Originales

Exploring Health Literacy Perspectives Among Portuguese Community Pharmacists

Exploración de las perspectivas de alfabetización en salud entre los farmacéuticos comunitarios portugueses

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Abstract

Introduction: Health literacy (HL) is a broad concept encompassing the knowledge, motivation and skills required to access, understand, evaluate and apply health information. It is a critical element of patient autonomy and leads to improved outcomes in healthcare systems. **Objectives:** This study aims to explore the perspectives of Portuguese community pharmacists on HL and their role in improving it among patients. HL is an increasingly relevant issue as health systems are under pressure due to factors such as longevity, lifestyle and environmental changes leading to new diseases. **Methodology:** A survey was sent digitally to 2,843 community pharmacies in Portugal. A total of 394 valid responses were received from pharmacists across Portugal. **Results:** The results showed that 96.95% of respondents recognised the importance of assessing patients' HL. Most pharmacists use various techniques, such as screening questions and the teach-back method, to assess HL levels and adapt their communication to influence patients' health decisions and improve their health knowledge. Pharmacists also actively promote positive health behaviours and medication adherence, especially for non-communicable diseases. **Conclusion**: The findings underline the key role of pharmacists in improving HL, thereby contributing to better health outcomes and the sustainability of health systems.

Key words: health literacy; community pharmacies; pharmacists; communication; health communication

Resumen

Introducción: La alfabetización en salud (AS) es un concepto que engloba los conocimientos, la motivación y las habilidades necesarias para acceder, comprender, evaluar y aplicar la información sanitaria. Es un elemento fundamental para la autonomía del paciente. **Objetivos:** El objetivo es explorar las perspectivas de los farmacéuticos comunitarios portugueses sobre la AC y su papel en la mejora de esta entre los pacientes. La AC es cada vez más relevante, ya que los sistemas de salud están bajo presión por factores como la longevidad, el estilo de vida y el medioambiente, que crean nuevas enfermedades. **Metodología**: Se envió una encuesta digital a 2843 farmacias comunitarias. Se recibieron 394 respuestas válidas. **Resultados:** 96,95 % de los farmacéuticos reconocía la importancia de evaluar la AS de los pacientes. La mayoría utilizaba diversas técnicas para evaluar los niveles de AS y adaptar su comunicación para influir en las decisiones de los pacientes sobre su salud y mejorar sus conocimientos al respecto. También promueven activamente conductas saludables y la adherencia a la medicación, especialmente en el caso de las enfermedades no transmisibles. **Conclusión**: Estos resultados subrayan el papel clave de los farmacéuticos en la mejora de la AS, lo que contribuye a obtener mejores resultados en materia de salud.

Palabras clave: alfabetización en salud; farmacias comunitarias; farmacéuticos; comunicación; comunicación

Introduction

Increasing patient involvement is an important feature of today's healthcare structure. This involvement is encouraged and promoted by healthcare systems and ultimately leads to a paradigm where the individual is at the centre of care and all processes revolve around them and require their active participation (Glanz, Rimer & Viswanath, 2008). This is called patient centricity.

Such active participation is linked to the idea that the decision-making process should be shared (Levinsky, 1996). This involves both understanding, informing and listening to people and presenting options in a way that people can understand (Epstein & Street, 2011).

Health literacy (HL) is defined by Sørensen et al. (2012) as a concept directly related to literacy in the broad sense. It encompasses the knowledge, motivation, and skills a person has to access, understand, evaluate, and apply health information to make assessments and decisions about healthcare, disease prevention, and health promotion in everyday life. This enables them to maintain or improve their quality of life throughout their life course. HL contributes to people's empowerment (Sørensen et al., 2012) and ultimately has a direct impact on health outcomes and, consequently, on healthcare systems (Paasche-Orlow & Wolf, 2007).

> **Health literacy contributes to people's empowerment and ultimately has a direct impact on health outcomes and, consequently, on healthcare systems**

Several researchers (Paasche-Orlow & Wolf, 2007; Schillinger, et al., 2002; Protheroe, Nutbeam, & Rowlands, 2009) report that patients with low levels of HL have poorer health outcomes and greater difficulty accessing the health care system than those with higher levels of HL.

