Community pharmacy insights: Supporting the need for self-care

A FIP Multinational Needs Assessment Programme report

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Colophon

Authors:

Dr Diala Koudmani (FIP Development Goals Projects Coordinator)

Dr Sherly Meilianti (FIP Data and Intelligence Specialist)

Ms Nisa Masyitah (FIP Project and Data Support Coordinator)

Ms Farah Aqqad (FIP Regional Engagement, Support and Development Manager)

Ms Afina Nur Fauziyyah (FIP-UCL Collaborating Centre Researcher)

Reviewers:

Professor Ian Bates (FIP Global Pharmaceutical Observatory Director)
Dr Catherine Duggan (FIP Chief Executive Officer)

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Executive summary

The healthcare context is evolving rapidly, driven by an increased emphasis on patient empowerment and self-care. The World Health Organization (WHO) defines self-care as "the ability of individuals, families and communities to promote health, prevent disease, maintain health and to cope with illness and disability with or without the support of a healthcare provider".[1] Within this evolution, community pharmacists play a pivotal role in supporting individuals on their journey towards better health. The pharmacy team serves as a critical point of contact for patients seeking guidance and assistance in managing their health and well-being.

This report took evidence from both an online questionnaire and short interviews aimed at describing pharmacists' understanding of self-care. The report assesses further needs related to education and training and investigates the role of pharmacists in using digital self-care tools and healthcare technologies. It also captures insights into support that patients need from the community pharmacy team to manage their own self-care conditions.

The findings from the literature review show that the concept of self-care is receiving greater attention worldwide. Pharmacists and pharmacy teams are developing more opportunities to extend their contributions and behaviours to facilitate self-care support for better patient health outcomes. However, substantial barriers still exist if community pharmacy is to optimise its performance and embrace change. Evidence suggests that leveraging and empowering partnerships between pharmacists and patients are prerequisites for delivering more patient-focused self-care support and higher-quality services. Educating and training pharmacists remains a necessity to bring tangible benefits to patients. This can enhance patients' health literacy and awareness and assist them to better care for themselves, enhancing economic impacts and maintaining sustainable and efficient services.

Key findings:

- From a total of 238 respondents from 55 countries, over three quarters (184, 77.3%) indicated that they had a clear understanding of the meaning of self-care as a concept.
- Most respondents expressed agreement with self-care statements that related to actively supporting patients' healthcare decisions and consultations (207, 87.0%), medication adherence (214, 89.9%), and facilitating lifestyle changes (204, 85.7%).
- Respondents expressed agreement with statements that underline patient empowerment, such as patients proactively seeking information to manage their conditions (204, 85.7%) and becoming more confident in making lifestyle and management changes (198, 83.2%).
- Three-quarters of respondents also leaned towards agreement with statements relating to patients actively communicating their preferences to community pharmacy teams for optimal support (177, 74.4%).
- Respondents tended to express disagreement with the notion of patients solely managing their health without the involvement of healthcare professionals, including pharmacists (158, 66.4%).
- A quarter of respondents disagreed with statements regarding self-care principles that advocate patients becoming more self-reliant or autonomous in their interactions with the community pharmacy team.
- Almost half of the respondents disagreed that self-care entails the transfer of the patient caseload from doctors and other healthcare professionals to pharmacists (117, 49.2%).
- Nearly all respondents (93.2%) reported that pharmacists should be actively involved in providing self-care support. Apart from pharmacists, pharmacy technicians (48.9%), pharmacy assistants and other team members (39.2%) should also provide self-care support.
- Educating and advising patients about their self-limiting conditions emerged as the most commonly employed approach reported by respondents (189, 79.4%), followed by advising on the use of medication for self-limiting conditions (177, 74.4%) and providing medicines to patients (141, 59.2%).
- Health education websites are the most widely employed resources used by respondents (106, 44.5%) with similar use of health tracking apps (87, 36.6%) and diagnostic tests (71, 29.8%).

- Interestingly, there was some recorded uncertainty about the types of digital self-care tools or healthcare technologies used by patients.
- A lack of time to educate patients about health technologies and digital self-care tools was observed by many respondents.
- Over three-quarters of respondents (179, 75.2%) reported obtaining information was a part of continuing professional development. Online training programmes, webinars and video lessons were the most preferred format for CPD.
- Respondents reported inadequate funding and limited access to patient records as significant barriers hindering their ability to provide self-care support.
- Key themes were identified that could improve community pharmacy practice and overall management for better self-care support delivery, including better use of digital self-care tools and healthcare technologies.
- Key themes that would enhance long-term benefits of self-care on patient outcomes and healthcare systems were also identified.

As evident throughout this report, community pharmacists recognise the importance of offering various self-care support activities. This acknowledgement presents a unique opportunity for the pharmacy profession to develop a cohesive strategy to address existing learning gaps and barriers. By doing so, community pharmacists can play a more significant role in promoting public health and empowering individuals to manage their well-being, ultimately improving healthcare access and quality of life.

Acknowledgements

1 Introduction

The healthcare context is evolving rapidly, driven by an increasing emphasis on patient empowerment and self-care. The World Health Organization (WHO) defines self-care as "the ability of individuals, families and communities to promote health, prevent disease, maintain health and to cope with illness and disability with or without the support of a healthcare provider".[1] Since the start of the COVID-19 pandemic, pharmacy professionals have expanded their role in supporting people's self-care. They maintained access to primary care when in some cases, it was limited to other primary healthcare providers.[2]

Within this evolution, community pharmacists play a pivotal role in supporting individuals on their journey towards better health. The pharmacy team serves as a critical point of contact for patients seeking guidance and assistance in managing their health and well-being.[3] To fulfil this role effectively, it is imperative that the community pharmacy team not only comprehends the concept of self-care but also possesses the requisite knowledge and skills to facilitate its practice to provide self-care support in favour of patients' health.

Digital self-care tools and healthcare technologies are becoming increasingly prevalent within healthcare systems worldwide.[4–6] Pharmacists' paramount role in directing and harnessing these innovations to enhance self-care support delivery is worth noting. Pharmacists are crucial in bridging the gap between technology and patient care, ensuring that individuals can access the right tools and guidance for effective self-care.

Nevertheless, with this healthcare transformation, the extent to which the pharmacy team can provide self-care support may be influenced by a complex interplay of barriers and enablers. Challenges such as regulatory constraints, resource limitations and the need for extensive staff training may hinder realising their full potential. Conversely, factors such as well-trained and qualified staff, technological innovations, and collaborations with healthcare networks can serve as enablers, allowing community pharmacies to maximise their role in advancing self-care support and fostering healthier communities.[7, 8]

Pharmacists, as highly accessible healthcare professionals, occupy a pivotal role in facilitating self-care support for individuals. Their expertise and knowledge empower patients to take charge of their health, offering a spectrum of interventions that extend beyond medicines dispensing to encompass education, guidance and leveraging healthcare technologies to enhance health and economic outcomes.

1.1 Aim and objectives

This project aimed to investigate community pharmacists' roles in supporting people's self-care, including their understanding of self-care and their learning needs, assessing the needs related to the education and training of pharmacists, and investigating the role of pharmacists in directing and leveraging digital self-care tools and healthcare technologies to enhance self-care support delivery in favour of patients' health.

The objectives were to:

- Describe how well self-care is understood as a concept by the community pharmacy team and its relevance to their practice;
- Identify the learning needs of community pharmacy teams to support patients in managing their own self-care conditions;
- Describe the general level of knowledge and skills within the community pharmacy team and the challenges the pharmacy team faces when educating patients about self-care and the resources available;
- Explore the existing digital self-care tools/healthcare technology used by patients and access and challenges the pharmacy team faces in using these healthcare technologies;

- Explore what the community pharmacy team needs to offer value-added services that support self-care (barriers and enablers);
- Identify community pharmacy teams' needs across countries/regions; this includes what is needed by patients and the public and any services that are recognised; and
- Identify gaps and provide recommendations on how to support the community pharmacy team's role in supporting people's self-care and to develop self-care tools and strategies to help patients manage their own conditions based on the findings and recommendations.

2 A review of the literature and existing data

We conducted a systematic literature review to explore community pharmacy insights into the self-care concept and describe the most common self-care support or activities that pharmacists contributed to, showing the clinical and cost impact on patient health outcomes and healthcare systems supported by evidence. This literature presented studies conducted in both developing and developed countries with different healthcare systems, namely England, Australia, Spain, Japan, Pakistan, Sudan, and some Eastern Mediterranean region countries (Egypt, Jordan, Lebanon and Somalia). Our review also helped identify the barriers, learning gaps and knowledge required to enable pharmacists to provide advice and educate patients about the self-management of their conditions, and we designed the survey questions (see Appendix 1) accordingly.

2.1   Search strategy and inclusion criteria

2.1.1 Review of literature

A systematic approach was conducted to identify and assess the relevant literature using the following electronic databases: SCOPUS, PubMed (Mesh search), Embase, and Ovid MEDLINE. The following search terms were used to cover all combination possibilities to the relevant articles: self-care, pharmacists, pharmacies, community pharmacy, self-care support, self-care activities, self-care concept, health literacy, minor ailments, knowledge, attitude, behaviour, perception and awareness. Table 1 illustrates the search combination and strategy used. The literature search was conducted in February 2023, and no time limit was imposed to restrict the search.

Table 1: Literature search combinations

Database (up to February 2023)	Controlled vocabulary and keywords			Citations retrieved	Articles included in this review
PubMed (Mesh search)	("Pharmacies"[Mesh] OR "Community Pharmacy Services"[Mesh])	AND	"self-care"[Mesh]	370	After excluding duplicates: 1950 articles.
Different keywords combination	(health literacy) AND (community pharmacy)	AND	"self-care"[Mesh]	45	
	((self-care) AND (community pharmacy)	AND	"minor ailments "[Mesh]	22	
Scopus	TITLE-ABS-KEY (community AND pharmacy) OR TITLE-ABS-KEY (pharmacists))	AND	TITLE-ABS-KEY (self-care AND support) OR TITLE-ABS-KEY (self-care AND activities)	406	After title and abstract screening: 26 articles.
Different keywords combination	TITLE-ABS KEY (community AND pharmacy) AND TITLE-ABS-KEY (knowledge))	AND	TITLE-ABS-KEY (self-care)	124	After reviewing the content in detail: 16 articles were included.
	TITLE-ABS-KEY (community AND pharmacy))	AND	TITLE-ABS-KEY (self-care AND support)	113	
	TITLE-ABS-KEY (community AND pharmacy))	AND	(TITLE-ABS-KEY (self-care AND activities)	81	
	TITLE-ABS-KEY (community AND pharmacy) AND TITLE-ABS-KEY (attitude) OR TITLE-ABS-KEY (behaviour) OR TITLE-ABS-KEY (perception))	AND	TITLE-ABS-KEY (self-care AND concept)	19	

Database (up to February 2023)	Controlled vocabulary and keywords			Citations retrieved	Articles included in this review
	TITLE-ABS-KEY (health AND literacy) AND TITLE-ABS-KEY (community AND pharmacy))	AND	TITLE-ABS-KEY (self-care)	19	
	TITLE-ABS-KEY (self-care) AND TITLE-ABS-KEY (community AND pharmacy))	AND	TITLE-ABS-KEY (minor AND ailments)	30	
	TITLE-ABS-KEY (community AND pharmacy) AND TITLE-ABS-KEY (perception))	AND	TITLE-ABS-KEY (self-care)	53	
	TITLE-ABS-KEY (community AND pharmacy) AND TITLE-ABS-KEY (behaviour)	AND	TITLE-ABS-KEY (self-care AND concept)	10	
Embase Different keywords combination	community pharmacy.mp. or "pharmacy (shop)"/	AND	self-care.mp. or self care//	426	
	Community pharmacy.mp. or "pharmacy (shop)"/ AND awareness	AND	self-care.mp. or self care//	28	
	community pharmacy.mp. or "pharmacy (shop)"/	AND	self-care support.mp	7	
	community pharmacy.mp. or "pharmacy (shop)"/	AND	self-care activities.mp	11	
	health literacy.mp. or health literacy/ AND community pharmacy.mp. or "pharmacy (shop)"/	AND	self-care.mp. or self care/	19	
Ovid MEDL	community pharmacy.mp. or Pharmacies/	AND	self-care.mp	219	

A systematic literature approach was conducted to identify and assess the relevant literature. The inclusion criteria of these articles were:

- Studies which involved pharmacists working in the community setting;
- No geographical limitations for the countries included (worldwide);
- All types of studies, audits and reports; and
- Only studies in the English language.

Initially, we identified 2,002 studies from the databases, of which 52 were excluded due to duplication. Afterwards, 1,950 articles were screened, which led to the exclusion of 1,924 studies based on irrelevant titles or abstracts reviewed. Subsequently, 26 articles were reviewed in detail, of which 16 articles were included in this literature review. Articles were excluded based on the inclusion criteria selected for this literature. Figure 1 displays the literature search profile.

Identification of studies via databases and registers

Identification

2002 articles identified from:
    PubMed (437)
    SCOPUS (855)
    EMBASE (491)
    Ovid MEDLINE (219)

52 duplicate articles removed before screening.

Screening

1950 articles screened

1924 irrelevant articles excluded based on the title or abstract review screening.

26 articles reviewed in detail

10 articles excluded after detailed review that did not meet the inclusion criteria of the literature.

Included

16 studies included in review

Figure 1. Flowchart of articles identified, excluded and included

2.2 Data extraction and analysis

2.2.1 Community pharmacists' role, perception, and awareness of providing self-care support and advice

Self-care, in its broadest sense, is described as the practice of individuals in managing their own health efficiently using the knowledge and adopting health-enhancing behaviours provided to them in collaboration with healthcare professionals as needed.[8–11] Self-care activities have a wide range, from dealing with various common self-limiting conditions (e.g., sore throat, headache, cold, reflux/heartburn) to supporting more complex conditions, including the management of chronic and long-term conditions (LTCs). [9]

Community pharmacists, as the most accessible healthcare providers, have the advantage of facilitating and providing credible self-care support and advice to the general public on demand.[7, 8] However, there is very little published evidence investigating pharmacists' understanding and conceptualising the multidimensional holistic concept of the self-care support provided to patients as a whole, not disease-specific interventions in pharmacy practice.[7, 10]

Two studies were conducted in England to explore community pharmacists' perception and contribution to the self-care support of LTCs in pharmacy practice. The findings of these studies showed that community pharmacists agree and understand the broader self-care principles related to patients' active involvement and taking responsibility for their healthcare.[7, 10] Still, their theoretical perspectives of self-care were not reflected in their systematic practice and contributions to self-care support.[10] The findings also found that the majority of pharmacists prioritised providing medicines-focused "information and advice" as the most important self-care support activity compared with other patient-focused support activities in community pharmacies.[7, 10] Nevertheless, a few pharmacists recognised that self-care support goes beyond educating patients about their medicines and should move further towards a patient-focused approach.[10] They, furthermore, agreed less with the self-care principle that promotes patients to become more autonomous and independent.[7]

Community pharmacists in Sudan showed a positive attitude towards providing self-care support, including prevention and management of chronic diseases. They expressed their concern, however, about the lack of proper knowledge and training as well as the existence of national standards for good pharmacy practice, which limited them to providing more patient-focused services.[8] Another study was conducted in England to determine the attitude and knowledge of community pharmacists advising people with acute or chronic low back pain, one of the most commonly reported physical symptoms. Pharmacists in this study showed a positive attitude towards the perception of providing evidence-based back pain advice. This study also, interestingly, indicated that pharmacists who have experienced back pain were more confident and knowledgeable, and provided better advice than other pharmacists. Pharmacists also agreed that gaining more education and attending training would be a benefit to improve their confidence and ability to offer self-care support about the management of back pain.[12]

Pharmacists in the reviewed studies demonstrated a general understanding of the self-concept. However, they also expressed that their previous knowledge and education must refine and improve to resonate with their pharmacy practice.

2.2.2   Pharmacists' most common self-care support in community pharmacy

As the global healthcare system continues evolving, self-care is expected to play a major role in treating certain minor ailments and some chronic conditions, wherein pharmacists are in the foreground of these changes.[11, 13] Minor ailments are generally defined as self-limiting conditions that can be managed with little or no medical interventions.[13–15] Respiratory conditions (coughs, colds, sore throats), pain conditions (headache, musculoskeletal), and gastrointestinal disorders are the top three self-care health areas that are constantly classified as the most prevalent conditions seen in the community.[9]

In this literature, we described global healthcare trends affecting self-care support, focusing on the most common health conditions in which community pharmacists are more engaging and critically contributing to empowering patients and improving their health outcomes.

