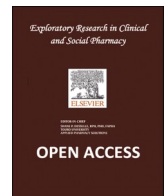




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Community pharmacy and selfcare provision: An international perspective

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ABSTRACT

A themed series of papers titled “Selfcare for Health System Sustainability: An International Series on the Role of Community Pharmacy” were published in the Exploratory Research in Clinical and Social Pharmacy journal between 2022 and 2024. The themed series covered 13 countries and had three objectives:

Objective 1 to describe selfcare policies, strategies and developments in countries and the key changes envisaged to ensure a more effective use of non-prescription products and ensure patient safety regarding drug, non-drug products and practices; Objective 2 to provide country-based selfcare activities and services with examples of programs; and Objective 3 to discuss the challenges and opportunities community pharmacy/pharmacists face in relation to the provision of selfcare services.

Most countries stated that there was little or no government policy recognition of selfcare and when they do exist, pharmacists' roles are rarely mentioned. Some countries stated that there was “no meaningful translation of the term selfcare” and on many occasions, different terminology such as “health promotion”, “prevention” or “disease prevention” were used.

Minor ailment services and counselling on self-medication were the only two services listed by all authors related to selfcare. Although some services may include selfcare elements, most services identified include selfcare as a side component. One could question whether the term “selfcare” is understood in its broad definition by the pharmacy profession.

Some of the challenges identified by authors were lack of service remuneration, lack of standardization of services, lack of selfcare training for pharmacists or lack of integration of pharmacies within the healthcare system. Pharmacies are reportedly already providing many services related to selfcare; however, it might be beneficial if the concept of selfcare was better defined, used more inclusively, more formally codified in regulatory policy to facilitate improvements and recognition of the roles of pharmacists and other health care providers.

1. Introduction

The concept and practice of selfcare is much debated at a global level. The interest is driven by many factors such as the impact of individual health behaviors, the COVID19 pandemic, questions about the sustainability of the health care system and evidence that suggests that when people manage their health it leads to more positive health outcome.^{1,2} The World Health Organization (WHO) has a broad definition where “*selfcare is the ability of individuals, families and communities to promote health, prevent disease, maintain health, and cope with illness and disability with or without the support of a health worker*”.² Different selfcare frameworks^{3–5} exist, with the Seven Pillars of Selfcare by the International Selfcare Foundation (ISF)⁵ being the most frequently cited. This framework describes seven elements of selfcare at an individual level including knowledge and health literacy, mental wellbeing, physical activity, healthy eating, risk avoidance, good hygiene and rational use of products and services. The approach is that there are many different types of activities and entry points into selfcare, and one healthy behavior can lead to others.⁵ The Seven Pillars of Selfcare framework is included in a wider framework, the Selfcare Matrix.⁴ This framework

identifies four dimensions (activities, behaviors, context and environment) at different levels: micro (person-centered, where the Seven Pillars of Selfcare is included), *meso* (individual/social network focused and patient-centered) and macro (system focused). This framework importantly includes all stakeholders involved in selfcare and its delivery.

Selfcare interventions are tools that can empower individuals (micro level) and communities (*meso* level) in their selfcare process. There are many types of selfcare interventions which include medicines, counselling, or digital technologies; these can be accessed fully or partially outside of formal health services and can be applied with or without the direct supervision of health care practitioners.

WHO⁵ and the International Pharmaceutical Federation (FIP)⁷ have recognized the increasing importance of selfcare and selfcare interventions for pharmacy. A FIP statement of policy published in 2017⁸ entitled “Pharmacy as a gateway to care: Helping people towards better health”, encouraged governments, pharmacy organizations and pharmacists to be involved in promoting the use of selfcare interventions. Another FIP report in 2022⁷ suggested that “*selfcare includes a broad scope of areas where individuals can be proactive in sustaining, improving and managing their own health and well-being, ranging from health*

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promotion, disease prevention and management, to self-medication. It is imperative that individuals are empowered with the knowledge and the ability to fully understand and care for their own health in an autonomous way". These documents^{7,8} have stated that pharmacists are ideally placed to support informed selfcare by empowering patients to make better health choices. Dineen-Griffin et al.³ proposed a model on the role of community pharmacists when providing selfcare to patients (Fig. 1). This model identifies four key areas where pharmacists can increase the availability of preventive measures and contribute to system resilience by lessening the burden of preventable diseases (minor ailments and/or chronic conditions).

