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International Series: Integration of community pharmacy in primary health care

Primary health care policy and vision for community pharmacy and pharmacists in Spain

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Abstract

From a political and governance perspective Spain is a decentralized country with 17 states [*comunidades autónomas*] resulting in a governmental structure similar to a federal state. The various state regional health services organizational and management structures are focused on caring for acute illnesses and are dominated by hospitals and technology. In a review by the Interstate Council, a body for intercommunication and cooperation between the state health care services and national government, there is a move to improve health care through an integrative approach between specialized care and primary care at the state level. Community pharmacy does not appear to have a major role in this review. Primary health care is becoming more important and leading the change to improve the roles of the health care teams. Primary care pharmacists as the rest of public health professionals are employed by the respective states and are considered public servants. Total health care expenditure is 9.0% of its GDP with the public health sector accounting for the 71% and the private sector 29% of this expenditure. Community pharmacy contracts with each state health administration for the supply and dispensing of medicines and a very limited number of services. There are approximately 22,000 community pharmacies and 52,000 community pharmacists for a population of 47 million people. All community pharmacies are privately owned with only pharmacists owning a single pharmacy. Pharmacy chain stores are not legally permitted. Community pharmacy practice is based on dispensing of medications and dealing with consumer minor symptoms and requests for nonprescription medications although extensive philosophical deep debates on the conceptual and practical development of new clinical services have resulted in national consensually agreed classifications, definitions and protocolized services. There are a few remunerated services in Spain and these are funded at state, provincial or municipal level. There are no health services approved or funded at a national level. Although the profession promulgates a patient orientated community pharmacy it appears to be reluctant to advocate for a change in the remuneration model. The profession as a whole should reflect on the role of community pharmacy and advocate for a change to practice that is patient orientated alongside the maintenance of its stance on being a medication supplier. The future strategic position of community pharmacy in Spain as a primary health care partner with government would then be enhanced.

Keywords

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

INTRODUCTION

From a political and governance perspective Spain is a highly decentralized country organized around 50 provinces in 17 States [*Comunidades Autónomas*], and two Autonomous cities, resulting in a governmental structure similar to a federal state. Spain has a population of 47 million people with its gross domestic product (GDP) in 2019 of EUR 1,244,757million (EUR 26440 per capita). The Spanish health care system is organized through a public National Health System (NHS) model financed through general taxes. Health care is provided through a network of hospitals and primary care health centers offering a broad portfolio of services with no-copayments except for medicines.[1] Expenditure in public health care is 6.4% of its GDP with the public health sector accounting for the 71% and the private sector 29% of this expenditure. The private sector is increasing, with almost 20% of the population having private insurance.[1]

In 2018 total health care expenditures according to Health Ministry was EUR 105,000 million/year (9.0% GDP and EUR 255/pp) distributed in public health care costs of EUR 74,000 million/year (6.4% of the GDP and EUR 1594/pp) and private care costs of EUR 31,000 million/year (2.6% of the GDP and EUR 662/pp). Expenditures in the public health care was distributed in hospital care (63%), primary care (14%), community pharmacy (17%) and others (6%). The cost of prescription medicines in community pharmacy, financed by the government public health system, was EUR 12,000 million.[2]

The Interstate Council [*Consejo Interterritorial*] is a body for intercommunication and cooperation between the state health care services and national government with objective of ensuring cohesion of the system and guaranteeing citizens' rights in the whole country.[3] Each state has its own health ministry [*consejería de salud*] and these are linked to the national Ministry of Health.

The responsibility for health matters is fundamentally transferred from the National government to the states. The National government retains the responsibility of registering medications and setting the price of medications and defining common set of health services to which all the population is entitled. These health services are defined in the Common Services Portfolio of the National Health System [*Cartera Común de Servicios del Sistema Nacional de Salud*] which is subdivided into three sections. One of them, Supplementary Common Portfolio [*Cartera Común Suplementaria*], includes the dispensing of

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medicines. Importantly there are no pharmaceutical services incorporated in any of the lists.[4]

Primary health care

The Spanish National Health System, due to its decentralized structure and management, faces challenges. The system is structurally focused to care for acute illnesses and thus is dominated by hospitals and technology. However, there is generally acceptance that there is need to evolve due to changes in social need, such as aging, polypharmacy patient, frailty and vulnerability of the population. Defragmentation of the healthcare delivery has led to the development of 17 separate and different regional health services.[5] However, there is a move to improve health care through an integrative approach between specialized care and primary care at the states level. The common objective is to work towards a new management model, more horizontal and organized around patients with chronic illnesses.[1] The system currently suffers from 17 different approaches using different terminologies.[6]

In 2018, the Interstate Council commenced a consultative process to design a "Community and Primary Care Strategic Framework".[7] State representatives, health care professionals, patients and users were invited to participate with the aim of improving health care and advance the strengthening and leadership of primary health care. The Ministry of Health has agreed with the Interstate Council proposal to progress towards a more integrated, equitable and efficient primary care.[8] There is a sense that primary health care progressively needs to take the lead, assuming a greater importance in the health care system.