A community pharmacy-based cluster randomised controlled trial conducted in Australia was designed to evaluate and compare the clinical and humanistic outcomes of patients receiving minor ailments services by well-trained pharmacists compared with usual pharmacist care. Patients presenting with symptom-based presentations and/or product-based presentations for reflux, cough, common cold, headache (tension or migraine), or primary dysmenorrhea, or low back pain were considered in this study. The results showed improved clinical and humanistic outcomes as a result of minor ailments care provided compared with usual care practice.[16] Also, the findings from this current study mirror the results of a systematic literature review which suggested that minor ailments are being treated effectively in community-based care.[17]

In Pakistan, an RCT study assessed the impact of pharmacist-led self-care practices and education on poorly controlled type 2 diabetes patients.[18] The clinical significance indicated in this study aligned with the findings of other literature that appraised and supported integrating self-care educational interventions, such as diet control, physical activity and self-monitoring of blood glucose in diabetes management.[18, 19]

In a study conducted in Japan, pharmacists were found to play an important role in the community setting through positive interventions by advising on healthy diets and nutrients, sun exposure and exercise to improve bone mineral

density and simultaneously manage and reduce the risk of osteoporosis for elderly people.[20] In the Eastern Mediterranean region (EMR), sexual and reproductive health (SRH) was also identified as an important area for community pharmacists to intervene, deliver self-care support and educate patients to maximise health benefits.[2] EMR pharmacists' role evidently increased during and after COVID-19; nevertheless, pharmacists emphasised the importance of training and educating individual pharmacists on self-care activities on SRH and in general.[2, 21]

Self-medication is also a fundamental component of self-care,[8, 11, 16] and many patients visit pharmacies for advice and access to non-prescription medicines for their minor conditions[16]. For instance, evidence showed that pharmacists can support patients with acid reflux-related symptoms with the effective and safe management of OTC treatments and lifestyle modifications as well as decrease the risk of heartburn treatments hiding other consequential conditions.[11]

All these studies reinforced that pharmacists are fundamentally involved in various therapeutic areas, significantly contribute to different self-care activities, and respond positively to patients' symptoms or product information requests.

2.2.3   Pharmacists' barriers and enablers to effective self-care support delivery

Although the role of pharmacists has widely expanded and shifted towards patient-centred care, there are still multiple problems associated with optimising pharmacists' contribution and hindering them from performing their roles to support self-care.

Several studies identified potential barriers to practice change and effective support, including factors such as time constraints and heavy workload, insufficient funding and remuneration, limited workforce support and expertise,[8–10] lack of standardised protocols/guidelines,[8] patients' awareness and expectations of the role of community pharmacists in delivering self-care support,[8, 10] access to patients' medical records and work relationship with GPs,[7, 8] lack of space in the pharmacy,[7, 8] patient acceptance and legislative barriers.[8]

Also, some of the reviewed studies that investigated the extension role identified other pharmacist-related factors. These studies have argued that pharmacists themselves can be a major barrier to undertaking such self-care interventions due to the lack of confidence in their clinical knowledge and ability to provide appropriate health care.[8, 9] This argument was based on tangible evidence reported constantly on pharmacists' self-assessments of the need for training and education to balance the reluctance to take responsibility and make autonomous decisions.[9]

On the other hand, some of the reviewed studies identified and summarised key practice elements that enable pharmacists to provide overarching self-care support activities and interventions.[7, 10] First, collaborative care planning plays a central role in enhancing the efficacy of self-care support, where patients and pharmacists can share their perspectives and expertise to personalise care and support plans. Second, patient education through providing tailored and personalised information and advice helps improve patients' knowledge and understanding of living with their conditions and individual needs (e.g., health beliefs, health literacy) – a self-care education approach that differs from the traditional patient education approach. Skills training and support is another key element deemed substantial for pharmacists and patients to carry out some self-care support activities. Healthcare professionals, including pharmacists, are encouraging and incorporating the use of technology into many self-care support activities and interventions that support and improve patients' self-care at home.

Several studies also emphasised some logistics that enable providing self-care support, for instance, the availability of private consultation rooms and pharmacists' accessibility and access to educational resources and training for support.[7]

2.2.4   Cost-utility of providing self-care support in the community setting

In order to maintain sustainable, economically viable and efficient global healthcare systems, healthcare expenditures need to be reduced, and self-treating certain illnesses under the guidance of community pharmacists can enhance the achievement of this goal.[11] Three main studies were conducted to compare the cost and health-related outcomes associated with the management of multiple minor ailments (self-limiting conditions), which are gastrointestinal disturbance[13–15] (diarrhoea, flatulence, heartburn or vomiting), pain[13–15] (dysmenorrhea, headache, sore throat, musculoskeletal pain), upper respiratory tract (cough, cold or nasal congestion)[13–15], dermatological problems[14] (cold sore, foot fungi) and eye discomfort.[15]

A first study of its kind carried out in England has illustrated that the cost associated with patients receiving counselling in the pharmacy setting for minor ailment management was significantly lower than in the emergency department or GP setting for similar symptomatic and quality-of-life outcomes.[15] The cost-utility of community pharmacists offering minor ailments services compared with usual care was also evaluated by conducting two recent and comparable cluster randomised controlled trials in the Australian[13] and Spanish[14] healthcare settings. The results of these studies have proven the significant clinical benefits to patients and the cost-utility of pharmacy-based care for minor ailments compared with the usual care provided by three different healthcare systems models in the world.[13, 14] These reviewed studies demonstrated a positive clinical and economic impact by decreasing the cost associated with treating certain minor conditions, reducing the workload burden for other healthcare settings and improving patient health.

In conclusion, the concept of self-care has received greater attention worldwide. Pharmacists and their pharmacy teams are, now more than ever, being provided with opportunities to expand their contribution and adopt behaviours that would facilitate delivering self-care support in favour of patient health outcomes. Yet substantial barriers still exist if community pharmacy is to optimise its performance and embrace change. Evidence suggests that leveraging and empowering partnerships between pharmacists and patients are prerequisites for delivering more patient-focused self-care support and higher-quality services. Educating and training pharmacists is a necessity to demonstrate proper and tangible benefits to patients. This can enhance patients' health literacy and awareness and assist them to better care for themselves, consequently reducing the economic impact and maintaining sustainable and efficient services.

3 Assessing the pharmacy team's involvement and needs in supporting self-care

The review explained in Chapter 2 provided insights into community pharmacists' perceptions and awareness of self-care support, highlighted the most common self-care support delivered by community pharmacists, identified barriers and enablers to effective self-care support delivery, and also investigated the impact of providing self-care support in the community setting on the healthcare system costs and expenditures. Nevertheless, the evidence showed that there is a need to bridge the gap related to the education and training of pharmacists, and the health literacy of pharmacists and patients, empowering pharmacists and patients to obtain better health outcomes.

Therefore, our global survey and short interviews aimed to collect information on current community pharmacist understanding and insights into the concept of self-care support, determining potential areas for further learning and appropriate training delivery methods, determining challenges of access to healthcare technology and pharmacists' role in directing the patient to leverage available digital tools. Finally, we will provide a list of recommendations and suggestions to mitigate the barriers that hinder proper self-care support delivery.

3.1 Method

This project used a mixed-methods approach. A quantitative global cross-sectional survey was undertaken (using the Qualtrics platform) from July to August 2023. This was followed by a recruitment of international community pharmacists who agreed to participate in a qualitative short-structured interview during August 2023.

The FIP Global Pharmaceutical Observatory project team designed and developed the online survey and the interview topic guide, both of which underwent peer evaluation.

The survey comprised 14 multiple-choice questions formulated by considering the review of the relevant literature and aligned with the project objectives. The survey included five sections:

1. Introduction, project overview, and demography/practice information-related questions;
2. Community pharmacy team's perceptions and understanding of the concept of self-care;
3. Community pharmacy team's engagement and contribution to self-care activities in the community pharmacy;
4. Community pharmacy team's knowledge and skills in supporting self-care and their training needs; and
5. Community pharmacy team "barriers" and "enablers" to providing self-care support.

The invitation email and survey were translated into five languages: Arabic, English, French, Spanish, and Portuguese, and it was designed to be completed within 10 minutes. The terms "Self-limiting conditions" and "A long-term condition" were defined to enable all participants across different nations to have the same understanding of these terms:

*   **Self-limiting conditions**[13] refer to medical conditions that will resolve on their own and can be reasonably self-diagnosed and managed with non-prescription medicines.
*   **A long-term condition** (or a chronic condition)[22] is a health problem that requires ongoing management over a period of years and is generally one that can be controlled with the use of medication and/or other therapies.

The survey can be found in Appendix 1.

The survey was distributed to all 151 FIP member organisations (MOs), 23 observer organisations and 1,032 members of the Community Pharmacy Section, inviting them to participate in this survey and to extend it to all community pharmacists and their staff. Throughout the survey duration, two reminder emails were forwarded to all MOs to enhance the response rate. In addition, we had the opportunity to share the link to the survey during a FIP digital event (Summary in Appendix 3) held on International Self-care Day, "Empowering pharmacy teams: Leveraging global insights

for self-care enhancement", aiming to discuss effective strategies for empowering pharmacy teams in their self-care practices to improve the response rate. We considered a response to be valid when the participant progressed through the survey, submitted their answers, and was presently employed in a community pharmacy in their countries. Respondents had the option to proceed with the submission even if they did not answer all questions, which means a valid response could have some unanswered questions.

The short-structured interviews aimed to capture further in-depth insights into community pharmacists' perceptions of self-care, what support that patients need to receive from the community pharmacy team, and what support pharmacists need to support patients in managing their own conditions through self-care. The interview also investigated the pharmacy team's role in guiding patients towards digital self-care tools and healthcare technologies. We also discussed the possible positive outcomes of long-term self-care. Lastly, we gathered recommendations from respondents on strategies or ways of practice to overcome barriers identified in their survey responses that might hinder them from providing self-care support.

The interviewed candidates were international community pharmacists, and they were approached after providing their consent through the survey to talk about their experience in managing patients' self-care. Notably, we aimed to select a targeted sample from different World Health Organization (WHO) regions to ensure a comprehensive and diverse sample representation. An interview topic guide was prepared outlining the purpose, structure and specific questions to discuss during the interview and forwarded to the participants prior to the interview (Appendix 2).

Replies to the survey questions were collected and summarised using descriptive analysis (frequencies and percentages) and the results were visualised using bar charts. Thematic content analysis was used to analyse the data collected from the interviews. All interviews were conducted in English and later transcribed and validated by the relevant interviewees. Interview data were coded, analysed and subsequently reviewed by a second coder. All interview recordings were deleted within a week after the interview.

3.2   Findings

3.2.1 Respondents' demographics (survey)

A total of 238 respondents from 55 countries participated in this survey. The majority of respondents were based in Austria (33, 13.9%), followed by South Africa (31, 13.0%) (Figure 2). Looking at the regional distribution, almost half of respondents were based in Europe (115, 49.4%), followed by Africa (60, 25.8%), Southeast Asia (19, 8.2%), America (15, 6.4%), Western Pacific (14, 6.0%) and Eastern Mediterranean (10, 4.3%).

European region (115, 49.4%)

Country	Number of participants
Austria	33
Spain	14
Portugal	11
Bosnia & Herzegovina	9
United Kingdom	9
Slovenia	7
Greece	6
Denmark	3
Serbia	3
Turkey	3
Croatia	2
Israel	2
Italy	2
Norway	2
Sweden	2
Azerbaijan	1
France	1
Germany	1
Iceland	1
Ireland	1
Netherlands	1
Ukraine	1

African region (60, 25.8%)

Country	Number of participants
South Africa	31
Zimbabwe	7
Nigeria	5
Namibia	4
Ethiopia	2
Kenya	2
Lesotho	2
Malawi	2
Rwanda	2
Ghana	1
Sierra Leone	1
South Sudan	1

Americas region (15, 6.4%)

Country	Number of participants
Paraguay	7
Costa Rica	3
United States	2
Uruguay	2
Peru	1

Western Pacific region (14, 6.0%)

Country	Number of participants
Australia	4
Philippines	4
Japan	3
Malaysia	2
New Zealand	1

South East Asia region (19; 8.2%)

Country	Number of participants
Sri Lanka	8
India	6
Indonesia	3
Bangladesh	2

Eastern Mediterranean region (10, 4.3%)

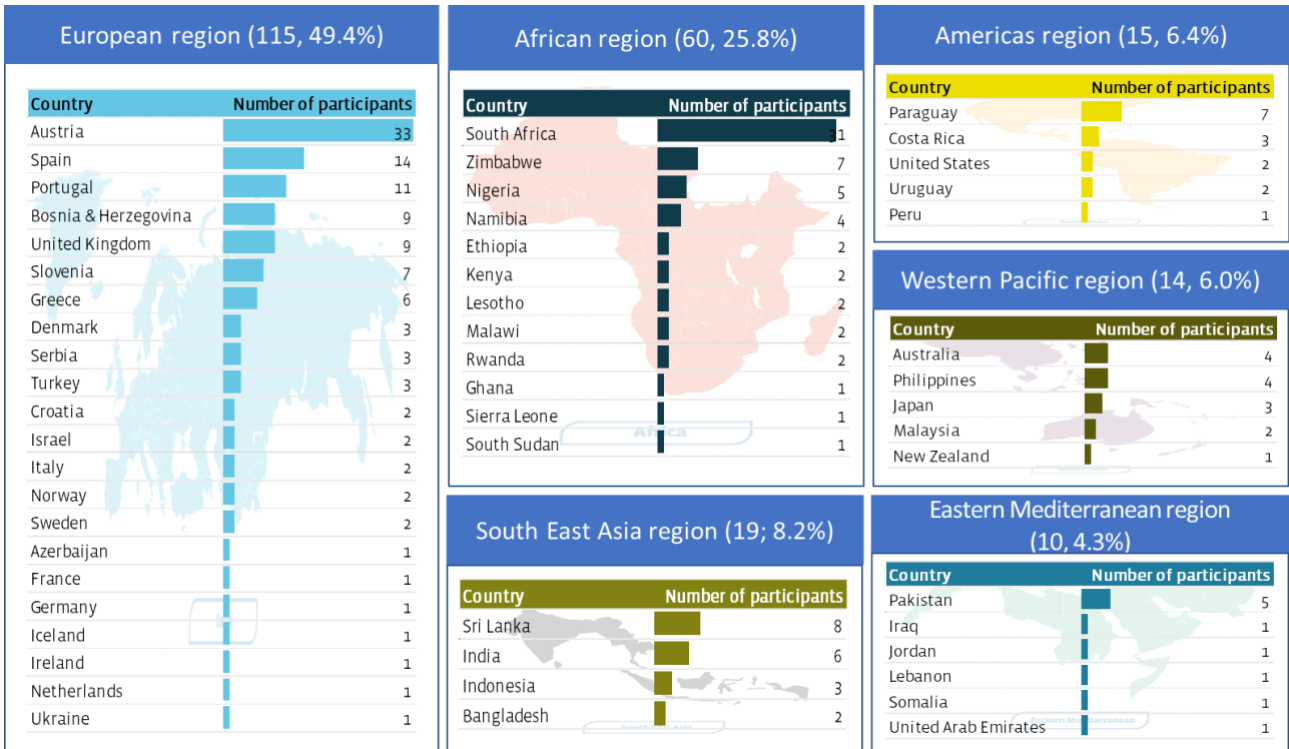| Country	Number of participants
Pakistan	5
Iraq	1
Jordan	1
Lebanon	1
Somalia	1
United Arab Emirates	1

Figure 2. Respondents' demographics by countries and regions

More than half of the respondents (167, 62.3%) worked in an independent community pharmacy, followed by almost a quarter (62, 23.1%) working in a retail chain community pharmacy. Eleven respondents stated that they worked as wholesalers (4.1%), and 10 respondents (3.7%) stated that they worked in a FIP member organisation (Figure 3).
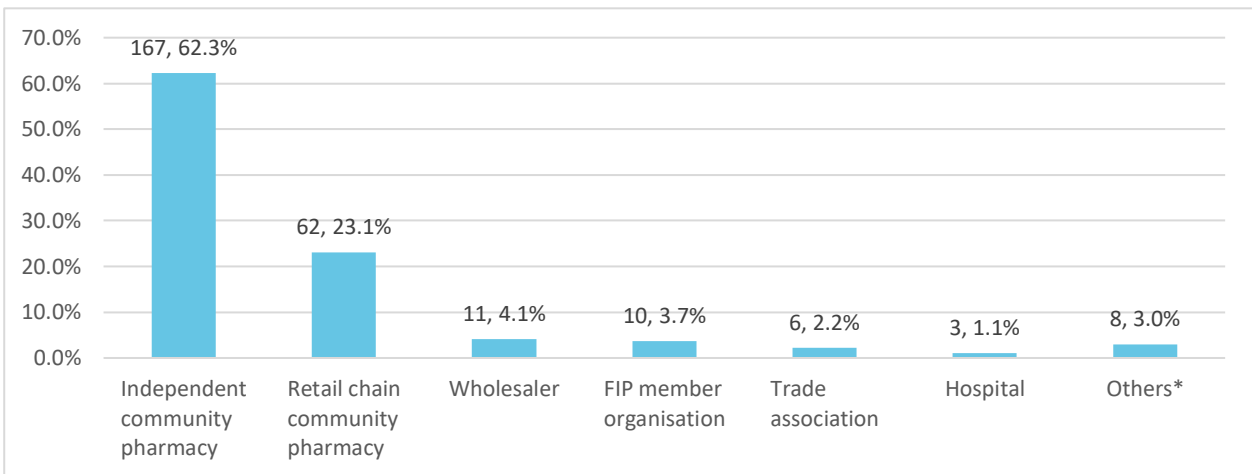
*Others include speciality pharmacies, medical centres, research, academicians, and non-governmental organisations.