While HL alone may not be sufficient to address inequalities resulting from the inefficient distribution of resources and opportunities (Nutbeam & Lloyd, 2021; Kickbusch, 2001), continued efforts to improve HL levels can significantly contribute to reducing inequalities by impacting other social determinants of health (Nutbeam & Lloyd, 2021).

Improving people's HL has a twofold impact on health systems: on the one hand, it encourages the exercise of autonomy, which is the result of informed choice and is an element that favours responsibility and self-care (Ratzan & Parker, 2000). On the other hand, it improves the individual's ability to adapt to the demands of the system (Sørensen, 2018). Both combined have a significant impact on the healthcare system: they add value to the system. By empowering patients to manage their health and make rational use of resources and health technologies, including medicines, HL not only makes these technologies more efficient, but also safer (Paasche-Orlow & Wolf, 2007).

Although health professionals have traditionally been the main source of medical and health information (Ishikawa & Kiuchi, 2010), it is important to note that there are persistent and sometimes serious communication gaps between doctors and patients (Baker et al., 1996). There are two main reasons for this: firstly, doctors often struggle to explain complex situations and concepts in simple terms; secondly, patients tend to 'hide' their lack of understanding out of shame (Parker, 2000; Baker et al., 1996). Inadequate and ineffective communication between health professionals and patients can not only compromise health outcomes but can be catastrophic (Priest et al., 2005).

As HL, by definition, involves the ability to understand health information, it is a key factor to consider if effective communication between patients and healthcare providers is to be expected (King et al., 2021).

The successful transition of patient care between sites and settings in an interdisciplinary environment is becoming a key element of healthcare (Blouin & Adams, 2017), and there is some evidence that pharmacists play a critical role in both ambulatory care and community pharmacy settings, for example in supporting the transition of care after hospitalisation (Hemberg et al. 2017).

Pharmacists are well placed to help patients manage their medicines safely and effectively (Dilworth, Mott & Young, 2009). Additionally, by reducing preventable medication-related morbidity and mortality, pharmacists provide a broader service that aligns more closely with the concept of 'pharmaceutical care' (Hepler & Strand, 1990). This is particularly important given that misunderstanding medication instructions can lead to avoidable costs for patients and the healthcare system (Bates et al., 1997).

However, the role of pharmacists is currently much broader; they are often the first healthcare professionals that patients consult in health-related situations, as they provide a universally accessible service (Ilardo & Speciale, 2020). Furthermore, pharmacists act as health educators today. Studies have shown that involving pharmacists in

educational activities and behavioural counselling improves therapeutic outcomes and patient conditions (Mossialos et al., 2015).

Portuguese people recognise the important role that pharmacies play in the community, as well as the strong relationships that pharmacists have with their local patients (Policarpo et al., 2019). They view pharmacists as part of a support network that assists with accessing the healthcare system (Cavaco et al., 2005).

Given that there are pharmacies throughout Portuguese territory, including areas where Portuguese public health structures are not present, and that many health interactions occur between individuals and community pharmacists, this research aims to understand how these professionals leverage their position to empower people to take control of their health, thereby promoting HL.

To achieve this, we will explore how pharmacists perceive HL, how important they consider it to be for people's health, and the role they believe they have in developing HL in their patients.

Materials and Methods

Study Design

Our descriptive research has been conducted using a primary research approach. A digital survey was sent to community pharmacies throughout Portugal.

The questionnaire was designed to cover the three domains of HL defined by the HLS-EU (Sørensen et al., 2012): healthcare, health promotion and disease prevention. The main objective was to test whether pharmacists influence their patients' access to, understanding of, evaluation of, and application of health information in these domains.

We also included some questions to help us assess how important HL is considered to be in the context of pharmaceutical professionals.

The convenience sample consisted of a database of 2,744 Portuguese pharmacies obtained from the ANF (Associação Nacional das Farmácias), the country's most representative pharmacy association, representing 93.9% of total pharmacies (INE, 2023). Using this database, we sent an email to the contact person listed for each pharmacy, who is typically the owner-pharmacist (it is worth noting that the ANF is an association of pharmacy owners).

The limitations of the data collection include the fact that respondents were not asked about their professional category. This means that we cannot tell whether they are pharmacy managers or pharmacists in charge, despite them being asked about their seniority.