According to the report, primary care has disproportionately suffered from the impact of the 2008 economic crisis and austerity politics, negatively affecting the approximately 13,000 primary care health centers. Primary health care is organized in various ways within states using different terminology and management structures although there is a commonly, smaller geographical areas usually called basic health zones [*zonas básicas de salud*].[9] Health centers are where basic–primary health care is provided through "primary health care teams", composed of family physicians, pediatricians, gynecologists, nurses, primary care pharmacists, assistants and support administrative personnel. All heath care professionals are employed by the respective states and are considered public servants.

There are around 750 primary care pharmacists, although they are not always located in health centers and not widespread. Their role is to improve safety, effectiveness and efficiency in the use of medicines and medical devices both at an individual or population level. Primary care pharmacists hold a strategic position being able to coordinate and guaranteeing pharmacotherapy continuity along the system and direct patient care activities are included in their job profiles.[10] However, the direct patient services for these primary care pharmacists is very limited and only occurs in few locations. In the short term, primary care pharmacists are expected to coordinate the development of multidisciplinary protocols to guarantee pharmacotherapy continuity including medication reconciliation in care transitions. Currently, there is limited collaboration between primary care pharmacists and community pharmacy and there is no policy guiding this collaboration and it tends to be episodic and sporadic. Primary care pharmacists could extend this coordination with the establishment of collaboration protocols between primary care teams and community pharmacy for medication reconciliation, pharmacotherapy optimization, improvement of medication safety and effectiveness, adherence improvement and reduction of inappropriate use of medicines. The potential for extensive collaboration has not been explored strategically nor operationally.

Spanish community pharmacy

To practice as a pharmacist there is a need to complete a five-year university degree resulting in the award of Master of Pharmacy (MECES Level 3) meeting European Union regulations.[11] In addition, to work as a pharmacist dealing with patients in any setting, it is compulsory to register in a Province Pharmacists' Association [*Colegio Provincial de Farmacéuticos*]. These Provincial Pharmacists' Associations are members of a national professional association called General Council of Province Pharmacists' Associations [*Consejo General de Colegios Oficiales de Farmacéuticos*] which tends to act as the major professional organization dealing with central government.[12]

There are a number of other organizations which represents pharmacy owners [*Federación Empresarial de Farmacéuticos Españoles*] or employees (Unions and a new technicians Federation is under way).There is also the Spanish Family and Community Pharmacy Society (SEFAC), a scientific society which is enthusiastically involved in promoting clinical activities in community pharmacies and has achieved a good relationship with family physicians associations.

There are approximately 22,000 community pharmacies in Spain with an average of 2,117 people per pharmacy the lowest ratio in the European Union after Greece.[13,14] All community pharmacies are privately owned with only pharmacists owning a single community pharmacy, although more than one pharmacist may jointly own a pharmacy. Pharmacy chain stores are not legally permitted. The establishment of new pharmacies is controlled by the state governments based on two criteria: population per pharmacy and distance from another existing pharmacy. The minimum population allowed for opening a new pharmacy range from 700 to 2,500 in states. The minimum distance between the new pharmacy and an existing one ranges from 150 to 250 meters.[15] In 2018, there were more than 74,000 registered pharmacists of whom approximately 52,000 work in community pharmacy.[13] There is an average of 2.4 pharmacists per pharmacy. The technician workforce is estimated to be around 31,000.[16]

In 2019, the average turnover of a community pharmacy was EUR 911,740, coming 71% from medicines and 29% from consumer health products. The average net margin before taxes for a community pharmacy was around 10%.[17] The staff pharmacists' salary is usually between EUR 25,000 and EUR 35,000 per year.[18] Community pharmacy national medication sales in 2019 were estimated to be EUR 15,636 million corresponding to 1,359 million units. Consumer

Table 1. Classification of Community Pharmacy services [*servicios asistenciales*] in community pharmacy agreed by Foro AF-FC

Pharmaceutical Care Services	Community health related services
Dispensing	Health promotion
Minor ailments	Health education
Reconciliation	Health prevention including screening
Adherence	Measurement of clinical parameters
Home first-aid kit	Nutritional advice/counselling
Compounding	Syringe-exchange program
Medication review	Smoking cessation
Medication information service	

health products accounted for EUR 6,068.6 million corresponding to 557.5 million units. Medications are exclusively sold in community pharmacies.

