceutical services and their inclusion in national health systems. National pharmacy organizations (COFA, FEFARA and others) appear not to have official strategic statements or plans related to promote the provision of these services.

**Pharmacy education**

Pharmacy is considered as a “priority profession” by a national law. The accreditation system for “public interest” degree courses was introduced in Argentina by the Higher Education Law in 1995, Law 24521 (art. 43).\(^ {35}\) Accreditation is undertaken by the National Commission for University Education and Accreditation [Comisión Nacional de Evaluación y Acreditación Universitaria] (CONEAU). The accreditation process takes into account the minimum workload requirements, basic curricular contents, and criteria of the practical training. These were established by a resolution of the Science and Technology Ministry (2004).\(^ {36}\) In 2018, a modification of the resolution reorganized and identified the professional activities

\(^{36}\)
associated with each of the "public interest "degrees with objective of preventing and avoiding overlapping competencies." Pharmacological care and pharmaceutical services are included among the basic curricular contents, and professional activities reserved for pharmacists.36-37

A pharmacist is also recognized as a member of the health team. Universities have attempted to improve their programs and adapt them to the new demands.38 Unfortunately, these modifications have been less than convincing, and have not translated to changes in daily professional practice primarily as professional and economically the focus is on dispensing medicines and selling products. Currently, there are a few practice guidelines or standard operating procedures for the provision of pharmaceutical services. Although specific training has been developed by Universities and professional associations.39

In the province of Córdoba, the National University of Córdoba and the College of Pharmacists delivered a program to implement pharmacotherapy follow-up.40 The intervention solved 77.9% of drug-related problems with a significant acceptance of pharmaceutical interventions by physicians (74.6%). This work demonstrated the feasibility of integrating community pharmacists into the health care team and provided evidence of the significant contribution for optimizing patient pharmacotherapy. The project demonstrated that collaboration between universities and professional associations could be part of a strategy to implement the concept of pharmaceutical care into practice.

Community pharmacy services
There is no official national portfolio of professional services for community pharmacy. There are no fees set for their provision nor is there a financing system established by third-party payers. The only potential source of fees is direct patient payments.

The Official College of Pharmacists and Biochemists in Buenos Aires has established fees for a number of pharmaceutical services: blood pressure control, application of injectable drugs, bandaging, pharmacotherapy follow-up, dose administration aids and nebulizing at pharmacy.41

The National Institute of Social Services for Retired Workers and Pensioners (or INSSJP) implemented a national flu vaccination campaign with the vaccine provided by community pharmacies. This service started more than a decade ago. In recent years, pneumococcal vaccines have been added. INSSJP pays a fixed fee to pharmacies and vaccination is allowed without a medical prescription for people over 65 years of age, pregnant women and children between 6 and 24 months.42 On April 2020, the INSSJP reported that the flu vaccination program to patients over 65 years of age was available in 6,600 participating pharmacies throughout the country.43 The fee was established at 165 ARS (May 2020 exchange rate of approximately USD 2 to 2.5 per vaccine delivered).44

From 2018 COFA has been promoting a remunerated service, at a fee of 50 ARS (equivalent to USD 2 according to May 2018 exchange rate). for the control of hypertension.45 This service includes taking and recording blood pressure values in a computer system available in pharmacies with patients keeping their own history of measured values, regardless of the community pharmacy they attended. According to COFA, only in May 2019 more than 12,000 blood pressure measurements were taken in community pharmacies.46

Additionally, there are some research examples of services, such as the work undertaken in Cordoba in community pharmacies to determine the prevalence of elevated blood pressure in patients without drug treatment and to assess the effect of a pharmaceutical intervention. Thirty-six community pharmacies and 687 patients participated, of which 41.8% had elevated blood pressure (BP). The intervention consisted of a standardized health education and recommendation on lifestyle modification provided by the pharmacist. The interventions achieving a reduction in BP values in 3 out of 4 patients.47 If this work was widely implemented, cardiovascular risk and other concomitant diseases that are usually associated with the presence of hypertension would be diminished. Furthermore, these results showed that teamwork between pharmacists and physicians is possible for the benefit of patients with high BP.

CHALLENGES AND OPPORTUNITIES
In Argentina community pharmacies are the most accessible health facility to the population and can be the first, and sometimes only point of contact of the user with the health care system.11 Community pharmacist have the opportunity to interact and intervene with patient, their family, sensitizing society to the perception of health risks, promoting healthy lifestyles, and preventing problems in high risk groups. In order to be effectively recognized as health facilities, community pharmacies should reorient their practices to meet the needs of patients and achieve acceptable standards in ethical and regulatory areas.13 There are some isolated experiences, in community pharmacies and in public FCL pharmacies, that demonstrate the real opportunities for implementing pharmaceutical services in PHC.48-51 However it is necessary to change the role of pharmacies, converting them to health care establishments where pharmaceutical care services are delivered to the person, the family and the community.13 Local studies have indicated that there is a significant percentage of patients over 75 years or more with polypharmacy, and who are prescribed inappropriate medications.32-54 One of the challenges would be to negotiate with the INSSJP, building on the success of the vaccination program, the provision of other remunerated services, such as medication review, pharmacotherapy follow-up and health education.

The challenge for health services managers, as well as the pharmaceutical organizations, is the integration of community pharmacies into the health system. There is a need to balance the professional and economic drivers to realize population health objectives. Currently, community pharmacies are not performing as FCL establishments and are separate from other public care settings. Individuals and families move around from pharmacy to pharmacy,
and primary care sites to satisfy their needs and expectations for health care.\textsuperscript{5,6}

The Brasilia Statement proposes to formulate intersectoral policies that guarantee the sustainability of the roles and functions of the pharmaceutical services under the PHC model. They suggest working groups constituted by health authorities, universities and professional associations to develop a national agenda.\textsuperscript{24} Several studies suggest that IHSDNs can improve accessibility to the system, reduce health care fragmentation, improve overall system efficiency, prevent the duplication of infrastructure and services, lower production costs, and better meet people’s needs and expectations.\textsuperscript{3} Pharmaceutical services, based on holistic approach of Pharmaceutical Care, should be integrated into the PHC and working coordinately in IHSDN.\textsuperscript{15} Rules and Laws are required to formalize these changes. Finally, a conceptual framework of the scope of pharmaceutical services in PHC, with definitions and standard procedures must be generated by universities and professional associations working collaboratively. Accreditation programs are required to ensure pharmacists can perform these services, with the aim of systematizing the results obtained and demonstrating their benefit. In Argentina there is no general frame for collaboration among pharmaceutical organizations, regulatory entities, organizations of health professionals and universities to provide quality standards and guidelines of practice. Without standards of practice, is more difficult for pharmacists to improve access to care, promoting health and a rational use of medicines to benefit their patients.\textsuperscript{15} A general framework was suggested for FIP in 2011, in the statement of Good Pharmacy Practice.\textsuperscript{54} In addition to a standard of practice, it is necessary to achieve an economic agreement that provides incentives and resources to guarantee professional services.\textsuperscript{4}

In conclusion community pharmacies could become an important gateway to the health system and, at the same time, contribute to guarantee comprehensive and integrated care.\textsuperscript{1,12} What is required is to move from statements into actions, implementing professional services, both in community pharmacies and CAPS, making them sustainable and demonstrating results in the assisted population and integrated into PHC.

**CONFLICT OF INTEREST**
None declared.

**FUNDING**
None.

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