The data we obtained enables us to understand the expectations, fears and limitations of pharmacists regarding the scope of their intervention. This provides a basis for identifying not only strengths and weaknesses but also threats and opportunities. However, the size of the sample itself is a limitation, as it only provides a snapshot of a broader, more complex reality involving around 10,700 community pharmacists.

Data collection

The questionnaire was initially sent out digitally via email in waves to the entire ANF database between 29 August and 9 September 2022. To increase the number of responses, the survey was also sent to pharmacies via Facebook Messenger.

Given that the survey was made available digitally and data collection was done online using the Google Forms platform, the sampling technique used was self-selection sampling. In the first phase, the questionnaire was sent by email to approximately 2,843 pharmacies. As the response rate was lower than expected, pharmacies with institutional Facebook pages were contacted via Messenger and asked to complete the questionnaire.

Data collection took place over five weeks, between 29 August and 3 October 2022. Data collection was carried out online using the Google Forms platform. The survey was closed with 394 validated responses on 10 October 2022, the last day of data collection.

The questionnaire was addressed exclusively to pharmacists. Only one response per Google account was permitted, and only responses from pharmacists were validated.A total of 394 surveys were validated.

Description of the sample

According to the National Chamber of Pharmacists (OF, 2023), there were approximately 11,000 pharmacists working in community pharmacies in Portugal in 2023. We consider the sample to be representative as the respondents were selected from one of the largest pharmacy databases with national coverage. It's therefore taken from a larger group that reflects the characteristics of a larger population, so the responses obtained from it would accurately reflect the results of interviewing the entire population.

The female gender represents a significant majority (79.9%, n=315) of the sample, which is in line with the figures reported by the OF (OF, 2023), where the distribution is 80% female and 20% male.

The majority of respondents were aged between 25 and 39 years (52.54%, n=207) and the 25-54 age group represented 85% (n=335) of all responses (mean age 39.13).

Most professionals (37.82%, n=149) have between 6 and 15 years of experience. The average is 14.61 years (SD=11.26). As not all pharmacists work or have always worked in community pharmacy, it is also important to note that for our sample, the average years of experience in community pharmacy is 13.25 years (SD=10.01).

Concerning the geographical distribution, although responses were received from all districts in Portugal, the large groups responding are mainly concentrated in the largest Portuguese cities. Lisbon stands out with 28.43% (n=112), followed by Setúbal with 12.69% (n=50) and Porto with 12.18% (n=48). Together they account for more than 50% of the responses.

Data analysis

The analysis of the data was carried out using Excel and, for the evaluation of the possible correlations, using SPSS.

Results - Health Literacy attitudes

Patient assessment of health literacy

Individual assessment of HL is an important step as it can be an indicator of a person's relationship with their health. Compared to people with adequate HL, people with limited HL have a poorer understanding of their health conditions and show more difficulty following instructions or managing medication (Jeppesen, Coyle & Miser, 2009).

HL can also provide insight into the factors that have influenced a person's health throughout their life, known as the social determinants of health (SDH). Educational levels are one example of these determinants. The WHO (2008) defines these as the environmental conditions in which people are born, live, learn, work and grow old. They influence the current health status of individuals and populations through exposure to factors that increase or decrease the likelihood of disease or premature and avoidable death (PNS, 2022). Education and literacy are important SDH, significantly impacting people's lives (Kickbusch, 2001; Sørensen et al., 2012). However, SDHs also affect quality of life beyond health (Kickbusch, 2012) and the availability of economic and social resources that shape opportunities and access to better working, living and health conditions (Braveman, Egerter & Williams, 2011).

HL plays an important mediating role between health professionals and patients. It influences patients' ability to understand and make sense of information, as well as their active participation in their health (Glanz, Rimer & Viswanath, 2008). Since communication between individuals and health professionals is vital in practically all aspects of healthcare (Brown, Crawford & Carter, 2006; Baker & Watson, 2015), it could be argued that the quality of these interactions is crucial for HL. Therefore, HL is both a precursor (Pleasant and Kuruvilla, 2008) and a product of the quality of interaction (Protheroe, Nutbeam and Rowlands, 2009), working as an evolving feedback loop.

Bearing this in mind and considering the importance of evaluating how and from which point to start a conversation, we asked pharmacists whether they take any steps to try to assess the level of HL of their patients to access their literacy level. The majority of respondents said yes (67.77%, n=267) and some said sometimes (29.19%, n=115), which shows that almost all pharmacists (96.95%, n=382) are aware of the importance of starting a conversation by understanding the point at which they are able to communicate with the patient.