Community pharmacies are reimbursed by government at a margin of about 28% of the pharmacy fixed retail price. The price of medications is fixed by the national government making it common to all states. This is one of the primary responsibilities of the national Government.

COMMUNITY PHARMACY SERVICES

A national Law 16 passed in 1997 covers specific matters related to community pharmacy and is in addition to Common Services Portfolio of the National Health System.[19] The main service in Law 16 covers the distribution and supply of medicines. This law also makes it compulsory for all Spanish pharmacies to provide patient counseling services, medication review with follow-up (detecting, preventing, solving negative outcomes of pharmacotherapy), compounding, and pharmacovigilance (adverse drug reaction reporting system). However, despite this law community pharmacy practice is much the same as prior to the law being enacted, with an emphasis and focus on dispensing of medications and dealing with consumer minor symptoms and requests for nonprescription medications.

An important advance in defining direct patient services was made in Spain with the publication of a national "Consensus on Pharmacy Services". This statement came from an expert panel which met in 2001 under the guidance of the Ministry of Health.[20] The consensus identified and defined three main services to be provided: dispensing, minor ailments scheme, and medication review with follow up. Dispensing was defined to include the provision of the medication with advice to ensure patient knowledge and adherence with treatment. Minor ailments service covered assisting the patient to choose the appropriate nonprescription medication for minor ailment and, if necessary, referral to the physician. Medication review with follow up covered monitoring a patient's pharmacotherapy to identify, detect, and prevent negative clinical outcomes. To follow up on these definitions a national group called Pharmaceutical Care Forum was established with the support of the Ministry of Health in 2004. This group confirmed the previous consensus, and went onto developing service protocols for these three services. It counted with the participation of different partners, and published a new Consensus on Pharmaceutical Care.[21] In 2009, following the completion of the work, a Pharmaceutical Care Forum in Community Pharmacy [Foro AF-FC] was established with the following participants in: General Council of Province Pharmacists' Associations, the Spanish Family and Community Pharmacy Society, the postgraduate pharmacy practice group of the University of Granada and the Spanish Pharmaceutical Care Foundation. From 2012 to 2018, the Clinical Pharmacy and Pharmacotherapeutic Unit at the University of Barcelona and since 2018, representatives of the Spanish Pharmacy Deans Conference. This Forum has updated definitions and described, classified and developed various services and protocols for community pharmacy services (Table 1).[22,23]

In summary, the above-mentioned process has meant the pharmacy profession has had extensive philosophical deep debates on the conceptual and practical development of new clinical services resulting in national consensually agreed classifications, definitions and protocolized services. However, the practical application to usual day practice has been limited with only the passionate, enthusiastic and motivated pharmacists taking up the mantle of providing services. Even in this group, it has been to a limited number of patients and intermittingly, probably attributed to the lack of remuneration.

In addition to the above-mentioned process, research has been conducted by various Spanish research groups showing that some pharmacy services can achieve positive outcomes measured by the ECHO model. Medication review with follow up service using the Dáder Method has been the most studied service.[24-26] The conSIGUE Program, promoted by General Council of Province Pharmacists' Associations, has studied the impact and implementation of MRF service.[27] The impact and implementation of Adherence services in community pharmacy, also promoted by the General Council, had been investigated and continues under research.[28,29] SEFAC is also promoting research, having participated in an international project and undertaken research such as INDICA+PRO evaluating the impact and the implementation of a minor ailment service co-designed with GPs.[30,31]

Remunerated services at a state level

There are a few remunerated services in Spain and these are funded at a states, provincial or municipal level. For all these services or programs, a form of accreditation by providers is required.

Methadone supply is quite a common service having started in the Basque country in 1995, Cataluña and Aragon (1998) and extended to other 7 states. Remuneration ranges from EUR 54 to 67 per patient/month. In the Basque country there are 890 methadone patients.