Although international selfcare reports are valuable, knowledge on what is occurring at a country level and on the ground in community pharmacies appears to be lacking in the literature. This induced the concept of a themed series that aimed to promulgate and disseminate country-based and/or expert information on selfcare and community pharmacies/pharmacists. The specific objectives were:

1. To describe selfcare policies strategies and developments in individual countries and the key changes envisaged while describing how they include/exclude pharmacy, particularly community pharmacy, and the role of community pharmacy/pharmacists.
2. To provide country-based selfcare activities and services with examples of programs.
3. To discuss the challenges and the opportunities community pharmacy/pharmacists face to meet the needs of objective 1.

This commentary is therefore based on a series of papers under the title "Selfcare for health system sustainability: An international series on the role of community pharmacy" published between 2022 and 2024 in the journal "Exploratory Research in Clinical and Social Pharmacy (ERCSP)". Thirteen papers were published from different countries across four continents. One in Africa (Egypt)⁹; three in America (Brazil,¹⁰ Canada,¹¹ USA¹²); seven in Europe (Denmark,¹³ England,¹⁴ Germany,¹⁵ Portugal,¹⁶ Spain,¹⁷ Sweden,¹⁸ Switzerland¹⁹) and two in Oceania (Australia,³ New Zealand²⁰). This commentary paper is limited to the use of information provided by the authors of the themed series and no original documents were evaluated.

Countries included in the themed series (Table 1) ranged from the smallest with 5.9 million inhabitants (Denmark) to the largest with 334 million inhabitants (USA). In relation to their Gross Domestic Product (GDP) devoted to health, it ranged from 4.6% (Egypt)⁹ to 18.3% (United States).¹² In these countries, pharmacies were generally privately own

by pharmacists, although in countries such as Switzerland,¹⁹ England,¹⁴ Sweden,¹⁸ and USA¹² there were corporate ownership.

2. Objective 1: National selfcare policies

Most countries stated that there was little or no government policy recognition of selfcare and when they existed, no mention of pharmacists was included. Authors from Germany¹⁵ and Switzerland¹⁹ explicitly stated that there was "no meaningful translation of the term selfcare" in their language (German and French respectively). On many occasions, different terminology such as "health promotion", "prevention" or "disease prevention" are used instead.

Denmark¹³ included selfcare in their policies in 1970 emphasizing prevention, since then, the Danish Health Authority has developed eleven packages on prevention and health promotion to help local authorities prioritizing actions on alcohol, drug and tobacco prevention and promotion of physical activity, good hygiene, indoor climate in schools, healthy nutrition, good mental and sexual health and sun protection. In Sweden¹⁸ a new law effective in mid-2023 defined selfcare and established measures to promote it. In Canada¹¹ there is a series of healthcare campaigns in topics related to selfcare such as smoking cessation or flu vaccines campaigns; however, no coordination is mentioned under a selfcare strategy. In Portugal,¹⁶ governments appear to have national strategies for some of the Seven Pillars of Selfcare namely health literacy promotion and education for chronic disease self-management. In Spain¹⁷ selfcare was mentioned by the government in the law only in relation to OTC medication utilization.

The "Selfcare Readiness Index 2.0",²¹ developed by the Global Self-Care Federation, evaluated the inclusion of selfcare into policies and documents in different countries. Even though Australia was positioned as one of the top countries in their ranking (second position after Singapore, out of the ten countries examined), Australian authors³ considered that there is little policy recognition to selfcare and there is still significant work to do. Similarly, other two countries rated in the Selfcare Readiness Index were Germany (in third position) and Canada (in sixth position), however, authors stated that there is not a national strategy for the implementation nor promotion of selfcare activities to the public.

However, when selfcare policies were in place or included some of its core elements, pharmacy was not considered (i.e., authors from Sweden¹⁸ stated that "involvement of pharmacists is not mentioned"). In countries such as Brazil²²⁻²⁴ and Sweden,²⁵ the authors stated that the Ministry of Health have published reports and guidelines related to selfcare where there was no mention of community pharmacy or pharmacists. In Egypt⁹ and United States,¹² authors stated that currently there is no national selfcare policy nor national programs focusing on community pharmacists and selfcare. In the United Kingdom, according to authors from England,¹⁴ policy documents have included the role of pharmacists in health promotion, health prevention and selfcare since 1992. In Portugal,¹⁶ the National Health Plan considered taking greater advantage of community pharmacies to promote health literacy and to detect disease.