Figure 3. Respondents' demographics by workplace

Respondents were asked to describe their current role in their workplace. Most respondents (217; 91.2%) said that they were community pharmacists (Figure 4). Five respondents (2.1%) said that they were pharmacy assistants, and two (0.8%) that they were pharmacy technicians. Eight respondents (3.4%) had more leadership or speciality roles such as project lead, clinical pharmacist, consultant, director and manager.
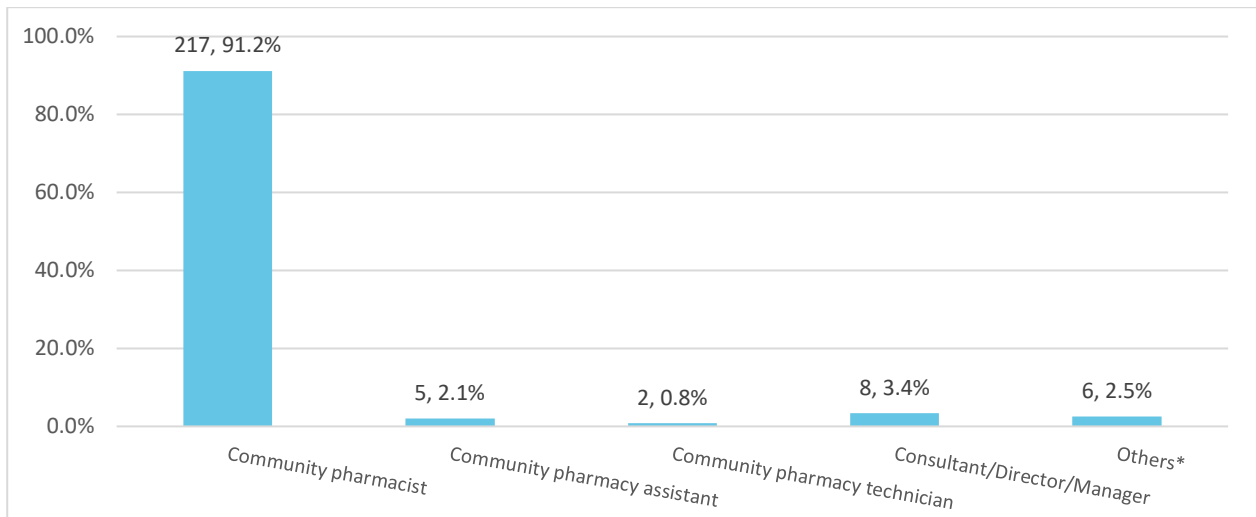
*Others include pharmacy interns or pharmacy-by-training.

Figure 4. Respondents' demographics by roles

The distribution of years of experience among respondents is diverse. Nearly half of the respondents (108, 45.4%) fall within the mid-career range, with 11 to 30 years of experience, while almost a quarter (49, 20.6%) have one to five years of experience (Figure 5).
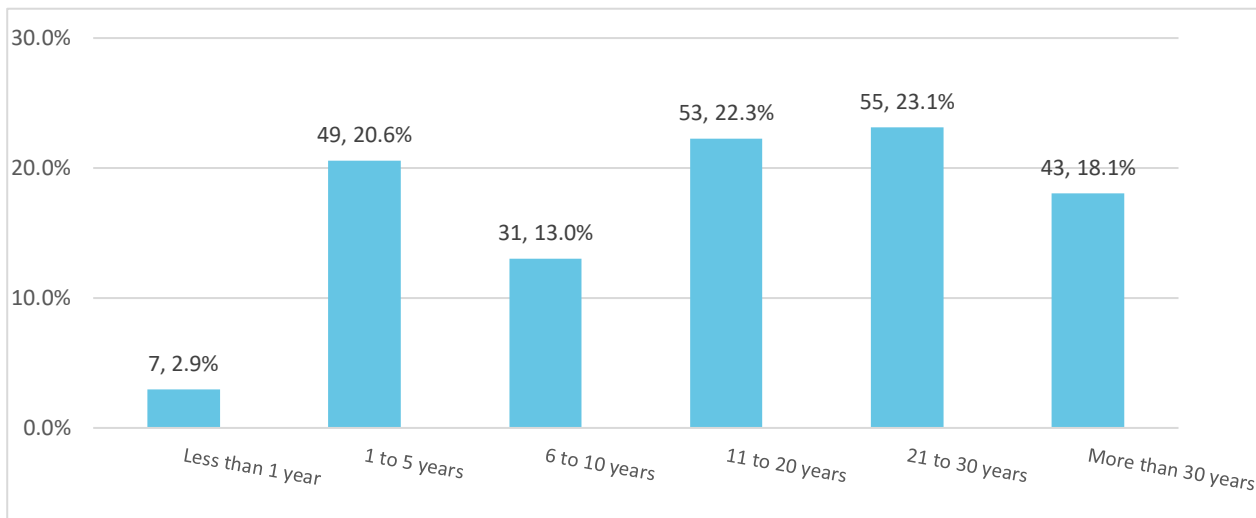

Figure 5. Respondents' demographics by years of experience

3.2.2 Community pharmacy team's perception and understanding of the concept of self-care

This section delves into the community pharmacy team's perceptions and understanding of self-care. Respondents were presented with 12 statements prompting them to evaluate their agreement with self-care-related concepts, along with one statement assessing their overall understanding of the concept (see Figure 6). Over three quarters of respondents (184, 77.3%) indicated that they had a clear understanding of the meaning of self-care as a concept.

Most respondents expressed agreement, ranging from agreement to strong agreement, with self-care statements related to their involvement in actively supporting patients' healthcare decisions (207, 87.0%) and consultations (207, 87.0%), medication adherence (214, 89.9%) and facilitating lifestyle changes (204, 85.7%). Furthermore, they concurred, ranging from agreement to strong agreement, with statements that underscore patient empowerment, such as patients proactively seeking information to manage their conditions (204, 85.7%) and becoming more confident in making

lifestyle and management changes (198, 83.2%). Nearly three-quarters of respondents also leaned towards strong agreement and agreement with a statement relating to patients actively communicating their preferences to community pharmacy teams for optimal support (177, 74.4%).

Statements related to patient autonomy or taking control of their own care without mentioning the involvement of the community pharmacy team revealed a spectrum of perspectives. For example, while 69.3% of respondents (165) revealed agreement, 18.1% of them (43) revealed disagreement. Moreover, respondents exhibited nuanced views regarding the level of patient independence from healthcare professionals within the self-care concept. Approximately two-thirds of respondents expressed disagreement or strong disagreement with the notion of patients solely managing their health without the involvement of healthcare professionals, including pharmacists (158, 66.4%). Similarly, almost half of the respondents disagreed or strongly disagreed with a statement positing that self-care entails the transfer of the patient caseload from doctors and other healthcare professionals to pharmacists (117, 49.2%). Additionally, there was some contention regarding self-care principles that advocate patients becoming more self-reliant or autonomous in their interactions with the community pharmacy team (74, 31.1%).
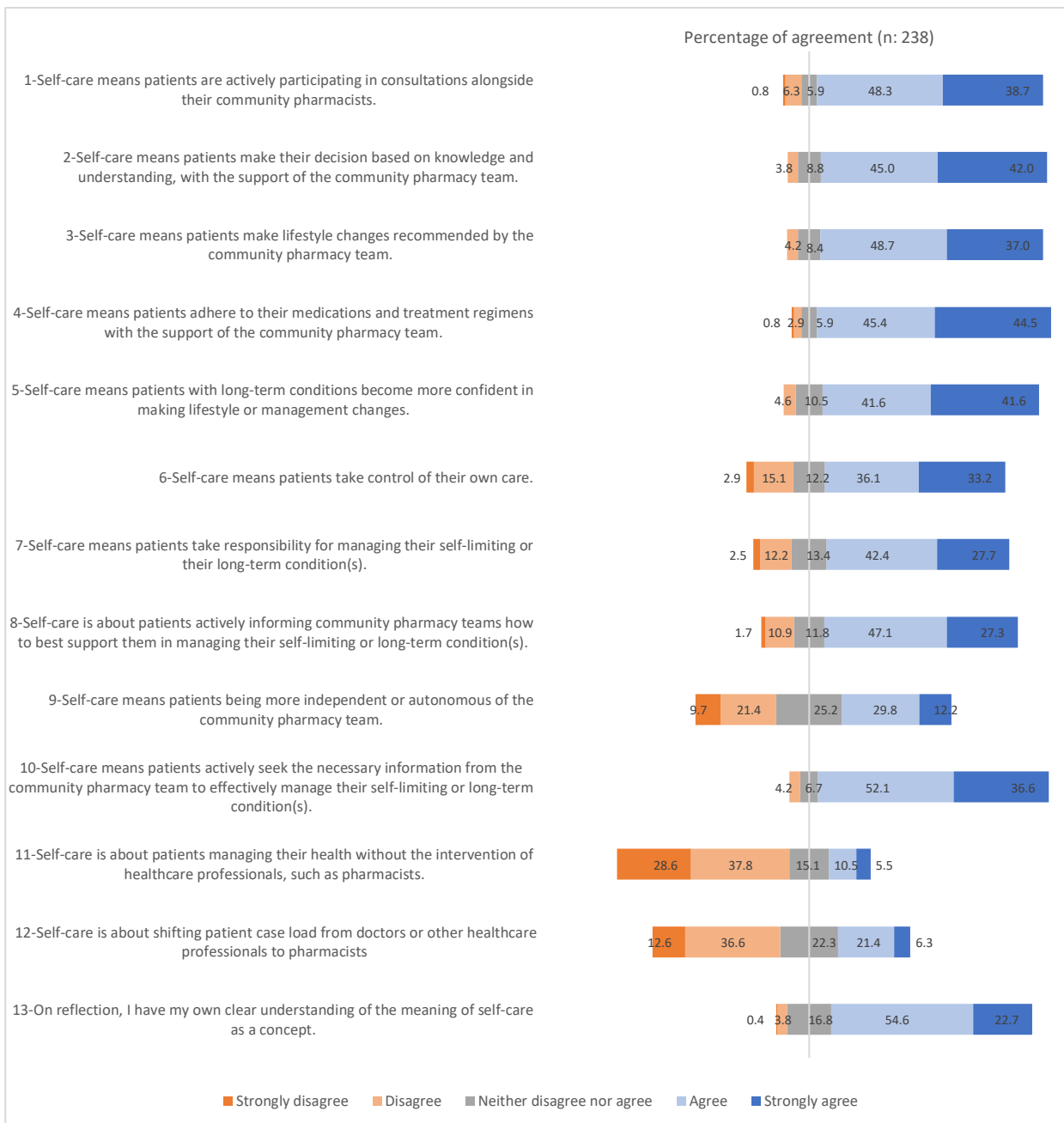

Figure 6. Community pharmacy team's understanding towards a self-care concept

3.2.3 Community pharmacy team's engagement and contribution to self-care activities in the community pharmacy

This section explores the community pharmacy team's engagement and contribution to self-care activities, including identifying which community pharmacy team members provide self-care support advice to customers and detailing the top three approaches they use to give advice and solutions to patients/customers as part of self-care support.

Members of the community pharmacy team who provide self-care support

Figure 7 represents the community pharmacy team members who were actively involved in providing self-care support. The data indicate that the largest group among respondents, comprising 221 individuals (93.2%), was pharmacists. This was followed by pharmacy technicians, accounting for 116 respondents (48.9%), and pharmacy assistants and other team members (93, 39.2%). This distribution of roles highlights the collaborative nature of community pharmacy teams in addressing self-care needs, with pharmacists at the forefront, supported by pharmacy technicians and other team members.
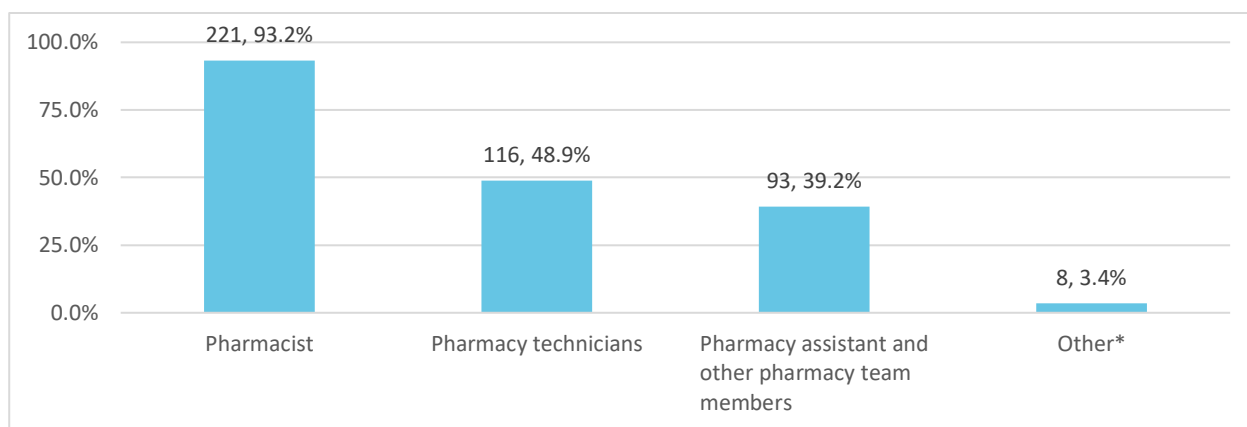
*Others include pharmacy owners and other healthcare professionals working in the pharmacy.

Figure 7. Members of the community pharmacy team who provide self-care support

Approaches that community pharmacy teams are using to provide advice to patients/customers

Respondents were asked about their top three approaches to giving advice and solutions to patients/customers as part of self-care support (Figure 8). Educating and advising patients about their self-limiting conditions emerged as the most commonly employed approach reported by respondents (189, 79.4%). This highlights the critical role of patient education and lifestyle modification advice in empowering individuals to manage self-limiting conditions effectively.

Educating and advising patients about the use of medicines for their self-limiting conditions was selected by 177 respondents (74.4%), indicating the importance of medication-related guidance in self-care support. Dispensing medicines (over-the-counter/non-prescription) to patients and customers was also a widely used approach, chosen by 59.2% of respondents (141), showcasing the integral role of community pharmacies in providing access to over-the-counter medicines.

The relatively lower selection of approaches, such as following a protocol/guideline for best practice advice with self-limiting conditions (66, 27.7%), referring patients and customers for an urgent or non-urgent appointment with a GP or hospital (58, 24.4%), and offering or providing diagnostic services (30, 12.6%) suggests that community pharmacy teams primarily focus on patient education, medication advice and medicines dispensing as their primary approaches to self-care support.
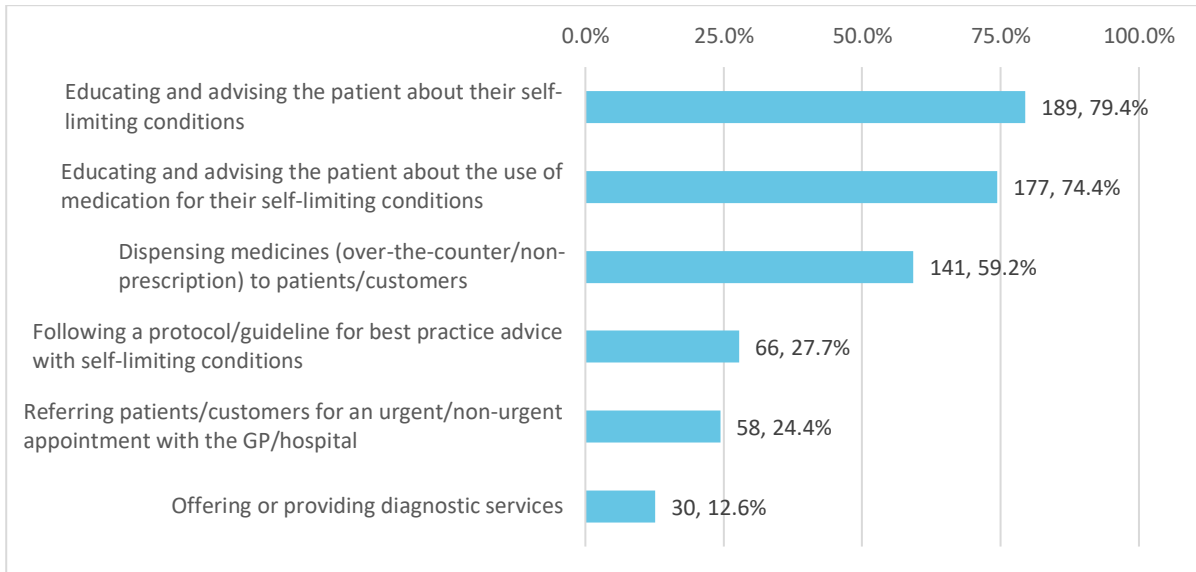
Figure 8. Top three approaches used in providing advice to patients/customers

3.2.4 Community pharmacy team's knowledge and perception of the use of digital self-care tools and health technologies

Digital self-care tools and health technologies play a pivotal role in supporting people's self-care. This section explores the community pharmacy team's understanding and perceptions regarding utilising these digital tools. Various types of digital self-care tools and healthcare technologies that patients are currently using, reported by the respondents, were outlined, followed by the challenges encountered by the community pharmacy team in effectively harnessing and integrating these digital self-care tools and health technologies into their practice.