HIV testing which started in the Basque Country in 2009 and has been subsequently implemented in Cataluña, Baleares islands, Cantabria and Castilla y León. Patients pay EUR 5, except for Cataluña where the patient pays EUR 10,

community pharmacy receiving from the administration a payment between EUR 10 and 18 per test. In addition, since 2014 in the Basque country a syphilis test is performed to men who have had sex with men. To date 24,602 HIV tests had been performed (since 2009), 2,284 syphilis tests since 2011.[32]

In Cataluña, remunerated services include colorectal cancer screening (EUR 1 per test and EUR 10 monthly practice allowance).[33] Patient group educational program on use of medications are also remunerated. Although a sentinel pharmacy pharmacovigilance program is undertaken in Madrid, Castilla Leon, and Asturias with no payment, in Cataluña it is remunerated with approximately 100 participant pharmacies receiving a practice allowance of EUR 1,000 per year.

In the Basque country there are other drug addiction related programs such as state financed anti-HIV kit (containing a new syringe, a preservative, a small towel, sterile water and a small container to prepare the mixture). From 1997 to 2017, 4.66 million kits have been sold at a pharmacy charge to the patients of EUR 1. Additionally, there is also a syringe exchange program, paid by the state at no cost to the patient. In one of the provinces of the Basque country there were 18,046 syringe exchanges during 2018.[34]

Dose administration aids (DAA), preparation of multicompartment compliance aids, are very common in Spain although, in general, pharmacies do not charge or charge a token amount (around EUR 10 per month). There are some examples of agreements for DAA services between town councils and local pharmacies.[35] The first such program was a social-health program, remunerated at EUR 31.63 patient/month, in the Basque country. Eligible patients are part of a municipal social services program. The service is provided by community pharmacies and is paid by the state health ministry.[36]

In Valencia there is a "directly observed treatment" service, mainly for tuberculosis treatments, which consists of patients taking their medications in the presence of the pharmacist who certifies the action.[37] This service is being reimbursed at EUR 56.06 patients per month), covering all observed treatments requested by physicians.

Most Spanish pharmacies subscribe to a drug-waste collection system (SIGRE) in response to European Directive 94/62 governing container management.[38] This service is also free, financed by pharmaceutical companies and use the wholesalers to manage logistics of discarded medicines. In 2019, 102.84 g per person and year were recycled what means an increase of 16.12% since 2015.[39]

Professional organization strategic plans

There are no detailed strategic plans from the professional organizations. Although general statements of the future of the profession are made by professional organizations and there is an apparent national, state and local consensus that the future of community pharmacy and pharmacist lies in patient orientated services. The development of a strategic plan for community pharmacy 2020-2030 had been announced by the General Council to be presented in 2020; however, no information is yet available.

Since 2019 the General Council of Province Pharmacists' Associations, has had a promoting and marketing campaign using new branding for the profession "We are Pharmacists, We are Patient Carers, We are Socially Orientated, We are Digital" [*Somos Farmacéuticos, Somos Asistenciales, Somos Sociales, Somos Digitales*]. A significant amount of resources is being devoted to the development and use of technology concentrating mostly of the projects around a Nodofarma project. Nodofarma is an electronic platform whose an objective is to facilitate the transformation of the community pharmacy profession. The platform, which is an attempt to link the 22,000 community pharmacies, is composed of a series of interconnected services. Programs such as SEVeM (Spanish branch of EMVO) to identify and avoid dispensing counterfeit medicines, CISMED to analyze in real time medication shortages, validation of private prescriptions both paper and electronically produced, and Nodofarma Asistencial (a networking system to help pharmacists implement the nationally agreed professional services). Some Province Pharmacists' Associations have their own platforms (i.e. Seville, Valencia) that are envisaged to be integrated or interoperable with Nodofarma in a near future.

Concurrently the Spanish Community and Family Pharmacists Association (SEFAC), has developed and offers its members a service practicing oriented platform called SEFAC-eXPERT which provide community pharmacists with information technology based service programs and protocols. Interestingly at the moment, there is no coordination between these two major organizations around those projects and there appears to be a competitive approach.