Another critical component of selfcare is patients' use of traditional and complementary medicines (T&CM) which are increasingly in use.²⁶ Yet, as gleaned from the papers in this special issue, little has been done to even define what these products actually are, let alone regulate them, or explicate pharmacists' roles in their use in conjunction with other drug and non-drug selfcare practices. This was recently confirmed in an international survey of stakeholders from nine countries.²⁷ Like the case with other aspects of selfcare, it has been argued that what constitutes T&CM along with roles of pharmacists be better explained, and that this might best occur under systems thinking and additional studies employing implementation science to discern the most effective interventions and educational practices in this area.²⁸

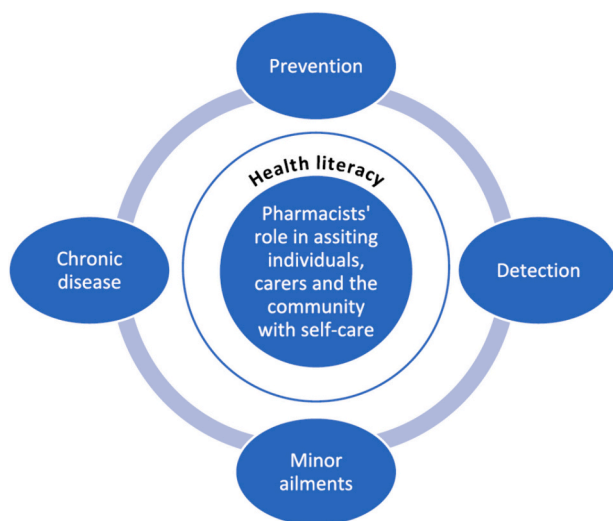


Fig. 1. Pharmacists' role in assisting individuals, carers and the community with self-care³

Table 1

Characteristics of countries and their community pharmacies.

	Population (million people)	Health expenditure (% GDP)	Community pharmacies (n)	Pharmacists (n)	Ownership
Australia [3]	26.8 ¹	10.5 ²	5800	36,107 ³	Only registered pharmacists can hold a financial interest in a pharmacy ⁴
Brazil [10]	212.5	9.6 ⁵	100,720	234,301	89.2% privately owned by pharmacists
Canada [11]	40	12.1 ⁶	11,712 ⁷	Nearly 30,000	Pharmacies must be owned and operated by a pharmacist or a corporation where the majority of directors of the corporation are pharmacists ⁸
Denmark [13]	5.9	10.8	523	1042	Privately owned by pharmacists
Egypt [9]	105	4.6	95,000	313,000	Privately owned by pharmacists (up to 2)
England [14]	67.6 ⁹	11.9	11,522	11,471	May be owned by non-pharmacists. Multiple ownership
Germany [15]	84	10	18,200	53,000	Owned by pharmacists (up to 3 + the main CP)
New Zealand [20]	5.3 ¹⁰	7.74 ¹¹	1070	4118	1) Independent, 2) Chain/banner 3) Supermarket 4) Discount pharmacies
Portugal [16]	10.3	11.1	3000	16,439	Ownership was open to non-pharmacists in 2007 ¹²
Spain [17]	47.5	8.0	22,198	Over 55,000	Privately owned by pharmacists (up to 1)
Sweden [18]	10.3	11.3	1407	12,026	Maybe own by non-pharmacists, four chains own 97% of the country's pharmacies
Switzerland [19]	8.7	11.8	1844	5753	May be owned by non-pharmacists
United States [12]	334	18.3	61,715 ¹³	331,700 ¹⁴	Regulations are different depending on the state ¹⁵

Data in grey were not extracted from the sources below as the information was not included in the theme papers:

1. Australian Bureau of Statistics, 2024
2. Australian Institute of Health and Welfare, 2023
3. The Pharmacy Guild of Australia, 2023
4. Pharmacy Council of New South Wales, 2024
5. Agencia IBGE (Instituto Brasileiro de Geografia e Estatística), 2019
6. Canadian Institute for Health Information, 2023
7. National Association of Pharmacy Regulatory Authorities, 2024
8. Drug and Pharmacies Regulation Act, 1990
9. Office for National Statistics, 2022
10. Stats NZ Tatauranga Aotearoa, 2024
11. World Health Organization Global Health Expenditure database, 2020
12. WHO, The legal and regulatory framework for community pharmacies in the WHO European Region, 2019
13. Berenbrok et al., JAPhA, 2022
14. U.S. Bureau of Labor Statistics, 2023
15. Salgado TM, Rosenthal MM, Coe AB, Kaefer TN, Dixon DL, Farris KB. Primary healthcare policy and vision for community pharmacy and pharmacists in the United States. *Pharm Pract (Granada)*. 2020 Jul-Sep;18(3):2160. doi: [10.18549/PharmPract.2020.3.2160](https://doi.org/10.18549/PharmPract.2020.3.2160).