Types of digital self-care tools and healthcare technologies patients are using

Figure 9 provides an overview of the digital self-care tools and healthcare technologies patients use, as reported by the respondents. The data reveal a rich and diverse landscape of digital healthcare solutions embraced by patients. Health education websites are the most widely employed resource, with 44.5% of respondents (106) indicating their use. This trend underscores patients' proactive approach to seeking knowledge and resources to enhance their understanding of various health topics.

Health tracking apps garnered significant attention, with 36.6% of respondents (87) noting their utilisation. These apps empower patients to monitor and manage their health data, reflecting the growing trend of individuals taking charge of their well-being through self-monitoring and data-driven health improvement efforts. Following health tracking apps, diagnostic tests were selected by 29.8% of respondents (71), illustrating the increasing availability and accessibility of at-home diagnostic options. Similar to health tracking apps, there was a growing interest in technology-assisted medication adherence and health tracking through wearable gadgets; each was selected by 64 (26.9%) and 63 (26.5%) respondents, respectively. On the other hand, mental health apps (20, 8.4%), brain training games (20, 8.4%), and remote monitoring systems (16, 6.7%) were the least common types of digital self-care tools selected by respondents.

Of particular interest is the 22.3% of respondents (53) who expressed uncertainty about the types of digital self-care tools or healthcare technologies used by their patients. This highlights a potential gap in patient awareness or communication between healthcare providers and their patients regarding available digital resources.
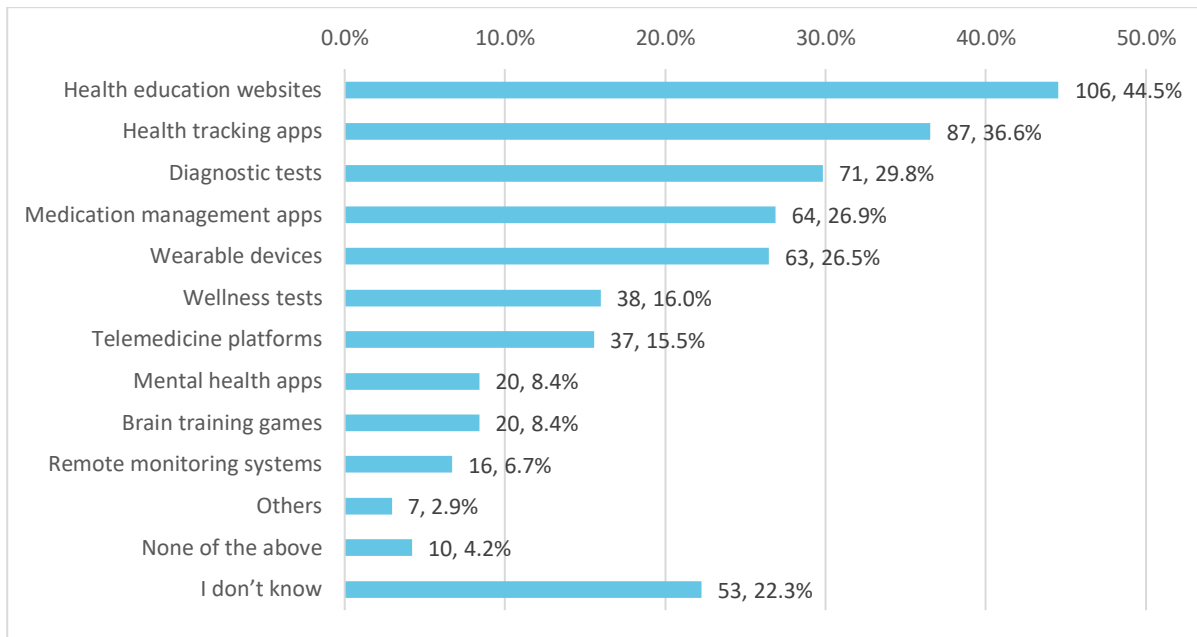
Figure 9. Types of digital self-care tools and healthcare technologies that patients are using

Challenges faced by community pharmacy team in using healthcare technologies to provide self-care support

Respondents were asked to describe the challenges that they faced in using healthcare technologies to provide self-care support for their patients (Figure 10). More than half of the respondents (126, 52.7%) selected a lack of time to educate patients about health technologies within the workplace. This emphasises the need for efficient strategies to integrate technology education into patient interactions. Additionally, 45.6% of respondents (109) expressed the lack of educational training programmes for pharmacy teams on digital self-care tools, followed by a lack of awareness of available digital tools (106, 44.4%), indicating a gap in knowledge and skills.

Over 100 respondents highlighted challenges related to health technology access (105, 43.9%) and cost (101, 42.3%), indicating the need to invest resources and infrastructure to facilitate technology adoption in community pharmacies. Fifty respondents (50, 20.9%) expressed concerns about regulatory compliance and privacy issues associated with the use of digital health tools. This highlights the importance of clear guidelines and adherence to regulations to ensure patient data privacy and security.
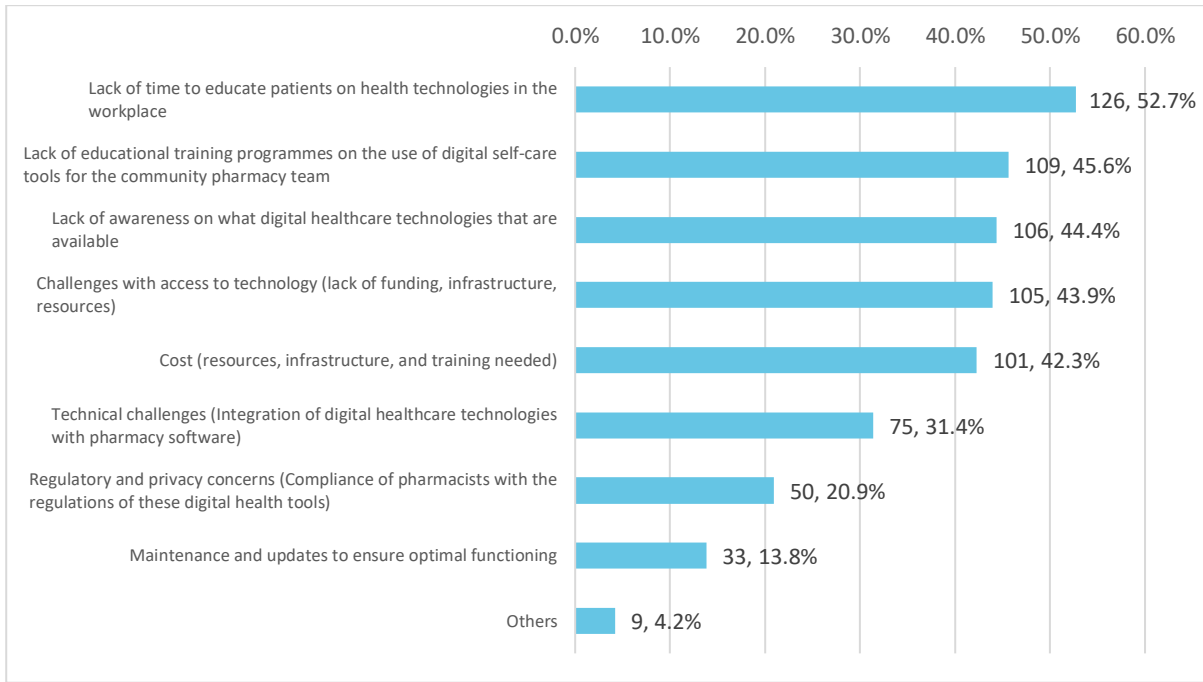
Figure 10. Challenges faced by community pharmacy team in using healthcare technologies to provide self-care support

3.2.5 Community pharmacy team's current and future training needs

This section explores the community pharmacy team's current and future training needs, including identifying sources of information they tended to use in supporting their roles and their preferences for their education and training formats.

Sources of information for self-care support

Community pharmacy teams use numerous sources of information to stay well-informed and provide high-quality self-care guidance to their patients (see Figure 11). Over three-quarters of respondents (179, 75.2%) reported obtaining information as part of continuing professional development as one of their top three sources. This underscores the importance of ongoing education and training in the pharmacy profession, with professionals relying on structured learning to stay updated and informed about self-care practices. Personal work experience was the second top resource chosen by respondents (163, 68.5%), highlighting the value of hands-on experience and the accumulation of knowledge and expertise over time as a crucial resource for self-care support in community pharmacies.

Online information provided by local health systems or other health and medicines information centres was selected by 41.6% of respondents (99), indicating the role of trusted online resources in supporting self-care advice. However, the relatively lower reliance on sources like social media (6, 2.5%) and online search engines (52, 21.8%) suggests that professionals tend to prioritise more structured and reliable sources when seeking information for self-care support.

Information gained as part of continuing professional development	179, 75.2%
My work experience, i.e., self-knowledge	163, 68.5%
Online information provided by local health systems or other health…	99, 41.6%
Online literature search	81, 34.0%
Information developed by the community pharmacy	68, 28.6%
Standard pharmacy textbooks	66, 27.7%
Company information about non-prescription or OTC products	55, 23.1%
From colleagues that I work with	52, 21.8%
Online search engines	52, 21.8%
Social media	6, 2.5%
From national guidelines and/or from global professional leadership…	4, 1.7%
Others*	4, 1.7%

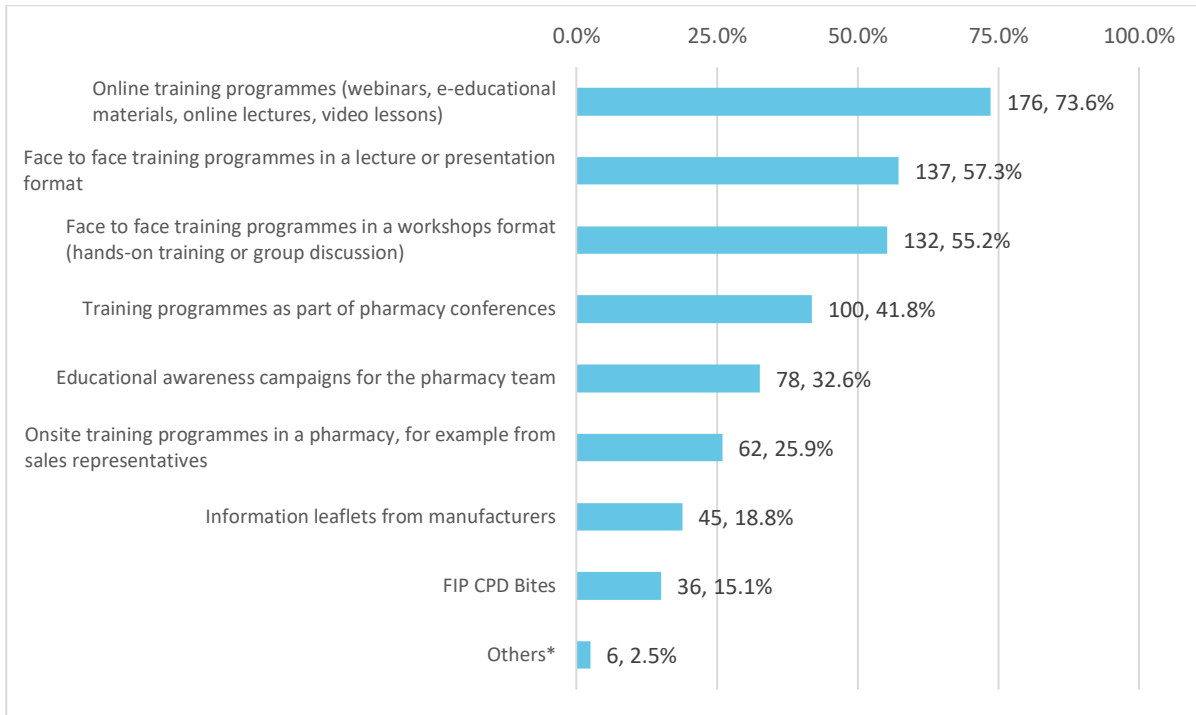*Others include scientific society and self-care forums.

Figure 11. Sources of information that community pharmacy teams tend to use for self-care support

Preferences on the formats of education and training programmes

Respondents were asked about the formats of education and training programmes that they prefer, where they could select the top three preferences (See Figure 12). The results emphasise the importance of adopting a hybrid approach that harnesses the advantages of both digital and conventional learning methods to meet the varying requirements of pharmacy professionals. Online training programmes, including webinars, e-educational materials, online lectures, and video lessons, emerged as the most preferred format, with 73.6% of respondents (176) choosing it among their top three preferences. This strong preference for online learning reflects the convenience and flexibility of digital educational resources, especially relevant in today's fast-paced healthcare environment.

Face-to-face training programmes, in lecture or presentation formats (137, 57.3%) and workshop formats (132, 55.2%), were also among the popular choices, highlighting the value of interactive, in-person learning experiences. Training programmes as part of pharmacy conferences were selected by 100 respondents (41.8%), indicating the relevance and effectiveness of conferences as opportunities for professional development.

The relatively lower preference for formats like educational awareness campaigns for the pharmacy team (78, 32.6%), onsite training programmes from sales representatives (62, 25.9%), and information leaflets from manufacturers (45, 18.8%) suggests that these methods, while still valuable, may be considered less optimal by pharmacy teams when compared with online and in-person training options. FIP CPD Bites were selected by 36 respondents (15.1%), highlighting a need to increase awareness of FIP CPD Bites among respondents.

Online training programmes (webinars, e-educational materials, online lectures, video lessons)	176, 73.6%
Face to face training programmes in a lecture or presentation format	137, 57.3%
Face to face training programmes in a workshops format (hands-on training or group discussion)	132, 55.2%
Training programmes as part of pharmacy conferences	100, 41.8%
Educational awareness campaigns for the pharmacy team	78, 32.6%
Onsite training programmes in a pharmacy, for example from sales representatives	62, 25.9%
Information leaflets from manufacturers	45, 18.8%
FIP CPD Bites	36, 15.1%
Others*	6, 2.5%

*Others include CPD from the World Health Organization, self-care forums and national professional leadership bodies

Figure 12. Formats of education and training programmes that the community pharmacy team prefer

3.2.6 Community pharmacy team's enablers and barriers to providing self-care support

This section explores the community pharmacy team's enablers and barriers to providing self-care support.

Enablers that enhance the overarching provision of self-care support

Respondents were asked to share their perspectives on various factors that could enhance the overall provision of self-care support (see Figure 13). Well-trained and qualified staff emerged as the most agreed-upon enabler, with 92.9% of respondents (212) expressing agreement or strong agreement. This underscores the pivotal role played by competent and knowledgeable pharmacy staff in effectively delivering self-care support. Additionally, the importance of fostering collaborative working relationships with other healthcare professionals was underscored by 92.9% of respondents (212), along with the endorsement of effective teamwork by 88.2% (210) of respondents. These findings emphasise the critical significance of skilled personnel and cooperative healthcare networks in the success of self-care support services.

Furthermore, 88.2% of respondents (210) agreed or strongly agreed with another enabler related to patient education through personalised information and advice, underscoring the importance of personalised guidance in empowering patients to manage their health. Access to educational resources, training and collaborative care planning between pharmacists and patients garnered substantial agreement from 88.2% of respondents (210), reinforcing their role as essential facilitators of self-care support.