The way in which pharmacists access HL can vary, as they can use several different techniques, either separately or together. The options given were 'asking screening questions', 'based on previous interactions' and 'using the teach-back technique'. Although responses could be cumulative, the majority of respondents (59.1%, n=225) reported using only one tool to conduct their assessment, with the remainder using a mixture of the different techniques or even all of them in combination. In the case of the teach-back technique, we include a simple explanation in the questionnaire describing what the technique is, so that everyone has the same understanding of the concept, and we can compare results.

Responses to this question were collected from 381 respondents, the number of professionals who said they were concerned about assessing patients' HL. The results were as follows: 120 pharmacists (31.50%, n=120) 'ask screening questions' and 55 (14.44%, n=55) 'use the teach-back technique' to support their analysis. Previous interactions are used as a support by 50 (13.1%) of respondents. The use of two or more complementary techniques was the choice of 40.94% (n=156) of respondents, and the combination of screening questions and previous interactions stood out with 15.49% (n=59) of preferences.

The pharmacist's preliminary assessment is critical in deciding which approach to take to ensure that their message is clearly understood, especially when faced with a person who needs support to manage their condition. After all, it is well known that in order to improve their ability to understand and make appropriate decisions, people need to have access to information and be able to understand it, which means improving their HL (Vaillancourt & Cameron, 2022).

Bridging communication gaps

When confronted with a person who needs support to manage their condition, pharmacists' approaches to ensuring their message is understood range from 'making recommendations in clear and positive language' (16.24%, n=64), 'making recommendations in clear and positive language' (9.39%, n=37) and 'asking questions to assess needs in more detail', and 3.55% (n=14) say they 'use written materials to support their message'. However, the majority of pharmacists (70.81%, n=279) reported using more than one resource to meet the needs of these individuals.

In some cases, all of the above techniques are considered necessary (30.96%, n=122) and in extreme situations, other additional methods are needed (6.35%, n=25). Other commonly reported complementary techniques include the use of analogies to everyday situations or, where appropriate, demonstrating the use of a specific drug or medical device, when this can be justified. However, the most frequently reported complementary approach is close follow-up after the pharmacy visit, either by making appointments in the pharmacy or by follow-up telephone calls on the pharmacist's own initiative, and sometimes even home visits.

We should point out that despite the questionnaire being tested by seven pharmacists prior to distribution, we were unable to prevent social desirability bias. This type of bias enables professionals to answer according to how they wish to be perceived rather than how they actually practise.

The above expressions of interest from pharmacists are consistent with survey data related to how pharmacists perceive their role in the community. This data showed that pharmacists are keen to interact with and influence patients, helping them to become healthier and more autonomous in managing their own health. This willingness is closely linked to how pharmacists perceive their role in the community, particularly with regard to HL. Interestingly, 99.2% of respondents believe that their position as community pharmacists enables them to improve health in the community, and 98.7% believe that they are responsible for doing so.

The ability to establish a fruitful dialogue is particularly important when dealing with a person suffering from a non-communicable disease (NCD), as adherence to medication is crucial and adopting new habits and lifestyles is important. NCDs tend to be long-term conditions, which is why they are also known as chronic diseases (WHO, 2023).

HL significantly impacts the management of NCDs because it affects communication between patients and healthcare providers throughout the care journey (Pouliot & Vaillancourt, 2016).

NCDs are often the result of a combination of genetic, physiological, environmental and behavioural factors (WHO, 2023). Behavioural factors have been identified as the most important contributors to NCDs. Daily choices that lead to poor health, such as poor diet, physical inactivity and excessive use of tobacco and alcohol, are the three main individual risk factors for NCDs (OECD, 2023). Behaviour plays such an important role that four major

groups of these diseases - cardiovascular disease, cancer, chronic lung disease and diabetes - are directly linked to the previously mentioned behavioural risk factors (Hunter & Reddy, 2013). Together, they account for approximately 80% of deaths from NCDs (Lozano et al., 2012).