CHALLENGES TO THE INTEGRATION OF COMMUNITY PHARMACY

Perspective from the pharmacy organizations

Despite much debate over the last 10 years with respect to the implementation and universality of patient-oriented services from community pharmacy, it is reasonable to conclude that most of the barriers remain unresolved and the implementation of services has not been established in a universal way in community pharmacy.[40] Critically there is lack of payment for services which with a number of other factors is essential. Significantly, there appears to be a lack of advocacy from the majority of the leadership for changes to the current remuneration system and this continuous to be a critical factor delaying the implementation of services. It is acknowledged that implementation and sustainability of services requires profitability, with this issue not seeming to be a priority for professional leaders. Nevertheless, the discourse of professional pharmacy organizational leaders has changed and at present, they are publicly promoting and defending a more clinical and patient oriented practice through service implementation. This discourse, however, is not being followed by a change in usual practice by ordinary community pharmacists.

There is a perception that practicing community pharmacists may not yet have a clear understanding of the required practice change when researchers and strategists talk about a shift from a product to a patient-oriented

practice. The political climate of professional pharmacy organizations, associated with the facilitation for the provision of services, is limited to having a consensus on national priority services and to providing excellent technology to provide the services. Research has shown that service implementation needs well defined services, and implementation programs that entails implementation indicators and the support of practice change facilitators with remuneration to succeed and be sustainable.[27,29,31,41,42,43] Most of the General Council of Province Pharmacists' Associations and other pharmacy organizations efforts to change the current practice of community pharmacy are based on strategies that support research, educational actions and technology but not the critical element of remuneration that might be the catalyst for the change of practice.

Perspective from the health authorities

Community pharmacy is seen as an external element to the system, a private actor and external contractor in a system controlled and managed by public authorities. The external contractual relationship of community pharmacy, in a health care system, that most other health care professionals in primary care are employees of the states leads to a perception that community pharmacists are mainly product providers. Nevertheless, there is a recognition that pharmacists are health care professionals, well distributed around the country and with a great potential. Governments, at different levels, when developing policies appear to only have limited consideration of the value-add of community pharmacy services. At the same time, some administrators and health care professionals embedded in the health care system are influenced and focus on the commercial elements of community pharmacy. They may not be aware or reject the potential role of community pharmacy in optimizing healthcare outcomes for individual patients and the population. It appears that in a competitive environment for resources, the economic arguments associated with community pharmacy services are rejected.

Perspective from the other health care professionals

In the recent past, there have been some controversies around nursing profession and community pharmacist practicing pharmaceutical care. The nursing profession was advocating that certain roles around medication such as medication reviews and adherence would be best delivered by them. However, at present interprofessional relationships have improved and there are good interactions and collaboration between pharmaceutical organizations, such as the General Council of Province Pharmacists' Associations, SEFAC and some medical scientific associations. From a corporative point of view there are good relationships with the General Councils of medical practitioners and dentists with a number of agreements including dealing with electronic private prescriptions. The relationship with some GPs associations is excellent and there is a yearly conference between SEFAC and the Spanish Society of Primary Care Physicians (SEMERGEN).[44] As an example, a statement in collaboration with the Spanish Society of General and Family Physicians (SEMG) and SEMERGEN entitled "COVID-19. Problems and solutions in Primary Care and Community Pharmacy" has been released.[45]

Perspective from the patients

Patients in Spain report being very satisfied and comfortable with the current pharmacy service as their expectations and needs are being apparently met. Patients are generally unaware of the need for professional services so their current expectations are fully met.

Future

The future integration of community pharmacy in the Spanish healthcare system can be said to be dependent on several critical factors. These factors include:

• The development of the strategic review of primary care in Strategic Framework for Primary and Community Care [*Marco estratégico para la Atención Primaria y Comunitaria*] provides an opportunity for community pharmacy to be integrated in primary care. The integration of community pharmacy in the system needs to be an element of the strategic direction for primary care.

• The enhancement of the role of primary care pharmacists in the collaboration and coordination of community pharmacists. Integration with the rest of the health care team would be essential.

• The inclusion of community pharmacy services in the Common Services Portfolio would ensure that these services are provided to population in all states

• Following the discourse on the importance of patient orientated services from community pharmacy by pharmacy political leaders at the state level should be focused on the value add and the need to implement remunerated services.

• The profession at all levels commences advocating for the remuneration of community pharmacy services.

• The enhancement of the positive relationship between Spanish General Council and SEFAC with primary care medical practitioners' associations.

Although a number of these factors are external to the profession, the major emphasis should be on ensuring that the profession as whole reflects on the role of community pharmacy and advocates for a change to a practice that is patient orientated alongside the maintenance of its stance on being a medication supplier. The future strategic position of community pharmacy in Spain as a primary health care partner with government would then be enhanced.

CONFLICT OF INTEREST

None declared.

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