In contrast, pharmacist remuneration for providing self-care services received mixed feedback, with 78.2% agreeing or strongly agreeing and 13.9% neither agreeing nor disagreeing. This suggests a diversity of opinions within community pharmacy teams regarding the financial incentives for delivering self-care services. These insights provide valuable guidance for developing strategies to enhance self-care support services and ultimately enhance patient outcomes in the community pharmacy settings.
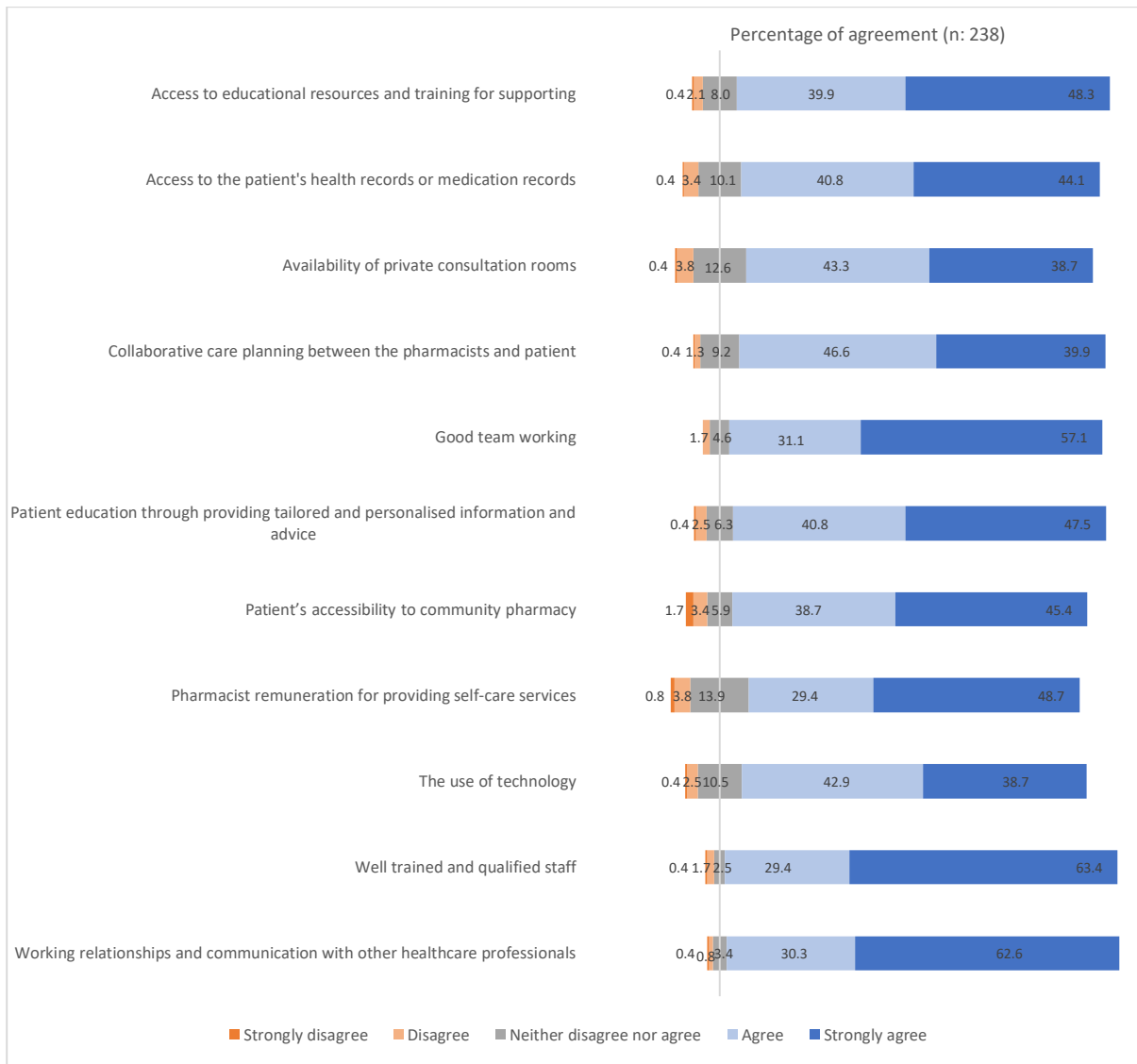
Percentage of agreement (n: 238)

Enabler	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
Access to educational resources and training for supporting	0.4	2.1	8.0	39.9	48.3
Access to the patient's health records or medication records	0.4	3.4	10.1	40.8	44.1
Availability of private consultation rooms	0.4	3.8	12.6	43.3	38.7
Collaborative care planning between the pharmacists and patient	0.4	1.3	9.2	46.6	39.9
Good team working		1.7	4.6	31.1	57.1
Patient education through providing tailored and personalised information and advice	0.4	2.5	6.3	40.8	47.5
Patient's accessibility to community pharmacy	1.7	3.4	5.9	38.7	45.4
Pharmacist remuneration for providing self-care services	0.8	3.8	13.9	29.4	48.7
The use of technology	0.4	2.5	10.5	42.9	38.7
Well trained and qualified staff	0.4	1.7	2.5	29.4	63.4
Working relationships and communication with other healthcare professionals	0.4	0.8	3.4	30.3	62.6

Figure 13. Enablers that enhance the overarching provision of self-care support

Barriers that might hinder community pharmacy team from providing self-care support

Figure 14 provides an overview of the various perceived barriers that hinder the provision of self-care support in community pharmacies. Insufficient funding and remuneration emerged as a prominent concern, with 81.1% of respondents (193) expressing agreement or strong agreement. This underscores the financial considerations that may have an impact on the motivation and capacity of pharmacy teams to deliver effective self-care support services.

Lack of access to patient records was identified as another significant barrier, with 79.4% of respondents (189) strongly agreeing or agreeing that it hinders their ability to provide self-care support. Additionally, time constraints and heavy workload posed a considerable challenge, with 76.9% of respondents (183) agreeing or strongly agreeing. This highlights the demanding nature of pharmacy work and the need for strategies to address time management and workload issues and improve accessibility to patient records to enhance self-care support services effectively.

The survey responses also unveiled diverse views among respondents regarding specific barriers. For example, regarding the barrier of lack of confidence in offering health recommendations, 51.7% (123) of respondents expressed strong agreement or agreement, whereas 53 respondents (22.3%) strongly disagreed or disagreed with this notion. Similarly, concerning the challenge of lack of space in the pharmacy, 137 respondents (57.6%) strongly agreed or agreed that it was a barrier, while 47 respondents (19.7%) held the opposing view by strongly disagreeing or disagreeing.
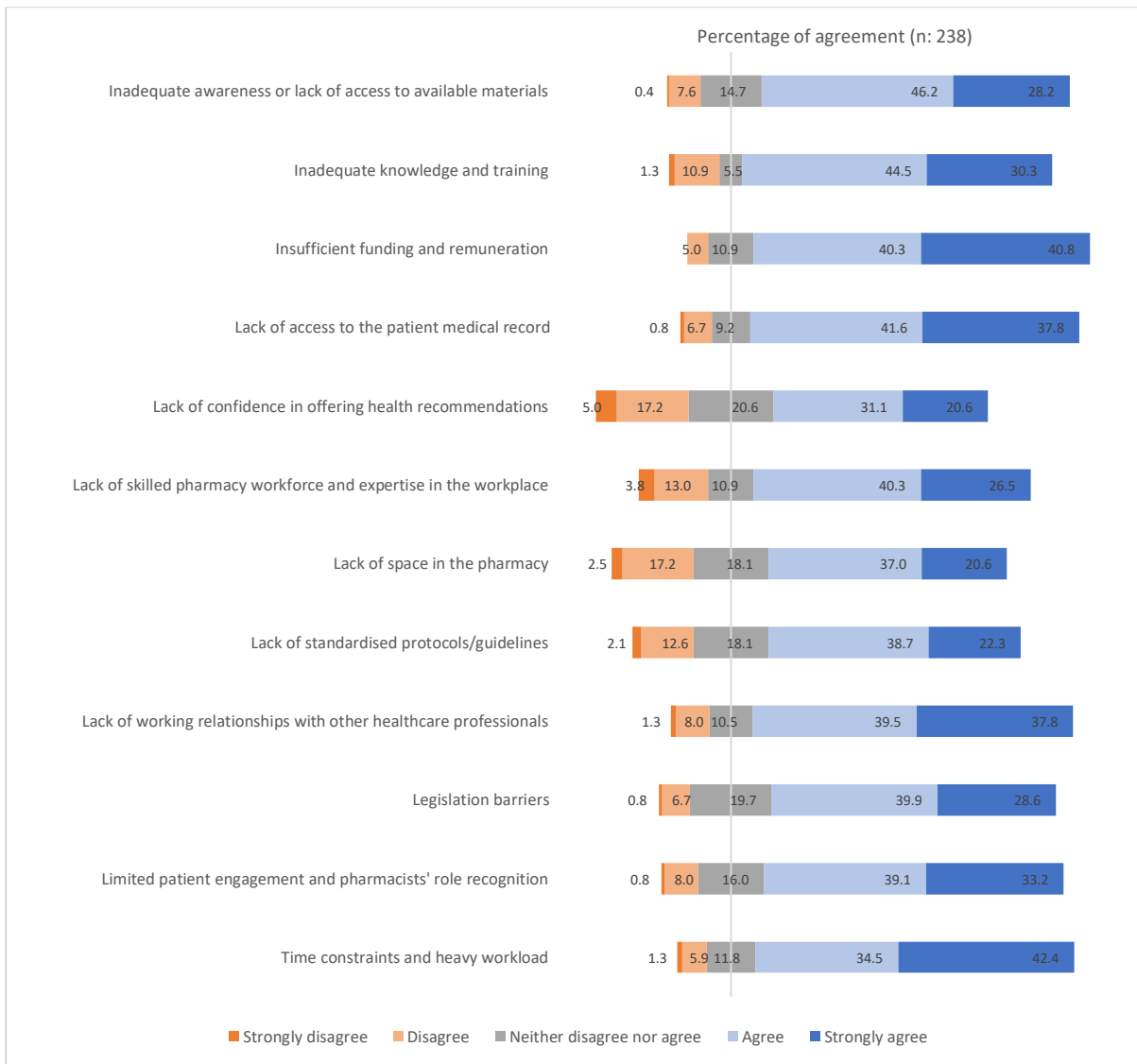
Percentage of agreement (n: 238)

Barrier	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
Inadequate awareness or lack of access to available materials	0.4	7.6	14.7	46.2	28.2
Inadequate knowledge and training	1.3	10.9	5.5	44.5	30.3
Insufficient funding and remuneration		5.0	10.9	40.3	40.8
Lack of access to the patient medical record	0.8	6.7	9.2	41.6	37.8
Lack of confidence in offering health recommendations	5.0	17.2	20.6	31.1	20.6
Lack of skilled pharmacy workforce and expertise in the workplace	3.8	13.0	10.9	40.3	26.5
Lack of space in the pharmacy	2.5	17.2	18.1	37.0	20.6
Lack of standardised protocols/guidelines	2.1	12.6	18.1	38.7	22.3
Lack of working relationships with other healthcare professionals	1.3	8.0	10.5	39.5	37.8
Legislation barriers	0.8	6.7	19.7	39.9	28.6
Limited patient engagement and pharmacists' role recognition	0.8	8.0	16.0	39.1	33.2
Time constraints and heavy workload	1.3	5.9	11.8	34.5	42.4

■ Strongly disagree ■ Disagree ■ Neither disagree nor agree ■ Agree ■ Strongly agree

Figure 14. Barriers that might hinder community pharmacy team from providing self-care support

3.2.7 Respondents' demographics (interviews)

A total of 66 candidates from various countries extending to all six WHO regions expressed their interest in participating in a short and structured interview. Out of these, 34 candidates were randomly selected, ensuring a diverse representation across different countries. Ultimately, nine interviews were conducted with pharmacists representing Indonesia, Malawi, Nigeria, Portugal, Serbia, Spain, Turkey, Scotland, and Uruguay. The majority of interviewees were from the European region (5, 55.6%), followed by the African region (2, 22.2%), the South-East Asian region (1, 11.1%), and the region of the Americas (1, 11.1%).

3.2.8 Pharmacists' role in supporting patients' self-care practices

This section discussed how community pharmacists support patients to undertake self-care based on the pharmacists' personal practice and experience. We identified six key themes that community pharmacists can embrace to offer effective and tailored self-care assistance to their patients/customers. Throughout this report, we will elaborate on each theme using insights gathered from the discussions with participants and supported by some examples from the interviews to substantiate their viewpoints.

Improving patient health literacy and education

During the discussion, participants from the nine countries agreed on the role of pharmacists in educating patients about self-care practices, health conditions, and responsible medicines use to enhance patients' self-care management capabilities. The primary objective is to improve health literacy and empower patients to make informed decisions about their health and well-being. Pharmacists' support involves explicitly a comprehensive assessment of patient needs, tailored advice, providing accurate information and guidance, and appropriate referrals where necessary. Some participants place a strong emphasis on fostering self-awareness. For example, in Nigeria, many patients still lack fundamental knowledge about topics concerning women's health. When patients consult pharmacists for guidance on feminine health, pharmacists need to evaluate the extent of the patient's awareness, including factors such as understanding their menstrual cycle. Following the assessment, pharmacists will provide tailored information on women's health to address the patient's specific needs.

Encouraging preventive self-care practices and healthy lifestyles

The promotion of healthy lifestyles to prevent potential health issues was underscored by four participants. They also highlighted non-pharmacological solutions as the initial intervention strategy. This involves engaging patients in discussions about lifestyle adjustments, such as offering dietary advice and encouraging healthier exercise habits. The significance of lifestyle adjustments extends beyond simply managing symptoms and following medical recommendations. It aims to deepen individuals' understanding of why making changes to their daily habits is essential for their long-term well-being and overall health.

Providing self-care resources and tools

Participants from Spain, Nigeria and Scotland stressed the important role of pharmacists in providing patients with self-care resources and tools for managing their health. Pharmacists can educate patients on using health tools, such as blood pressure monitoring apps, which enable them to actively monitor their health conditions outside clinical settings. Furthermore, participants discussed the distribution of informative materials through mobile apps, leaflets and online resources, such as the NHS websites. These resources empower patients with the knowledge and tools needed to manage their health effectively.

> *"In cases of hypertension, I educate patients about the condition, stress the importance of medication adherence, and encourage lifestyle changes like reduced salt intake and smoking cessation. I empower them with tools, like a blood pressure monitoring app, that allow them to track their health at home and stay connected with me for guidance based on their readings. This approach aims to not only address immediate health concerns but also foster a proactive attitude towards well-being." — Spain*

Fostering patient engagement and self-awareness

Pharmacist can encourage patients to reflect on recent changes or irregularities in their routines that may impact their overall well-being. Patients are empowered to proactively engage with pharmacists to acquire health-related information. These conversations demonstrate pharmacists' commitment to guide patients throughout their self-care journey by ensuring that patients are well-informed and actively involved in making informed decisions. Pharmacists can motivate patients to independently monitor their health to foster a sense of responsibility and accountability. This shift towards self-care is not only perceived as beneficial for patients in the long run but is also seen as a strategy to preserve valuable medical resources, which can be redirected to individuals in need of more specialised care.

To provide an example, the interviewee from Scotland discussed a scenario involving patients suffering from back pain who often request potent painkillers. In response, the pharmacist suggested alternatives such as paracetamol or ibuprofen and encourage patients to consider options such as exercise and physiotherapy. The key message conveyed was the importance of patients taking control of their conditions and not relying solely on medicines as a "magic bullet".

Delivering personalised self-care support

Five participants underscored the importance of tailoring advice and medication to meet the unique needs of individual patients. This personalisation is achieved through comprehensive questioning and assessment. Patients may require different levels and types of support, and pharmacists can delve deeper beyond the surface concerns to grasp the underlying needs behind a patient's visit to the pharmacy. One notable challenge highlighted during the discussion is the technological barriers faced by elderly patients, a prevalent issue among a majority of community pharmacy patients. This underscores the importance of considering diverse patient demographics and addressing their specific needs. Lastly, the discussion emphasised the interplay of social behaviours and local culture norms to effectively tailor support, highlighting the need for a holistic approach in delivering personalised self-care support in pharmacy practice.

> *"In my approach to supporting patients in self-care, I prioritise understanding their needs and symptoms through thorough questioning and assessment. Let's consider the example of a sore throat, a common issue, especially in Europe's winter months. When a patient enters the pharmacy complaining about a sore throat, I engage in a conversation to ascertain the nature of their condition. I inquire about specific details such as irritation, any associated symptoms like headaches or pain, and whether they've been taking antibiotics. This last question is crucial, as some pharmacies here allow antibiotics without prescriptions, which can lead to improper use. If bacterial infection isn't suspected, I educate them about them responsible medication usage and the importance of self-care. Assuming it's a standard sore throat, I might recommend over-the-counter remedies like lozenges or throat sprays. It's imperative to explain the necessity of seeking medical attention if fever is present or symptoms persist beyond a certain duration. In cases where streptococcal infection is a concern, I might suggest visiting a designated pharmacy for testing."* — Uruguay

Appropriate referral and follow-up

Appropriate referral and follow-up are critical to support self-care practice. Our participants from Scotland and Uruguay shed light on the importance of pharmacists opting to refer patients to physicians where deemed necessary. This underscores collaboration with other healthcare professionals to ensure the continuity of care. Participants also placed a strong emphasis on follow-up through phone calls to monitor progress and address new developments. This approach is essential in ensuring that patients' conditions are effectively managed and any changes in their health status are promptly addressed.

> *"Follow-up is also essential. I or a team member make phone calls to check on their progress or address any new developments. Essentially, my approach involves actively initiating a dialogue with the patients, carefully diagnosing their symptoms, and ensuring appropriate follow-up, with a strong emphasis on education and responsible self-care practices."* — Uruguay

3.2.9 Pharmacists' needs

In this section, we will delve into the pharmacists' needs to support patients and customers in managing their self-care conditions. We identified eight key themes that community pharmacists need to improve in their practice and overall management for better self-care support delivery.

Enhancing knowledge and accessibility to reliable self-care resources

The majority of our interviewees (six out of nine) agreed on the need for pharmacists to improve their knowledge and access to reliable self-care resources. During the interviews, our participants addressed the need for diverse resources that pharmacists can readily access, such as websites, brochures, and digital apps. The need for guidelines and workshops were also highlighted as they do not only provide in-depth knowledge but also facilitate skill development in self-care practice. Additionally, the use of pictorial aids emerged as a practical approach to improving patient-pharmacist communication. These materials can serve as visual tools for explaining self-care concepts directly to

patients, making it easier for them to grasp and follow self-care recommendations. Proper training to navigate and utilise these resources effectively is crucial. Additionally, it was stressed that pharmacists should rely on reliable and evidence-based resources to ensure the quality of information provided to patients. Ultimately, pharmacists need to be equipped with the skills and knowledge to interpret and communicate the information from these resources accurately.