3. Objective 2. Services and tools related to selfcare and provided in community pharmacy

3.1. Services related to selfcare and provided in community pharmacy

Table 2 contains the services identified by authors including selfcare components that were provided in community pharmacies in their country. Additionally, some authors classified the services using different frameworks: the Seven Pillars of Selfcare framework⁵ (England¹⁴ and Spain¹⁷); the Self-Management/Awareness/Testing model²⁹ (Portugal¹⁶) and the model for Selfcare in Community Pharmacy³ (Australia³ and Denmark¹³). When the frameworks were used for the classification of pharmacy services, only some services were mentioned by more than one country under the same classification (i.e., smoking cessation was mentioned under pillar 5 about risk avoidance). This demonstrates that there is a need for establishing the definitions of services and its relationships with selfcare.

As previously indicated by FIP statement of policy,⁸ community pharmacists' perception of selfcare appears to be predominantly limited to the management of minor ailments and the provision of advice for OTC medications ("The value of this pharmacist input into selfcare derives from: Their competency: The ability to safely assess minor illness effectively and distinguish it from major disease").⁸ Interestingly, results from this series of papers corroborates such statement as the minor ailment service and the counselling on self-medication were the only two services listed by all authors as services in pharmacies specifically to selfcare (Table 2).

Although some services could be said to include a selfcare component for specific patients (i.e., education for cardiac patients or patients with iron-overloaded β -thalassemia); however, most services identified only include selfcare as a side component of the service (i.e., medication

management review, medication adherence, medication reconciliation at discharge, pharmacist prescribing, etc.) with the main focus on the patients' medication. One could question whether that the term "self-care" is understood in its broad definition.

3.2. Tools related to selfcare and used in community pharmacy

In addition to pharmacy services, tools were also identified in relation to selfcare. Pharmacy associations in countries such as Australia³ and New Zealand²⁰ have developed some of these tools. In Canada,¹¹ local resources for patients mainly for the self-management of minor ailments were also mentioned.

Self-medication, through the use of OTC medications, is an important component of selfcare, therefore, differences in the availability of OTC medications directly affect patients' self-management of their health/illness. Countries such as Australia,³ Canada,¹¹ Germany,¹⁵ New Zealand²⁰ and Sweden¹⁸ allow selling some OTCs outside pharmacies, so they are available in supermarkets, gas stations and outlets. Spanish authors¹⁷ stated that OTCs are only available in community pharmacies and Egyptian authors⁹ specified that OTC was not an appropriate term for the Egyptian context given that most medications are readily provided without a prescription.

4. Objective 3: Challenges and opportunities for community pharmacy/pharmacists in relation to selfcare.

Some of the key challenges mentioned by authors for the provision of selfcare services in pharmacies were lack of service remuneration, lack of standardization of services, lack of selfcare training for pharmacists, and lack of integration of pharmacies within the healthcare system.

Most authors and countries agreed on the lack of remuneration as

Table 2

Services related to selfcare and provided in community pharmacies that were mentioned by the authors in the theme series.

Service/Activity*	Country
Allergy checks	Sweden
Counselling Sexual and reproductive health	Brazil, Egypt, England, Germany, USA
Injuries	Brazil, New Zealand
Self-medication	All countries
Digital selfcare solutions	Sweden, Switzerland
Disease screening	Australia, Brazil, Denmark, England, Portugal, Spain, Sweden, Switzerland, USA
Disposal of unwanted medication	England
Dose Administration Aids (DAA)	Australia, Portugal, Spain
Health campaigns	Denmark, England, Portugal, Spain, Switzerland
Inhalation technique assessment	Denmark, Egypt, Portugal
Education for cardiac patients	Egypt
Education in Iron-overloaded β -thalassemia	Egypt
Management of substance use disorders	Australia, Brazil, Switzerland
Medication adherence	Australia, Denmark, Egypt, Spain
Medication management review	Australia, Brazil, USA
Medication reconciliation at discharge	Brazil, England
Medication safety monitoring	Spain
Mental health service	New Zealand
Methadone supply	Spain
Minor ailment service	All countries
Needle exchange	Portugal, Spain
New medicines service	Denmark, England
Point of care testing	Australia, Denmark, England, Portugal, Spain, Sweden, Switzerland, USA
Pharmacist prescribing	Australia, Canada, Denmark, Switzerland
Prevention of opioids & gabapentinoids use	Switzerland
Smoking cessation	Australia, Brazil, Denmark, Egypt, England, Germany, New Zealand, Portugal, Spain
Triage service	Australia, Brazil, Canada, Denmark, England, Switzerland, USA
Vaccination	Australia, Denmark, England, Germany, Portugal, Sweden, Switzerland
Weight management / Nutritional counselling	Brazil, Egypt, New Zealand, Spain, USA