In this context, when asked whether they usually give simple, condition-specific recommendations to help people with NCDs maintain their health in their daily pharmacy practice, the majority of pharmacists (61.68%, n = 243) say that they often do this, and 20.56% (n = 81) say that they always do this. Together, these two groups account for 82.23%, indicating that providing appropriate recommendations for each situation is a common practice in Portuguese community pharmacies.

From basic understanding to safe and effective medication use

Another crucial aspect of NDC management is medication adherence. As some researchers have pointed out (Brown & Bussell, 2011; Ho et al., 2008), medication is an extremely important tool for the effective management of diseases, particularly chronic ones. Given that the best health outcomes are achieved through the correct use of medicines and an understanding of their purpose and how to use them safely (Paasche-Orlow & Wolf, 2007), and considering that the scope of pharmaceutical action is closely linked to the dispensing and counselling of medicines, every interaction provides an opportunity to promote every interaction provides an opportunity to promote HL within its context.

It is worth remembering that patients with low HL often struggle to manage their medication due to a poor understanding of instructions and how their medicines work. This can lead to them not following their prescribed regimen properly (Pouliot & Vaillancourt, 2016; Mancuso, 2009). As a result, patients suffering from these diseases can benefit from pharmaceutical training and expertise in the long-term management of their disease (Ribeiro et al., 2020).

According to Baker et al. (2004), drug-related adverse events are often caused by the inappropriate use of medication, which is associated with a poor understanding of medication instructions and low HL. The same researchers also pointed out that 37% of adverse events were subsequently identified as highly preventable. Pharmacists can play a pivotal role in mitigating the misuse of medication by assisting patients in understanding and using their medications safely and effectively (Pouliot & Vaillancourt, 2016). This is particularly important in cases of NCD (Ribeiro et al., 2020), where individual well-being can gradually deteriorate, and in cases of antibiotic use (Tang et al., 2023), where antibiotic resistance can impact the well-being of the wider community.

Pharmacists have a clear understanding of their role and are aware of the importance of discussing key aspects of medicines with patients, such as their purpose and the need to take them as prescribed (including duration of treatment and punctuality). Over half of the pharmacists (50.51%, n = 199) said they always discuss these aspects with patients, while 43.65% (n = 172) said they often do so. Together, these two groups represent 94.16% of the total number of respondents.

Helping promote health through dialogue

Health promotion is a key aspect of HL. It directly affects people throughout the different stages of life, either directly when the goal is self-care or indirectly when caring for others. Webber et al. (2015) describe self-care as a health process that occurs in several domains, some of which are related to health promotion, such as HL and self-awareness of one's health (whether physical or mental), as well as daily choices and lifestyles, while others are related to disease prevention, such as avoiding risky behaviours and reducing exposure to risk (Bell et al., 2016).

Pharmacists are in a unique position to positively impact individuals' health throughout their life, acting as life health mentors. This is due to their proximity to individuals and understanding of one's circumstances, as well as their professional proficiency in cultivating adaptable communication processes that align with diverse contexts (Levin-Zamir & Petersburg 2001).

For the general population, managing one's own health is an exceptionally demanding process (Levin-Zamir & Bertschi, 2018) as it requires a wide range of skills and knowledge in order to respond efficiently to a given health condition (Kickbusch, 2001). The ability to access, manage and understand the essential information for this process

influences one's capacity to "function in a rapidly changing society" (Kickbusch, 2001, p. 294). Such a society is characterised by new situations of autonomy that affect health and extend to all aspects of daily life (Espanha & Cardoso, 2009), in which digital platforms play an important role.

When asked if they encourage positive health behaviours, such as exercising, reducing salt intake, and consuming more fruit and vegetables, through their daily work, the vast majority of pharmacists (82.74%, n = 326) said they do. Of these, 59.9% (n = 236) said they often do, and 22.84% (n = 90) said they always do (Figure 1).
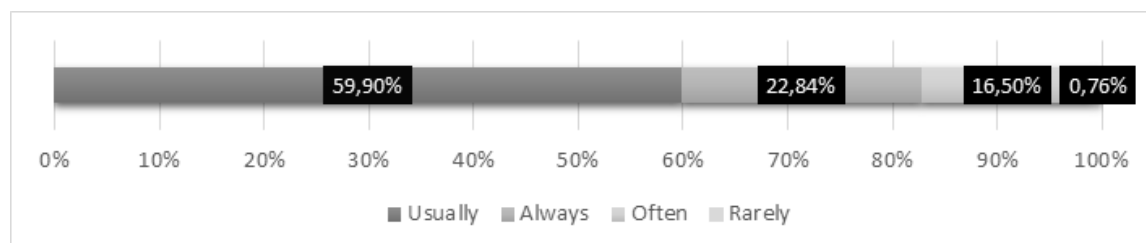
Digital health literacy

Figure 1. Frequency of advice on positive attitudes towards health.