Optimising time in providing services

Two of our participants reported that time optimisation in providing pharmacy services is needed, particularly with regard to pharmacists' interactions with patients about self-care practices. It was noted that engaging deeply with patients on self-care practices requires substantial time investment. However, in practice, challenges arise when patients have other commitments or when a line of people is waiting at the pharmacy, which can limit the time available for in-depth interactions. It is imperative to create a conducive environment for uninterrupted one-on-one interactions. Additionally, pharmacists can encourage patients to schedule their visits during less crowded hours to ensure sufficient time for consultations.

Access to continuous learning and professional development

Nearly all participants highlighted the importance of expanding education and training opportunities, such as webinars and short courses, to equip pharmacists and all pharmacy staff with the knowledge necessary to provide high-quality patient advice and support. Continuous education for pharmacists was also emphasised as essential to stay updated on evolving healthcare practices and treatments. During the interviews, participants emphasised the importance of enhancing pharmacist skill sets, particularly in communication skills, assessment abilities, critical thinking and appropriate referral decision-making. Effective communication techniques, such as simplifying complex medical information, using visual aids and open-ended questions, and fostering dialogue, were deemed essential in facilitating patient-pharmacist interactions. It is imperative to train pharmacists in utilising digital health apps, self-care tools and platforms. These skills enable pharmacists to make effective use of relevant resources, further improving their ability to provide self-care support to patients.

> *"I'm a strong advocate for ongoing education, as the process of continuous professional learning is never-ending. I actively organise and participate in educational programmes to ensure that I stay updated and well-informed. Adapting to the evolving landscape is essential, and I prioritise continuous education to provide the best care possible." — Turkey*

Fair remuneration and recognition

A reimbursement model was suggested by participants from Serbia, Nigeria and Portugal. It is a model where pharmacists are compensated for their counselling services, either through health insurance or patient payments. The model prioritises quality over quantity, aligning with the goal of improving patient outcomes. This approach recognises the value of the pharmacist's expertise and time dedicated to patient consultations, emphasising the need for fair compensation. Moreover, the participants emphasised the importance of increasing the perceived value of pharmacy services for patients. This includes reflecting the impact of pharmacist interventions in the remuneration model to ensure that patients acknowledge the value they receive from these services.

> *". . . we also face some challenges in providing self-care support to the pharmacy team. One of them is the lack of resources and incentives for us to help our patients. We do not have any official support from the government or the health system in Portugal. We also do not get paid for the extra time and effort we spend on teaching our patients how to use health apps and devices. Another challenge is the low value that some patients place on our services. They may not appreciate or understand the importance of self-care when they do not have to pay for it. Therefore, we need to find ways to overcome these barriers and promote self-care among our patients." — Portugal*

Promoting workplace unity, collaboration, and employee well-being

The participant from Nigeria highlighted the importance of fostering a professional environment characterised by unity, which extends from top management down to the staff, with everyone united by a common goal. The importance of genuine breaks in a work setting was also underscored during the discussion. These breaks means being completely disconnected from work tasks during designated break times, ultimately leading to enhanced performance when pharmacists return to their responsibilities.

Dedicated consultation infrastructure

The availability of dedicated consultation spaces in community pharmacies is essential. These spaces allow for uninterrupted and noise-free communication to facilitate comprehensive consultations effectively and ensure patient privacy. This was further highlighted by respondents from countries that lack similar facilities such as in Indonesia, where there are calls for integrating such well-equipped rooms to facilitate seamless interaction between patients and pharmacists.

Stakeholder engagement and support

Four participants reported that pharmacists need active engagement and support from stakeholders, including government and health systems, to facilitate resources and incentives for pharmacists to deliver their self-care support effectively. Moreover, collaboration within the pharmacy profession is emphasised as a means to find accurate solutions collectively. On a national level, collaboration among pharmacist associations is encouraged to develop guidelines, resources, and training programmes tailored to the unique healthcare landscape of each country.

> *". . . there is a necessity for marketing and government support. Government initiatives like advertising campaigns for minor ailments schemes are good, but there is a need for more extensive support and marketing efforts. Increased awareness could help convey the message that pharmacists can provide valuable assistance, reducing the burden on doctors and hospitals."*
> *— Scotland*

Mentorship opportunities

The participant from Serbia suggested that pharmacists need to practise patient-centred care and counselling under the guidance of experienced mentors. With the right training and mentorship, pharmacists can amplify their impact in guiding patients towards effective self-care management.

3.2.10 Pharmacy team's facilitation of health technology use

This section will focus on the pharmacy team's involvement in directing patients towards digital self-care tools and healthcare technologies. We identified four key themes that participants raised during the interviews that might enable patients to use the available digital health technologies effectively.

Educating and guiding patients to use health technology

All participants emphasised the critical role of patient education in the effective utilisation of health technology. Participants from Spain, Malawi and Uruguay highlighted the necessity for pharmacy teams to possess expertise both in digital technology and in the fundamental pharmaceutical knowledge acquired through pharmacy school. In particular, the participant from Uruguay mentioned the importance of training for the pharmacy teams to enable proficient understanding and navigation of digital health platforms — a foundational step in ensuring that pharmacy teams are well-informed about apps and their functionalities.
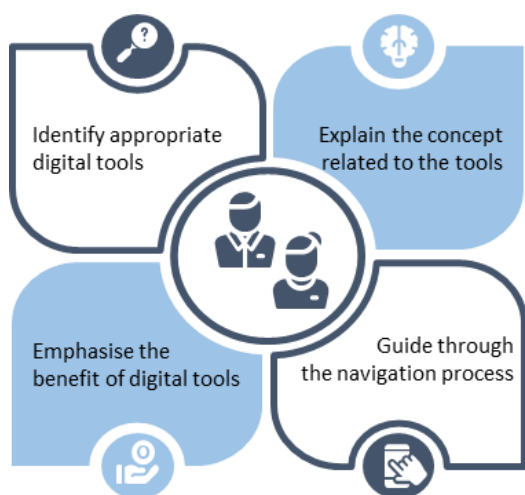
Figure 15: Pharmacy teams' roles in educating and guiding patients to use health technology

Several key points emerged from the participants regarding the educational responsibilities of pharmacists and pharmacy teams in the realm of digital technology. One notable point from the participant from Malawi centred on assisting patients in identifying appropriate digital tools before guiding them through the navigation process. Moreover, six participants highlighted the significance of providing guidance on the functionality of digital tools and how to navigate them effectively. Another aspect mentioned by the participant from Serbia is the need to explain some concepts that may appear in digital resources, such as explaining the concept of generic drugs to patients. Lastly, participants from Scotland and Nigeria highlighted the importance of emphasising the benefits of using digital tools (Figure 15). They recognised that success lies in patient education and the uptake of these digital solutions, which often happens rapidly once patients grasp their benefits.

To facilitate a quick dissemination of self-care and medication-related information to patients, the participant from Indonesia proposed engaging with patients' family members who are more familiar with digital tools. Given the wide-ranging digital literacy among patients, the participant from Nigeria underscored the importance of conducting surveys among patients to assess their experiences with technological tools. These surveys serve to uncover challenges patients may encounter, their usage patterns and their suggestions for improvement, ultimately guiding pharmacies in better serving their patients in the realm of technology-enabled healthcare. As the participant from Scotland concluded, these advancements in technology hold the potential for significant improvements in patient care and overall well-being. Additionally, the participant from Serbia highlighted that pharmacy teams often aid healthcare professionals who are also patients in identifying useful applications. In such cases, pharmacy teams can direct them to professional resources like drug databases tailored to the local context.

"We directed a lot of healthcare professionals that are also patients. So, I know they can confidently use certain apps that are used in pharmacies. For example, (to use) media tele database for the drugs we have in Serbia here. I directed a lot of healthcare professionals that are our patients to use that app. But it is not meant for patients unfortunately, not for patients that are not healthcare professionals." — Serbia

Recommending reliable websites and apps

The participants from Nigeria, Spain and Malawi highlighted the role of pharmacy teams in recommending trustworthy websites and applications to patients within the healthcare context. This recommendation is crucial as online resources, such as websites, are increasingly utilised as initial diagnostic tools. For example, in Nigeria, pharmacy teams can use an online resource as initial diagnostic tools for prostate health before potentially referring patients to a hospital.

"There's a website for prostate (health) that I use for elderly men when they are having symptoms before I have to refer them to the hospital. I use that website with elderly men when they come in to get more information from them. My role is to tell them that I am not trying to get your information and upload it (to the website) without your knowledge. It is just to guide me to know how best I can help you and how much service I can provide you in my capacity." — Nigeria

Tailoring digital tools usage according to the needs of patients

During the interviews, two participants mentioned the customisation of digital tools to meet the specific needs of patients, presenting varied perspectives on tailoring the usage of these tools. The interviewee from Uruguay emphasised the role of pharmacists in recommending suitable health devices based on patients' specific medical

conditions. For instance, diabetic patients might be advised to utilise a glucometer, with pharmacists providing guidance on its proper usage, including how to measure blood glucose levels effectively. A second interviewee suggested tailoring the user interface of health applications, particularly in contexts where elderly patients are prevalent in Portugal. This interviewee highlighted that age is a crucial factor and influencing the ease of adaptation to digital tools, necessitating the customisation of instructions within the application. Another perspective is on personalising health apps according to patients' health record. This customisation involved incorporating details such as medicine names and medication schedules into the application. However, participants acknowledged that while individualising apps for each patient is indispensable, this process could be time-consuming.

Digital health integration and data privacy

The use of digital health platforms raises significant concerns regarding data integration within the healthcare system. A key issue identified by the participant from Uruguay is the lack of connectivity among electronic medical records across the community, indicating a gap in data integration. However, there is optimism, according to the participant from Turkey, who saw potential in leveraging digital tools such as wearable technologies and artificial intelligence-driven solutions. These tools can play a crucial role in bridging this gap by enabling real-time monitoring and seamless data transmission to medical professionals. This holistic approach, integrating technology, artificial intelligence and patient care, is essential for the advancement of pharmacy practice in the modern landscape.

Concurrently, the integration and sharing of health data also give rise to security and data privacy issues. Participants emphasised the importance of ensuring data protection, as patients highly value the confidentiality of their medication history. A lack of data protection measures could lead to patients being hesitant to share sensitive medical information. However, there are examples, such as the healthcare application introduced by the Ministry of Health in Turkey, which demonstrates how digital tools can help with patient safety issues. This application allows users to assess the compatibility of medicines they are considering, ensuring that prescribed medicines do not contain prohibited substances. By providing warnings and cautions, where necessary, this application enhances user safety, promotes informed decision-making, and illustrates the potential of digital tools in safeguarding sensitive health information. Addressing data integration and privacy concerns is paramount for the effective utilisation of digital health tools in modern healthcare systems.

3.2.11 Long-term benefits of practising self-care

In the following two sections, we describe the potential long-term benefits of practising as well as the risk associated with not practising self-care on patient outcomes and healthcare systems. We identified 10 key themes drawn from the insights and contributions of the participants.

Improving patients' quality of life

Five participants underscored the importance of prioritising overall health and well-being in the long run. Individuals who maintain good health and healthy habits tend to avoid falling ill at a younger age, increasing their likelihood of enjoying longer, healthier lives. The role of self-care lies in reducing the need for medication and medical interventions. For instance, by making informed dietary choices and incorporating self-care practices, individuals can reduce their dependency on medicines, leading to improved long-term health outcomes. This preventive approach not only improves the quality of life for individuals but also has the potential to minimise the impact of chronic conditions and foster a more active and fulfilling lifestyle.

The participant from Nigeria illustrated the case of a woman in her 50s who consistently monitors her blood pressure and maintains optimal levels. This stands in contrast to the common experience of individuals her age grappling with high blood pressure. Her secret lay in her commitment to self-care since her 20s, which involves maintaining a balanced diet, regular exercise, a consistent sleep schedule and proper nutrition. These practices have played a pivotal role in preserving her health and overall well-being.

Preventing and managing chronic conditions

Another long-term benefit for practising self-care is to maintain optimal health, not only in preventing diseases but also in slowing the progression of existing illnesses. Nearly all participants highlighted the preventive approach, aiming to delay the onset of chronic diseases, ultimately improving long-term health outcomes. The emphasis on preventing illnesses and conditions, following preventive measures, and minimising the impact of chronic conditions contributes to fostering a more active and fulfilling lifestyle. Through the implementation of these strategies, individuals can not only avert certain health issues but can also effectively manage existing conditions. This approach reduces patients' reliance on medicines, emphasising prevention rather than solely focusing on healing. Ultimately, empowering individuals to take control of their health fosters consistent self-care practices, positively impacting their long-term well-being.

"For instance, consider someone with a predisposition to high blood pressure. Through regular exercise and adequate fluid intake, they can significantly reduce their risk of developing complications associated with hypertension." — *Malawi*

Promoting mental health and well-being through self-care

Self-care practice encompasses various dimensions, including emotional and physical well-being, which provide a wide range of advantages. The majority of participants maintained that these benefits not only improve individuals' quality of life but also result in reduced healthcare expenses. The participants also argued that self-care practices and a healthy lifestyle also have a positive impact on mental well-being by reducing the risk of mental health issues related to self-esteem and body image. The overarching goal of self-care is to prevent illness and proactively maintain health, holding the potential to prevent various diseases and contribute to long-term overall well-being.

"Encouraging patients to engage in physical activities such as tracking can also yield long-term benefits. Such activities not only improve physical health but also contribute to mental well-being and a sense of community, reducing the need for excessive medication." — *Serbia*

Optimising healthcare: cost reduction and efficiency improvement

Three participants highlighted the importance of reducing the burden on healthcare providers by reducing the need for patients to seek medical attention. This approach not only eases the workload on healthcare providers but also contributes to overall healthcare efficiency. Pharmacists can assist patients in making cost-effective decisions, choosing supplements or over the counter medicines that offer comparable results without straining their finances. This financial relief can lead to reduced stress and an improved overall quality of life.

Ensuring sustainable pharmacy

Building solid patient-pharmacist relationships through effective communication to foster trust is essential. Two participants stressed the necessity to improve service provision, which offers the potential long-term benefit of improved and consistent patient support in their self-care practices. Furthermore, achieving patient-centric care is important, where patients are involved in the decision-making process by taking into account their unique concerns, preferences, and circumstances. These efforts collectively contribute to better patient outcomes and foster sustainability in pharmacy.

3.2.12 Risks of not practising self-care

Increased chronic diseases and other health complications

Nearly all participants described an increase in chronic diseases and other health complications as one of the risks of not practising self-care. The rise in conditions like diabetes, heart disease and high blood pressure is attributed to a lack of preventive measures and poor self-care practices. Poor self-care practice includes insufficient management of medicines and disregarding recommended lifestyle adjustments, which can lead to severe complications. Additionally,

the impact on immunity is a notable concern, as individuals who neglect self-care become more vulnerable to various illnesses. Moreover, non-adherence to recommended treatments presents significant challenges, including treatment failures, higher transmission rates, and increased costs in drug research and development.

Decreased patients' quality of life

Another consequence of not practising self-care raised by four participants is decreased patient quality of life. Individuals who consistently rely on medicines without considering dietary changes or exercise routines may find themselves in a vicious cycle of poor health. This not only impacts their physical health but extends to affect family dynamics, as unhealthy habits are inadvertently passed down to their children. Additionally, the risk of burnout was emphasised by participants. They underscore the importance of achieving a balance between work and personal life to maintain optimal performance and overall well-being.

Increased polypharmacy and medicines misuse

Four participants expressed their concerns about the risks associated with the improper use of medicines. Cultural norms and behaviours may lead patients to misuse medicines or combine them with other substances, such as soft drinks, often based on misconceptions or beliefs about their effectiveness. This improper use, coupled with a lack of proper guidance, especially concerning accurate dosages and usage regimens, can have detrimental effects on patients' health outcomes. Furthermore, this reliance on medication may lead to side effects and complications, which then require further medicines to address these unintended consequences. As a result, patients may find themselves burdened with multiple medicines, which can complicate their overall health and well-being.

> *"Another issue is polypharmacy, where patients end up taking numerous medications, often more than they need. They attributed this phenomenon to a lack of understanding and practice of self-care. In such cases, patients may become unnecessarily burdened with multiple medications, further complicating their health." — Scotland*

Poor pharmacy reputation and possible customer loss

The participant from Indonesia underlined the issue concerning a poor pharmacy reputation and the potential for customer loss. Failure to engage in effective patient consultation and promote self-care practices can significantly impact the reputation of a pharmacy negatively. Furthermore, the loss of customers is another consequence, as individuals may seek alternatives where they perceive a higher standard of care and attention to their health needs.

Increased healthcare costs and health systems burden

Three participants expressed concerns about the increase in healthcare costs, which significantly burden healthcare systems and providers. This rise in costs not only increases healthcare expenses for individuals but also heightens reliance on private healthcare services. Additionally, there is a concern about the potential for higher healthcare costs to result in a decline in the quality of care accessible to everyone, which poses a significant threat to healthcare accessibility and affordability.