Australia,³ Brazil,¹⁰ Canada,¹¹ Denmark,¹³ Egypt,⁹ England,¹⁴ Germany,¹⁵ New Zealand,²⁰ Portugal,¹⁶ Spain,¹⁷ Sweden,¹⁸ Switzerland,¹⁹ USA.¹²

* The list of services has been extracted from the theme papers. Authors included those self-perceived services in relation to selfcare.

one of the main challenges for service delivery. Different methods other than dispensing fees were seen as an opportunity to enhance selfcare delivery through community pharmacy.¹² However, for remuneration to occur, pharmacists' roles must be clarified. As mentioned specifically with respect to T&CM, further leveraging the roles of pharmacists requires further study with systems thinking and implementation science to create lasting interventions that pique the interests of policymakers and other stakeholders. It also boils down to stressing patient safety as part of an ethical framework where positive outcomes are not fully realized simply as a result of omission of pharmacists' roles.²⁶

The homogenization and standardization of services under the label "selfcare services" was also perceived as important to improve awareness between patients and health professionals.^{17,19} In countries where the health system is decentralized, homogenization of services in the different regions was mentioned as crucial for ensuring equity in selfcare service access.

Another challenge often mentioned was the lack of specific pharmacist training about selfcare. In the USA,¹² the number of credit hours included in their degree and covering selfcare appears to vary between 1 and 6 h; in New Zealand²⁰ selfcare education, as in many countries, is covered in several modules and is mainly taught from the point of view of OTC medicines; in Switzerland,¹⁹ the training to become a "patient

selfcare coach" represents 12 days of a program which have a duration of 100 days; and in Germany,¹⁵ there are some post-graduate specialization options for pharmacists addressing selfcare activities, especially about nutritional counselling, prevention, and health promotion. Universities and continuing development programs sometimes include learning objectives and devote time to selfcare; however, when delivered, selfcare training is mainly associated with OTC medications.

Ultimately, lack of integration of community pharmacies in Primary Care was also perceived as a challenge for the provision of selfcare services. Policies, regulations, and prevention packages were sometimes in place, but pharmacy was not included. Barriers such as the professional competencies overlapping with those from general practitioners were mentioned.¹⁰ Clarifying professional roles, encouraging and improving collaboration within the healthcare sector is essential to increase recognition of pharmacists' contributions to selfcare. Once pharmacy is better integrated, cultural shift towards selfcare among healthcare professionals should be also functioned.

Community pharmacies are already providing many services mostly related to disease screening (i.e., blood pressure or cholesterol measurement), risk avoidance (i.e., smoking cessation) and health promotion (i.e., health campaigns) so opportunities for the profession to embrace more fully selfcare exist. However, there is need to clearly identify that component within services to increase awareness for patients and other stakeholders, namely policy makers and health regulators.

5. Conclusions

The concept of selfcare appears to be poorly recognized by governments. In policies and regulations where selfcare is mentioned, the role community pharmacy is not generally clarified. Furthermore, the community pharmacy profession does not appear to embrace the depth and breadth of selfcare, often adopting a narrow approach limited to nonprescription medicines that alters the way selfcare services are provided in pharmacies; that is, a product rather than service orientation. Although many professional pharmacy services incorporate elements of selfcare, particularly in relation to the Seven Pillars of Selfcare, these elements are not usually identified as such or are critical component. Therefore, there is a need for clear definitions of pharmacy services and explicit relationships between these services and selfcare (rather than only relying on terms such as prevention or health promotion). One of the main challenges in providing selfcare in community pharmacies is service remuneration, yet clearer explication of roles of pharmacists and even other health care providers must first be established.

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CRedit authorship contribution statement

Noelia Amador-Fernandez: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Writing – original draft. **Shane Desselle:** Conceptualization, Investigation, Writing – review & editing. **Victoria García-Cárdenas:** Conceptualization, Investigation, Writing – review & editing. **Sarah Dineen-Griffin:** Conceptualization, Investigation, Writing – review & editing. **Shalom I. Benrimoj:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Writing – original draft.

Declaration of competing interest

None.

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