The internet is now a dominant force. It is embedded in all aspects of modern society. Searching for information is one of the dominant practices that has a direct impact on the way people relate to their own health, and this impact is often significant. According to data from Eurostat (2022), almost half of the Portuguese population frequently uses the internet to search for health-related topics.

Digital health literacy — defined by Norman and Skinner (2006) as the ability to search for, locate, understand, evaluate and apply health information from electronic sources to manage or solve a health problem — is therefore a highly relevant topic to include in this research.

However, given the proliferation of content and platforms, it is highly likely that information will be inaccurate, misleading or taken out of context. Therefore, it is not surprising that 96.45% of surveyed pharmacists said they had encountered such situations.

When faced with these situations, pharmacists typically respond in one of two ways. Firstly, they clarify the question to ensure the individual has understood correctly (50.79%, n = 193). Secondly, they explain that not all websites provide reliable information (46.32%, n = 176)

Authors such as Paige, Krieger, and Stellefson (2017) have noted that improvements in HL have been shown to be associated with improvements in public trust in health communication. This demonstrates that interventions that address both HL and digital literacy are important interventions to improve the digital health readiness agenda (OECD, 2023).

Improving health outcomes

The behaviours described above reflect pharmacists' wider attitudes towards HL. These professionals recognise the impact of this concept in three relevant areas. These are public health, people's quality of life and the sustainability of the NHS (Figure 2). Each of these areas has different outcomes that directly or indirectly affect society and people's lives.

When evaluating these responses, it was important to ensure that all these variables were assessing the same construct. To achieve this, we measured their internal consistency by calculating Cronbach's alpha. In this case, the result was 0.842, which is considered acceptable (Maroco & Garcia-Marques, 2006).

In the context of public health and quality of life, pharmacists' concerns about the impact of HL are well founded, as these areas can have a significant direct effect on people's lives. People with low HL levels are known to experience significant barriers when accessing health care (Berkman et al., 2011). This is partly because HL has been identified

as a key factor affecting communication between healthcare professionals and patients throughout the care journey (Pouliot & Vaillancourt, 2016). Patients with low HL who experience difficulty accessing healthcare may be putting their health at risk, which can lead to poorer health status and outcomes.

It is important to evaluate these different domains because research on HL has expanded far beyond clinical settings. It is now associated with all health-related activities, whether they occur in private settings, such as the home or family life, or in public settings, such as the workplace, community life, health policy, or the healthcare system (Rudd et al., 2023).

We tested for correlations between pharmacists' age, years of professional experience, years of community pharmacy practice, and responses to questions about their involvement and level of intervention regarding incentives to develop HL in patients. We can conclude that these correlations are either absent or irrelevant.
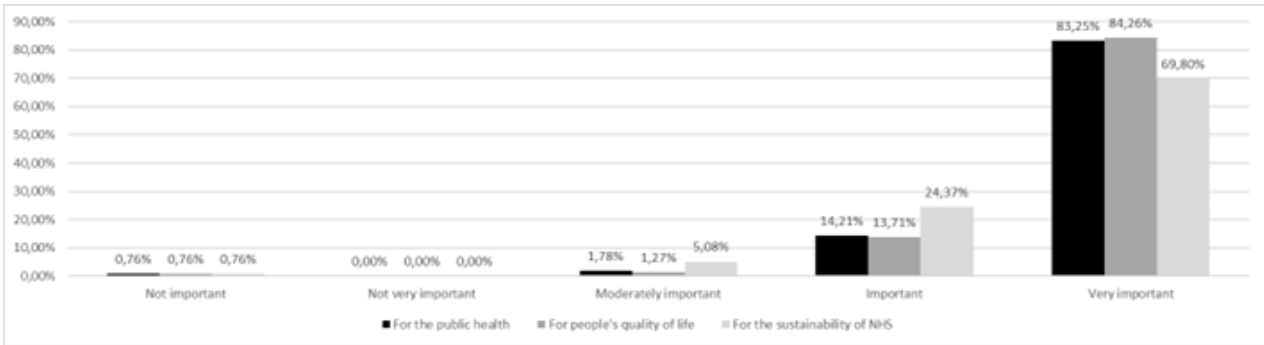
Discussion