> *"Not practising self-care can also increase the burden on the health system, as people may need more medication, hospitalisation and doctor visits. This can lead to higher costs and lower quality of care for everyone." — Portugal*

3.2.13 Self-care barriers mitigation

Finally, in this section we will explore recommendations and strategies to overcome or mitigate some of the barriers outlined by participants in their survey answers. Our analysis has revealed 10 key themes based on our interviewees' experiences and urgent needs. These themes highlight areas for improvement in community pharmacy's self-care support practices and, ultimately, in enhancing patient health. These themes encapsulate essential insights that can guide the enhancement of pharmacy practice approaches worldwide.

Greater access to self-care resources for pharmacy staff

Most participants (five out of nine) emphasised that increasing access to self-care resources is essential to tackle the barrier of Inadequate awareness or lack of access to available materials. The participant from Uruguay suggested translating guides or handbooks originally in English into multiple languages. This approach helps overcome the language barrier and ensures that information is readily accessible to pharmacists worldwide. By following these guidelines, pharmacists can provide self-care suggestions to patients that are evidence-based and consistent across the field. It is also imperative to improve engagement and accessibility to relevant information for pharmacists. The pharmacist from Malawi suggested establishing platforms that provide easy access to accurate and updated information, along with mechanisms for information and resource exchange across pharmacies, which can empower pharmacists to make informed decisions and offer comprehensive recommendations to patients. Furthermore, the participant from Nigeria suggested that extending basic self-care knowledge to pharmacy technicians can enhance the overall quality of care and alleviate the workload on pharmacists. Trusting in their capabilities and providing them with the necessary training can lead to more effective and efficient healthcare delivery.

> *"Translating self-care guides, like the FIP reports and handbook tools on self-care, is vital to overcoming the language barrier. These guides, initially in English, could be converted into languages such as Spanish, which is widely used in Latin America. This would mainly assist regions where English isn't widely spoken, like my country. More individuals could access and benefit from their valuable information by offering local-language guides, promoting better self-care practices overall." — Uruguay*

Promoting continuous learning and training opportunities

Most participants (seven out of nine) pointed out the importance of continuous learning and training opportunities to stay up to date with latest evidence. Pharmacists should recognise that pharmaceutical knowledge evolves rapidly due to new emerging medicines and technologies. Therefore, pharmacists should engage in continuous training and actively seek additional information to bolster their confidence in providing healthcare recommendations. Adequate resources and access to CPD training should be made available for pharmacists. This approach is necessary for pharmacists to be well-equipped to provide healthcare recommendations and support self-care practice. Furthermore, training expansion programmes and school collaborations are effective measures taken to address the problem of a shortage of qualified pharmacy professionals and expertise.

Availability of standardised protocols and guidelines on self-care

Most participants agreed that the availability of standardised protocols and guidelines on self-care is paramount in ensuring consistent and evidence-based practices in pharmacy. Developing standardised, adaptable guidelines is needed to overcome the absence of standardised protocols. Participants mentioned that creating a basic set of checklists customised to fit individual contexts would be highly effective. This approach offers structure while allowing flexibility, which leads to the improvement of patient care quality across diverse settings. Community pharmacists can play an active role by aligning their practices with established protocols and guidelines. Collaborative efforts, such as partnership across community pharmacies or with health societies, can play a pivotal role in developing these guidelines. Standardised protocols and guidelines for pharmacy management can further enhance the patient experience, making interactions more efficient and effective.

Fostering collaboration with other healthcare professionals

Most participants agreed that establishing structured programmes and collaboration among different healthcare professionals, including physicians, pharmacists, nurses and others, can significantly enhance the quality of patient care. Through the establishment of a platform that encourages continuous communication and collaboration, healthcare professionals can leverage each other's expertise and knowledge-sharing to ensure better-informed decision-making and, ultimately, improve patient outcomes. For instance, regular interprofessional discussions can effectively address issues such as conflicting medication recommendations or gaps in knowledge, particularly regarding the area of plant-

based therapies that pharmacists might specialise in. By providing opportunities for cross-disciplinary learning, we can bridge gaps in understanding and ultimately deliver more holistic and patient-centred care.

Promoting pharmacists' roles in supporting self-care

The participant from Serbia highlighted the prevailing perception among some patients who view pharmacies primarily as places to obtain medicines, often prioritising cost considerations over a broader perspective of holistic healthcare. A fundamental shift in patient education is required to overcome this limited patient engagement, starting at an early age. Incorporating basic healthcare knowledge into general education curricula can empower individuals to view pharmacists as essential healthcare providers, not just medicine dispensers. This broader awareness has the potential to motivate patients to actively seek guidance from pharmacists in their self-care journeys.

Legislative and regulatory reforms

Nearly half of our participants recognised the lack of pharmacists' role recognition as a barrier and the need to acknowledge the significant contributions pharmacists make in healthcare, which extend beyond the traditional role of dispensing medicines. Through policy advocacy and reform efforts, the goal is to ensure that pharmacists' valuable contributions to patient care receive the recognition they deserve. This recognition should become an integral part of healthcare systems, effectively overcoming legislative barriers that may hinder their full participation.

Optimising patient-centred care services

Five participants outlined several strategies aimed at optimising patient-centred care services. These strategies encompass enhancing patient engagement, efficient time management, improving patient record management and optimising infrastructure, such as providing adequate private consultation rooms. The role of patient engagement can be achieved by raising awareness to promote self-care and fostering trust within the community. Efficient time management is another key element to ensure that patients receive the necessary attention and care they require. Effective patient record management further optimise patient-centred care by ensuring that healthcare providers have access to accurate and up-to-date information, enabling them to provide tailored guidance and support. Using plain language with patients can create an open and supportive environment for dialogue. Additionally, adequate infrastructure, such as private consultation rooms, helps address space constraints, resulting in improved patient privacy and comfort.

> *"Regarding mitigating barriers related to time constraints, allocating sufficient time to address patient concerns and provide guidance is important. Time constraints could be challenging, but it is recommended to encourage patients to return for additional consultations if needed. This approach ensures that patients receive the attention and care they require." — Scotland*

Adequate compensation models

The need for proper compensation models for pharmacists is evident, as highlighted during three interviews. Current funding and remuneration levels often fall short of recognising the full scope of pharmacists' contributions to healthcare. A revised compensation models for pharmacists is key to addressing insufficient funding and remuneration. Such approaches may include exploring fee-for-service options within pharmacies, where patients pay for consultations, thus attributing a value to pharmacists' expertise and encouraging proactive engagement, resulting in improved patient outcomes.

> *"We also do not get enough funding and remuneration for our services, which makes it hard to sustain them. A good example of this is the flu vaccination. We have shown through many pilot projects that we can increase the access and coverage of the flu vaccine for the population and reduce the costs for the government. However, it took us a long time to get permission and support to do it in pharmacies. Even now, we still face some challenges, such as the different prices and incentives for the vaccine in pharmacies and medical centres and the unequal distribution of the vaccine across the country. We think that this is unfair and illogical, as it affects the quality and equity of care for our patients." — Portugal*

Public health campaigns and government-led initiatives

There is a growing need for greater emphasis on public health campaigns and government-led initiatives to promote the role of pharmacists, especially in providing advice and support. The success of campaigns, such as Pharmacy First for common ailments in Scotland, serves as a good example. However, more extensive marketing efforts could further encourage individuals to access pharmacy services.

Digitalisation and integration of healthcare systems

The participant from Malawi emphasised the growing importance of digitalisation and the integration of healthcare systems. He highlighted that embracing digital medical records and integrating health services can alleviate challenges arising from paper-based systems and significantly enhance communication among healthcare providers. This shift towards digitalisation represents a crucial step in addressing the barrier of limited access to patient records and improving the overall efficiency of healthcare delivery.

> *". . . in response to the lack of access to patient records and confidence in offering health recommendations, a shift towards digitalisation and integration of healthcare systems is imperative. Embracing digital medical records and integrating health services can alleviate challenges arising from paper-based systems and enhance communication among healthcare providers." — Malawi*

4 Summary and conclusions

The healthcare landscape is undergoing swift transformation, driven by a growing focus on patient empowerment and self-care management. With the onset of the COVID-19 pandemic, pharmacy professionals have broadened their scope in supporting individuals with their self-care journeys towards better health outcomes.[2] The pharmacy team has emerged as a pivotal first point of contact for patients seeking advice and support in managing their health and overall well-being.[3]

This report is focused on a comprehensive investigation into the role of the community pharmacy team in facilitating and enhancing people's self-care practices from a global perspective. We evaluated how community pharmacists conceptualised and understood the principles of self-care. Conceptually, the majority of the international respondents agreed with the self-care statements related to active patient participation in their healthcare, adopting positive lifestyle changes, adhering to prescribed treatments, sharing their preferences with pharmacists for optimal support and taking comprehensive responsibility for their health and care. These findings emphasise the perception of self-care as a collaborative effort with healthcare professionals, particularly the community pharmacy team. They envisioned self-care as a process where patients work hand in hand with healthcare teams, seeking guidance and assistance and making lifestyle changes recommended by these teams.

On the other hand, respondents leaned towards disagreement when confronted with statements advocating increased patient autonomy and independence from healthcare professionals. They also leaned towards the perspective that self-care does not encompass transferring a patient's healthcare duties from doctors and other healthcare professionals to pharmacists. Significantly, our findings align with previous studies that have explored how community pharmacists perceive self-care for long-term conditions, revealing a similar trend, with community pharmacists showing greater agreement with the overarching patient-centred self-care principles but demonstrating less agreement with statements that promoted increased patient independence and autonomy.[7]

Consistent with the findings from our literature review, this project also found that self-care support activities relating to educating and advising patients about their self-limiting conditions and medication-related guidance were prioritised as most important when compared with other approaches community pharmacy teams employ to offer advice to patients and customers in their practice (Figure 8). This reflects pharmacists' commitment to providing more patient-centred care and empowering individuals to manage their health needs effectively.

Digital self-care tools and healthcare technologies are now an integral part of healthcare systems across the globe, transforming the way we manage our health and well-being.[4, 5] Health education websites, health tracking apps and diagnostic tests are the most common healthcare technologies patients use, as reported by the respondents. Interestingly, 22.3% of respondents expressed uncertainty about patients' use of digital tools, suggesting a potential awareness gap (Figure 9). Our report has addressed this gap by identifying the several challenges confronting community pharmacy teams as they endeavour to use healthcare technologies for self-care support. Respondents reported the lack of educational training programmes and lack of awareness of the digital tools available to pharmacy teams as the top challenges among others to consider (Figure 10). Such challenges underscore a noticeable knowledge and skills gap that can be bridged through ongoing training and staying informed, allowing pharmacists to play a more proactive role in meeting self-care support needs.

Although pharmacists constantly show their willingness and professional motivation towards providing self-care-related services, they also mention that their learning gaps need to be filled for them to perform their newly expanded roles. Such gaps can be addressed by choosing efficient educational and training methods tailored to meet the pharmacy team's specific needs and experience levels. Our findings highlight the need for a blended approach that combines the benefits of both digital and traditional learning methods to cater to the diverse needs of pharmacy professionals. Respondents favoured e-learning as their preferred educational format, aligning with evidence highlighting its

effectiveness in enhancing engagement, flexibility and cost efficiency, particularly relevant in today's fast-paced healthcare landscape. [23]

Barriers and enablers to engaging in these self-care support activities were identified. Interestingly, the lack of access to patient records and insufficient funding and remuneration barriers were the most selected barriers by our respondents and resonated with the findings of previous studies. [7, 8] This report helped us recognise the multifaceted nature of enablers or barriers faced by pharmacy professionals, encompassing financial, infrastructural, legislation, training needs and workload-related aspects, all of which require attention and resolution to enhance self-care support services effectively.

There were no notable differences in the views of interviewees despite the differences in how community pharmacy self-care support is organised and delivered in the nine different countries. Aligning with other findings, [10] participants emphasised the importance of enhancing health literacy and empowering patients to make informed decisions about their health. While information and advice were crucial, participants stressed the need to encourage preventive self-care and healthy lifestyles and use non-pharmacological solutions, motivating patients to take greater responsibility and stressing the importance of tailoring advice and medication to suit the unique needs of each individual patient.

Our interviews allow us to understand better pharmacists' role in facilitating the use of health technology so that first, pharmacists must deeply understand patient-accessible technologies. The pharmacy team can assist patients in navigating digital tools, empowering them with the necessary skills to make informed decisions about their health through these technologies. This hands-on guidance aims to protect patients from potentially misleading or incorrect information. By encouraging patients to utilise recommended apps or visit trusted websites, pharmacists ensure they receive accurate information regarding their medical conditions, prescribed medicines and healthcare practices. Therefore, pharmacists' comprehensive grasp of patient-accessible technologies and pharmaceutical knowledge is paramount. This dual expertise enables them to provide tailored guidance, effectively fulfilling their diverse roles. [24]

It was also crucial to investigate pharmacists' learning gaps and practice challenges to improve their self-care support for their patients. We identified eight key points from our interviews, most of which were unanimously agreed upon by the interviewees (see section 3.2.9). These identified areas are intrinsic challenges and needs of pharmacists, which should be addressed comprehensively by advocating policy changes and reforming practice regulations and remuneration models, enhancing knowledge and continuous learning, and supporting collaborative working to empower them in delivering more effective self-care aid to patients.

In this report, we also explored our interviewees' perspectives on the long-term benefits of practising self-care, summarised by improving overall health and quality of life, reducing medication dependency, and promoting cost-effective healthcare. Conversely, neglecting self-care poses risks, including increased chronic diseases, decreased quality of life, medicines misuse, and potential damage to a pharmacy's reputation, leading to customer loss. Additionally, it drives up healthcare costs and burdens the system, potentially compromising accessibility and affordability (see sections 3.2.11 and 3.2.12).

Finally, our interviews allowed participants to reveal from their experiences the barriers encountered to performing optimum self-care support at the workplace and share some recommendations to follow to mitigate these barriers. These recommendations are listed and discussed in section 3.2.13 of this report with illustrative examples to better guide the ways of practices in community pharmacies. They can be categorised as educational and training needs, legislation and fair compensation, effective patient-centred care services and infrastructure and workplace-related aspects, all of which are prerequisites for enhancing the role of the pharmacy team to provide better support to patients in their journey towards managing their health conditions effectively.

In conclusion, this report highlights that community pharmacists recognise the importance of offering various self-care support activities. This acknowledgement presents a unique opportunity for the pharmacy profession to develop a cohesive strategy to address existing learning gaps and barriers. By doing so, community pharmacists can play a more

significant role in promoting public health and empowering individuals to manage their well-being, ultimately improving healthcare access and quality of life.

References

1. World Health O. Self-care interventions for health: WHO; 2022. updated [accessed: Available at: https://www.who.int/news-room/fact-sheets/detail/self-care-health-interventions.

2. El Bizri L, Jarrar LG, Ali WKA et al. The role of community pharmacists in increasing access and use of self-care interventions for sexual and reproductive health in the Eastern Mediterranean Region: examples from Egypt, Jordan, Lebanon and Somalia. Health Res Policy Syst. 2021;19(Suppl 1):49. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/33882956/.

3. Ilardo ML, Speciale A. The Community Pharmacist: Perceived Barriers and Patient-Centered Care Communication. Int J Environ Res Public Health. 2020;17(2). [Cited: Available at: https://mdpi-res.com/d_attachment/ijerph/ijerph-17-00536/article_deploy/ijerph-17-00536.pdf?version=1579076535.

4. Paul M, Maglaras L, Ferrag MA et al. Digitization of healthcare sector: A study on privacy and security concerns. ICT Express. 2023;9(4):571-88. [Cited: Available at: https://www.sciencedirect.com/science/article/pii/S2405959523000243

5. Senbekov M, Saliev T, Bukeyeva Z et al. The Recent Progress and Applications of Digital Technologies in Healthcare: A Review. Int J Telemed Appl. 2020;2020:8830200. [Cited: Available at: https://downloads.hindawi.com/journals/ijta/2020/8830200.pdf.

6. Vatanka P, Lofton JC. Re-envisioning the Pharmacist's Role in the Era of Digital Health—CPhA's Inaugural Digital Health Conference. Journal of Contemporary Pharmacy Practice. 2020;67(2):23-32. [Cited: 10/12/2023]. Available at: https://doi.org/10.37901/jcphp20-00002.

7. Ogunbayo OJ, Schafheutle EI, Cutts C et al. How do community pharmacists conceptualise and operationalise self-care support of long-term conditions (LTCs)? An English cross-sectional survey. Int J Pharm Pract. 2017;25(2):121-32. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/27324310/.

8. Mohamed SS, Mahmoud AA, Ali AA. The role of Sudanese community pharmacists in patients' self-care. Int J Clin Pharm. 2014;36(2):412-9. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/24442644/.

9. Rutter P. Role of community pharmacists in patients' self-care and self-medication. Integr Pharm Res Pract. 2015;4:57-65. [Cited: Available at: https://www.dovepress.com/getfile.php?fileID=25622.

10. Ogunbayo OJ, Schafheutle EI, Cutts C et al. A qualitative study exploring community pharmacists' awareness of, and contribution to, self-care support in the management of long-term conditions in the United Kingdom. Res Social Adm Pharm. 2015;11(6):859-79. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/25677228/.