Figure 2. Importance attached to health literacy in relation to 3 main areas: public health; people's quality of life; sustainability of NHS

Community pharmacies are well placed to build trusting relationships that facilitate dialogue about medicines and healthcare, and contribute to a better understanding of the healthcare system, reducing its complexity (Kairuz et al., 2015). This is partly because pharmacists can communicate at a specific time and place, providing the necessary context to be effective (McQuail & Deuze, 2020).

Some evidence suggests that involving community pharmacists in patient education and behavioural counselling results in better therapeutic outcomes and improves the situation of patients suffering from NCDs. Therefore, involving community pharmacists in the healthcare management of these patients could be considered beneficial (Mossialos et al., 2015). One such example is obesity, where there is potential for interventions and counselling on diet and physical activity. In such cases, pharmacies are particularly well placed to identify situations and provide timely and close monitoring (Swanton & Frost, 2007). In Portugal, where community pharmacies are highly regarded (Policarpo et al., 2019), interventions of this kind are possible thanks to the strong relationship between pharmacists and the public.

> **Involving community pharmacists in patient education and counselling can improve therapeutic outcomes for patients with Non-Communicable Diseases**

It should be noted that being overweight or obese is a major risk factor for several NCDs, including diabetes, cardiovascular disease, and certain types of cancer (OECD, 2023). Some of these conditions are fatal, and others may lead to premature death. According to the OECD, preventable mortality is defined as deaths in people under 75 years of age that can largely be avoided through effective public health interventions and primary prevention (focusing on prevention by acting before the disease occurs) (OECD, 2023). In contrast, treatable (or amenable) mortality is defined as the causes of death that can be prevented through timely and effective interventions in the healthcare system, including secondary prevention and treatment (the focus here is on disease management) (OECD, 2023).

Returning to the Portuguese reality, diabetes and ischaemic heart disease are both examples of treatable and

preventable deaths, accounting for a standardised rate of 230 deaths per 100 000 inhabitants that could have been avoided by better health systems (deaths from treatable and preventable diseases/conditions) (Eurostat, 2024). These are the types of NCDs that have a behavioural focus, where improving HL improves health outcomes.

The Observatório Português dos Sistemas de Saúde (OPSS, 2021) has been calling for patients to be placed at the centre of the health system. Community pharmacies can support this process of empowering individuals to participate actively by helping them to navigate and use the available resources correctly, access clinical data and take ownership of their health (Serapioni, Ferreira & Antunes, 2014). This makes them part of a system fuelled by collaboration that can better respond to people's needs.

Conclusion

The study highlights the critical role of Portuguese community pharmacists in improving HL. The results show that the vast majority of pharmacists recognise the importance of assessing HL and use techniques such as screening questions and the teach-back method to adapt their communication accordingly.

This approach is crucial for optimising communication and influencing individuals' health behaviours, as well as improving their understanding of their own health. It helps people access and apply quality information in useful and beneficial ways (Nutbeam, 2000) and reduces their perception of the complexity of the health system (Nutbeam & Lloyd, 2021). Such support is particularly important given that low HL directly impacts access to health services, system navigation, treatment adherence, and ultimately health outcomes (Sørensen et al., 2012; Paasche-Orlow & Wolf, 2007).

By training and supporting community pharmacists to establish quality interactions that improve HL, we can empower individuals to better manage their own health. This, in turn, will ease the burden on the healthcare system and contribute to better overall health outcomes (Protheroe, Nutbeam & Rowlands, 2009).

This study emphasises the perception among pharmacists of their responsibility for improving HL, as well as their commitment to patient education and support. Furthermore, it highlights the importance of pharmacists in addressing digital HL by guiding patients to reliable sources of health information and clarifying misconceptions. This role is becoming increasingly important in the digital age, where misinformation can spread easily.

Overall, the study concludes that community pharmacists play a critical role in improving HL, leading to better public health, an improved quality of life for individuals and a more sustainable healthcare system.

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