11. Bell J, Dziekan G, Pollack C et al. Self-Care in the Twenty First Century: A Vital Role for the Pharmacist. Adv Ther. 2016;33(10):1691-703. [Cited: Available at: https://www.ncbi.nlm.nih.gov/pubmed/27535290.

12. Silcock J, Moffett JK, Edmondson H et al. Do community pharmacists have the attitudes and knowledge to support evidence based self-management of low back pain? BMC Musculoskelet Disord. 2007;8:10. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/17266748/.

13. Dineen-Griffin S, Vargas C, Williams KA et al. Cost utility of a pharmacist-led minor ailment service compared with usual pharmacist care. Cost Eff Resour Alloc. 2020;18:24. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/32742199/.

14. Amador-Fernández N, Benrimoj SI, García-Mochón L et al. A cost utility analysis alongside a cluster-randomised trial evaluating a minor ailment service compared to usual care in community pharmacy. BMC Health Serv Res. 2021;21(1):1253. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/34798895/.

15. Watson MC, Ferguson J, Barton GR et al. A cohort study of influences, health outcomes and costs of patients' health-seeking behaviour for minor ailments from primary and emergency care settings. BMJ Open. 2015;5(2):e006261. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/25694456/.

16. Dineen-Griffin S, Benrimoj SI, Rogers K et al. Cluster randomised controlled trial evaluating the clinical and humanistic impact of a pharmacist-led minor ailment service. BMJ Qual Saf. 2020;29(11):921-31. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/32139400/.

17. Paudyal V, Watson MC, Sach T et al. Are pharmacy-based minor ailment schemes a substitute for other service providers? A systematic review. Br J Gen Pract. 2013;63(612):e472-81. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/23834884/.

18. Bukhsh A, Khan TM, Phisalprapa P et al. Impact of Pharmacist-Led Diabetes Self-Care Education on Patients With Type 2 Diabetes in Pakistan: A Randomized Controlled Trial. Front Pharmacol. 2022;13:754999. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/29561461/.

19. Bukhsh A, Tan XY, Chan KG et al. Effectiveness of pharmacist-led educational interventions on self-care activities and glycemic control of type 2 diabetes patients: a systematic review and meta-analysis. Patient Prefer Adherence. 2018;12:2457-74. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/30538430/.

20. Wada Y, Wada Y, Ennyu S et al. Ability of community pharmacists to promote self-care and self-medication by local residents [I]: Improvements in bone mineral density. Drug Discov Ther. 2017;11(1):35-40. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/28179604/.

21. Logie CH, Berry I, Ferguson L et al. Uptake and provision of self-care interventions for sexual and reproductive health: findings from a global values and preferences survey. Sex Reprod Health Matters. 2021;29(3):2009104. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/35100942/.

22. NHS Data Model and Dictionary. Long Term Physical Health Condition England: NHS England; 2023. updated [accessed: Available at: https://www.datadictionary.nhs.uk/nhs_business_definitions/long_term_physical_health_condition.html#:~:text=A%20Long%20Term%20Physical%20Health,medication%20and%2For%20other%20therapies.

23. Learning E. Which Training Delivery Method is Best for Your L&D Program? : 2021. updated [accessed: Available at: https://elmlearning.com/blog/training-delivery-methods/.

24. Silva ROS, de Araújo D, Dos Santos Menezes PW et al. Digital pharmacists: the new wave in pharmacy practice and education. Int J Clin Pharm. 2022;44(3):775-80. [Cited: Available at: https://pubmed.ncbi.nlm.nih.gov/35380393/.

Appendix 1: Survey questionnaire (English version)

Introduction

We are pleased to invite you to take part in a major global survey to understand how the community pharmacy team currently support SELF-CARE for those managing their health conditions.

The study will explore global understandings of the self-care concept, including needs, engagement, barriers and enablers in supporting people's management of their health conditions in the country where you practice.

Information for participants

The survey is anonymous, and no one will be able to link your responses back to you. Our data is stored securely in password-protected drives with restricted access.
Data will be analysed and reported in an anonymised format. You are not obliged to answer any of the questions, your participation is voluntary, and you can withdraw from the survey at any time.

This survey is being conducted by the FIP Global Pharmaceutical Observatory (GPO) as part of a global overview, and resourced through unrestricted funds. The survey will take 10 minutes to complete. The survey is available in Arabic, English, French, Portuguese and Spanish.

Insights from this survey will be made available and published worldwide in order to support pharmacy teams in providing better public health services. Thank you for your time and for taking part.

Q1 Your country of residence:

▼ Afghanistan (1) ... Other (153)

Q2 Do you currently work or practice in a community pharmacy (in any capacity, whether full or part-time)?

○   Yes

○   No

Skip To: End of Survey If Do you currently work or practice in a community pharmacy (in any capacity, whether full or part... = No

Q3 Your workplace:
(You can select more than one option)

☐ Independent community pharmacy

☐ Retail chain community pharmacy

☐ FIP member organisation

☐ Trade association

☐ Wholesaler

☐ Other (please state)_____

Q4 Your role:

o   Community pharmacist

o   Community pharmacy technician

o   Community pharmacy assistant

o   Other (please state)_____

Q5 How long have you worked in a community pharmacy environment?

o   Less than 1 year

o   1 to 5 years

o   6 to 10 years

o   11 to 20 years

o   21 to 30 years

o   More than 30 years

Glossary of terms used in this survey:

1. Self-limiting conditions: refer to medical conditions that will resolve on their own and can be reasonably self-diagnosed and managed with non-prescription medicines.
2. A Long-Term Condition (or a Chronic Condition) is a health problem that requires ongoing management over a period of years and is generally one that can be controlled with the use of medication and/or other therapies.

Q6 Please indicate your opinion, from agreement to disagreement, for the following statements about self-care:

	Strongly agree	Agree	Neither agree nor disagree	disagree	Strongly disagree
1-Self-care means patients are actively participating in consultations alongside their community pharmacists.	○	○	○	○	○
2-Self-care means patients make their decision based on knowledge and understanding, with the support of the community pharmacy team.	○	○	○	○	○
3-Self-care means patients make lifestyle changes recommended by the community pharmacy team.	○	○	○	○	○
4-Self-care means patients adhere to their medications and treatment regimens with the support of the community pharmacy team.	○	○	○	○	○
5-Self-care means patients with long-term conditions become more confident in	○	○	○	○	○

making lifestyle or management changes.					
6-Self-care means patients take control of their own care.	○	○	○	○	○
7-Self-care means patients take responsibility for managing their self-limiting or their long-term condition(s).	○	○	○	○	○
8-Self-care is about patients actively informing community pharmacy teams how to best support them in managing their self-limiting or long-term condition(s).	○	○	○	○	○
9-Self-care means patients being more independent or autonomous of the community pharmacy team.	○	○	○	○	○
10-Self-care means patients actively seek the necessary information from the community pharmacy team to effectively manage their self-limiting or long-term condition(s).	○	○	○	○	○
11-Self-care is about patients managing their health without the intervention of healthcare professionals, such as pharmacists.	○	○	○	○	○
12-Self-care is about shifting patient case load from doctors or other healthcare professionals to pharmacists.	○	○	○	○	○
13- On reflection, I have my own clear understanding of the meaning of self-care as a concept.	○	○	○	○	○

Q7 Which members of the community pharmacy team provide self-care support advice to customers:
(You can select more than one option)

☐ Pharmacist

☐ Pharmacy technician (trained)

☐ Pharmacy assistant and other pharmacy team members

☐ Other (please state):_____

Q8 Which of the following approaches do you use to give advice and solutions to patients/customers as part of self-care support?
(Please select the top three approaches that you generally use).

☐ Dispensing medicines (over-the-counter/non-prescription) to patients/customers.

☐ Educating and advising the patient about their self-limiting conditions (Patient-centred advice), such as lifestyle modification advice and nutrition advice.

☐ Educating and advising the patient about the use of medication for their self-limiting conditions.

☐ Following a protocol/guideline for best practice advice with self-limiting conditions.

☐ Offering or providing diagnostic services

☐ Referring patients/customers for an urgent/non-urgent appointment with the GP/hospital.

Q9 Which of the following sources of information for self-care support do you use?
(Please select the top three sources of information that you tend to use)

☐ My work experience, i.e., self-knowledge.

☐ From colleagues that I work with.

☐ Information developed by the community pharmacy.

☐ Information gained as part of continuing professional development.

☐ Online information provided by local health systems or other health & medicines information centres.

☐ Online search engines.

☐ Online literature search.

☐ Standard pharmacy textbooks.

☐ Social media.

☐ Company information about non-prescription or OTC products.

☐ Other (please state)_____

Q10 Which of the formats (delivery methods) of education and training programmes do you prefer?
(Please select your top three preferences)

☐ Face-to-face training programmes in a lecture or presentation format

☐ Face-to-face training programmes in a workshops format (hands-on training or group discussion)

☐ Training programmes as part of pharmacy conferences

☐ Online training programmes (webinars, e-educational materials, online lectures, video lessons)

☐ Educational awareness campaigns for the pharmacy team

☐ Onsite training programmes in a pharmacy, for example from sales representatives

☐ Information leaflets from manufacturers

☐ FIP CPD Bites, for example: https://youtu.be/PkDWp62UA0E

☐ Other recommendations (please state)_____

Q11 To the best of your knowledge, what types of digital self-care tools and healthcare technologies are your patients using?
(You can select more than one option)

☐ Brain training games

☐ Diagnostic tests

☐ Health education websites

☐ Health tracking apps

☐ Medication management apps

☐ Mental health apps

☐ Remote monitoring systems

☐ Telemedicine platforms

☐ Wearable devices

☐ Wellness tests

☐ Other (please specify)

☐ None of the above

☐ I don't know

Q12 What challenges do you face in using healthcare technologies to provide self-care support for your patients/the public in the community pharmacy?
(You can select more than one option)

☐ Challenges with access to technology (lack of funding, infrastructure, resources).

☐ Cost (resources, infrastructure, and training needed).

☐ Lack of awareness of what digital healthcare technologies that are available.

☐ Lack of educational training programmes on the use of digital self-care tools for the community pharmacy team.

☐ Lack of time to educate patients on health technologies in the workplace.

☐ Maintenance and updates to ensure optimal functioning.

☐ Regulatory and privacy concerns (Compliance of pharmacists with the regulations of these digital health tools).

☐ Technical challenges (Integration of digital healthcare technologies with pharmacy software).

☐ Other (please specify)

Q13 Please indicate your opinion, from agreement to disagreement, for these statements about the **enablers** that might enhance overarching provision of self-care support.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Access to educational resources and training for supporting	○	○	○	○	○
Access to the patient's health records or medication records	○	○	○	○	○
Availability of private consultation rooms	○	○	○	○	○
Collaborative care planning between the pharmacists and patient	○	○	○	○	○
Good team working	○	○	○	○	○
Patient education through providing tailored and personalised information and advice	○	○	○	○	○
Patient's accessibility to community pharmacy	○	○	○	○	○
Pharmacist remuneration for providing self-care services	○	○	○	○	○
The use of technology	○	○	○	○	○
Well-trained and qualified staff	○	○	○	○	○
Working relationships and communication with other healthcare professionals	○	○	○	○	○
Other (please specify):	○	○	○	○	○

Q14 Please indicate your opinion, from agreement to disagreement, about these potential **barriers** that might hinder you from providing self-care support.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Inadequate awareness or lack of access to available materials	○	○	○	○	○
Inadequate knowledge and training	○	○	○	○	○
Insufficient funding and remuneration	○	○	○	○	○
Lack of access to the patient medical record	○	○	○	○	○
Lack of confidence in offering health recommendations	○	○	○	○	○
Lack of skilled pharmacy workforce and expertise in the workplace	○	○	○	○	○
Lack of space in the pharmacy	○	○	○	○	○
Lack of standardised protocols/guidelines	○	○	○	○	○
Lack of working relationships with other healthcare professionals	○	○	○	○	○
Legislation barriers	○	○	○	○	○
Limited patient engagement and pharmacists' role recognition	○	○	○	○	○
Time constraints and heavy workload	○	○	○	○	○
Other (please state)	○	○	○	○	○

Q15 Would you like to participate in a 5-10 minutes interview with us to talk about your experience in managing patients' self-care?

○ Yes

○ No

Display This Question:
    If Would you like to participate in a 5-10 minutes interview with us to talk about your experience i... = Yes

Q16 Please provide your email address.

_____

Appendix 2: Interview topic guide (English version)

Advance information

Our interview with you aims to capture further in-depth insights into your perception of self-care, what support you think patients need to receive from the Community Pharmacy team, and what support you need to support patients in managing their own self-care conditions.

Here are some points that we would like to discuss:
1. A brief review of our online questionnaire (if needed)
2. A discussion on the following questions:

➢ How do you support patients to undertake self-care based on your personal practice & experience? Can you use an example to illustrate this?

➢ What support do you think pharmacists (you) need to support patients in managing their own self-care conditions?

➢ What is the role of the pharmacy team in directing patients to digital self-care tools and healthcare technologies?

➢ Do you think there are any potential long-term benefits of practising self-care? Can you elaborate?

➢ Do you think there are any associated risks of not practising self-care? Can you provide some examples?

➢ What are your suggestions to overcome or mitigate some of the barriers you have described in your survey answers?

Appendix 3: Project's digital event (Empowering pharmacy teams: Leveraging global insights for self-care enhancement) summary

Aim

The event, which took place on 25 July 2023, aimed to engage experts and stakeholders in discussions regarding effective strategies for empowering pharmacy teams in their self-care practices. This included the utilisation of technology, highlighting successful community pharmacy initiatives, and emphasising the importance of patient engagement and involvement. The event recording can be found here.

This panel discussion had the following objectives:

1. Understanding self-care needs and challenges in the pharmacy sector: The first goal was to gather information about the specific self-care needs, challenges, and opportunities faced by pharmacy teams. This included identifying gaps in self-care practices, barriers to implementation, and areas for improvement.

2. Exploring best practices in self-care initiatives: The second objective was to collect information on successful community pharmacy initiatives that have empowered self-care. By sharing examples of best practices, participants could learn from one another and gain insights into strategies that have yielded positive outcomes.

3. Enhancing patient engagement in self-care decision-making: The third aim was to obtain information on the importance of patient engagement and involvement in self-care decision-making processes. This involved understanding patients' perspectives, preferences and needs in self-care and how pharmacy teams can effectively collaborate with them on their self-care journey.

4. Utilising technology and digital tools in self-care: Lastly, the event aimed to gather insights on the role of technology in enhancing self-care practices within the pharmacy sector. This encompassed understanding the use of digital self-care tools, innovative technological solutions, and the impact of technology on patient outcomes and pharmacy services.

Summary from the event

Theme 1: Community pharmacy initiatives empowering self-care

Speaker: Jorge Schlottke

Observer of the FIP Community Pharmacy Section

Member of the Confederación Farmacéutica Argentina – Argentina

Community pharmacies provide a range of services to promote patient self-care. Examples include smoking cessation support, immunisation campaigns, blood pressure monitoring, blood glucose monitoring, medication adherence programmes, and COVID-19 testing. These services improve patient access to healthcare and reduce the burden on hospitals. Pharmacists play a key role in promoting health, preventing diseases and educating patients about self-care.

Theme 2: Role of technology in enhancing self-care practices

Speaker: Ezinne Onwuekwe

FIP Technology Advisory Group

Senior Clinical Informatics Analyst

Nova Scotia Health – Canada

Advanced digital technologies and data-driven solutions are transforming pharmaceutical manufacturing and improving patient care. Examples include telehealth, medication adherence apps, remote monitoring devices, and AI-powered healthcare platforms. These technologies support self-care across daily choices, lifestyle, self-treatable conditions and minor ailments. Privacy, accessibility and digital literacy are considerations for ensuring equitable access to technology-enabled self-care.

Theme 3: Smartphone applications in enhancing self-care practices among patients

Speaker: Dr Pauline Siew Mei Lai

FIP Technology Advisory Group

Associate Professor, Department of Primary Care Medicine

University Malaya, Malaysia

Smartphone applications like "Ola" for anticoagulation management and "Smart" for HIV self-management are valuable tools for patients. These apps offer information, lab result documentation, checklists for vaccinations, and support groups. They enhance self-care by empowering patients with knowledge and tools for managing their conditions.

Theme 4: Importance of patient engagement in self-care decision-making

Speaker: Kawaldip Sehmi

International Alliance of Patient Organisations (IAPO) – UK

Universal health coverage by 2030 should prioritise primary healthcare and patient engagement. Patients must be actively involved in healthcare decision-making. Patient engagement reduces adverse events and medication errors. Health literacy and personalised approaches are vital, and an enabling ecosystem should be established. Expert patients can play a role in raising awareness and co-creating initiatives. Collaboration and technology can enhance patient interactions and self-care.

Conclusion

In conclusion, the event emphasised the importance of educating patients about the benefits of using technology for self-care. Pharmacists and healthcare workers must guide patients in the safe and effective use of technology, including AI, machine learning, wearables and smart apps. Patient-centric care, soft skills training and ongoing support are essential for fostering patient engagement and achieving successful health outcomes amid evolving technological landscapes.