

Barriers for the Implementation of Cognitive Services in Spanish Community Pharmacies

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BARRIERS FOR THE IMPLEMENTATION OF COGNITIVE SERVICES IN SPANISH COMMUNITY **PHARMACIES**

Objective. To identify and assess barriers for dissemination, implementation, and sustainability of different cognitive services in Spanish community pharmacies. Design. Qualitative study through semistructured interviews followed by a descriptive analysis.

Method. Two groups of experts related to Spanish community pharmacy were chosen. One with 15 community pharmacists with a relevant professional activity, while the other group (n=18) was related to pharmacy strategists.

Results. The lack of university clinical oriented learning, lack of pharmacists' attitude towards change and some uncertainty over their professional future were identified as barriers at the pharmacists' level. In relation to pharmacy as an organization the lack of clear messages by their leaders and the small volume of Spanish pharmacies were identified as barriers. In the category of pharmacy profession, the current reimbursement system, the lack of university clinical education, and the lack of leadership by current representative organizations were the barriers found. The lack of real involvement by health authorities, the lack of knowledge about the objectives of pharmacy cognitive services, and the lack of demand of these services by patients where also identified as barriers.

Conclusions. Finally, 12 barriers were identified and grouped into 6 categories. These barriers fit in with the barriers identified in other countries.

Key words: Community pharmacies. Cognitive services. Pharmacy attention. BARRERAS PARA LA IMPLANTACIÓN DE SERVICIOS COGNITIVOS EN LA FARMACIA COMUNITARIA **ESPAÑOLA**

Objetivo. Identificar y analizar los elementos que dificultan la diseminación, la implantación y la sostenibilidad de distintos servicios cognitivos orientados a los pacientes en la farmacia comunitaria española.

Diseño. Estudio cualitativo en el que se han utilizado entrevistas semiestructuradas, con el fin de realizar un análisis descriptivo. Métodos. Se eligieron dos conjuntos de expertos relacionados con la farmacia comunitaria española. El primero estaba compuesto de 15 farmacéuticos comunitarios que se habían destacado por sus actividades profesionales y el segundo, por 18 estrategas de la farmacia.

Resultados. La falta de orientación clínica de la formación universitaria, la falta de actitud ante el cambio y la incertidumbre sobre su futuro profesional se identificaron como barreras del farmacéutico individual. Para la farmacia como empresa, se identificaron como barreras la falta de pago por los servicios, la ausencia de mensajes claros y el reducido volumen de la farmacia española. En la categoría profesión farmacéutica, el actual sistema de remuneración, la falta de formación universitaria clínica y la falta de liderazgo de las instituciones representantes fueron las barreras encontradas. En cuanto a los otros colectivos, se encontró que la falta de apoyo real de las administraciones sanitarias, el desconocimiento de los médicos de los objetivos de los servicios cognitivos farmacéuticos, y la falta de demanda de estos servicios por los pacientes fueron las barreras identificadas.

Conclusiones. Se han encontrado 12 barreras que se han agrupado en 6 categorías. Estas barreras coinciden con las comunicadas en otros países.

Palabras clave: Farmacia comunitaria. Servicios cognitivos. Atención farmacéutica. Spanish version available

A commentary follow this article (page 471)

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Manuscript received August 28,

2006. Manuscript accepted for publication January 16, 2007.

None of the authors have any conflict of interest that might be related to this study. The study has not received any external finance other than that of the authors

Introduction

The concept of pharmaceutical care in its modern **▲** sense was introduced in 1980.¹ Since then great efforts have been made to enable pharmacists to implement new cognitive services.² These services have been defined as those that are directed towards the patient and carried out by pharmacists who, calling on a specific knowledge, attempt to improve the process of the use of medications or the results of the pharmacotherapy. It could be said that there are two types of cognitive services, those centred on improving the process of the use of medications and others focussed on the evaluation and follow up of the results of the pharmacotherapy.³ There is a wide consensus on the importance of implementing pharmaceutical care cognitive services in community pharmacies, 4-6 however the process of change is slow.⁷ Although the majority of pharmacies endorse the philosophy of pharmaceutical care, 4,5,8,9 its general implementation is still in the minority.⁹⁻¹⁵

There are studies in the international literature which analyse the barriers that make it difficult to disseminate and implement, and subsequently sustain the different cognitive services. ¹⁶⁻¹⁹ Some studies have also been conducted Spain which have analysed the possible barriers to implementing cognitive services. ^{11,18,20,21} However, when these barriers were evaluated in Spain, there were discrepancies in the results published by different authors.³

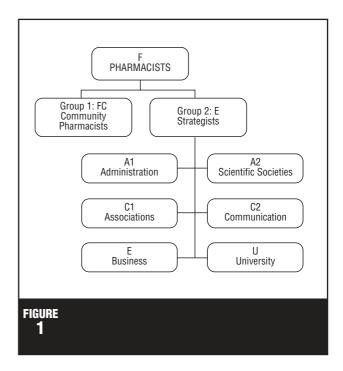
The objective of the present study was to identify and analyse the elements that hamper the dissemination, implementation and sustainability of the different cognitive services in Spanish community pharmacies, in the opinion of professional pharmacists and strategists in the world of pharmacy.

Methods

A qualitative analysis was performed, using semi-structured interviews conducted with 2 groups of experts: practicing and strategists.

The population was selected using a theoretical sample based on the work setting (all the participants were pharmacy graduates and Spanish residents) and, for the strategists, depending on the type of activity. Professional Spanish community pharmacists, who had experience of having implemented or had taken part in programmes that included the practice of different cognitive services were defined as "practicing." The strategist group came from different areas, 6 profiles being defined: health administration (A1), scientific societies (A2), professional association (C1), world of communication (C2), company associations (E), and university (U).

The interviewees from the "practicing" group were chosen from those who were prominent in the implementation of cognitive services in Spain. The "strategists" had, at the time of the interview, or had previously had responsibilities or decision capacity to be able to design, drive, and attempt to disseminate and imple-



ment different cognitive services or programmes that included these services in different organisations or institutions (Figure). A semi-structured interview²² based on the script by Roberts et al²³ (which was slightly modified and translated into Spanish), was used to obtain the information.

Of the 33 interviews conducted, 15 were from the practicing group and 18 from the strategists. The interviews were carried out by the same interviewer between May 2003 and October 2004, in the workplace of the interviewees.

The information was recorded on magnetic tape. Subsequently, a literal transcription was made from them. In no case was a synthesis or summary made, but the information contributed by the participants was collected just as they had expressed it. The text was then processed by the NUDIST VIVO® program.

The resulting information, given its qualitative nature, was analysed using a content analysis technique centred on semantic analysis, taking this as the selection of context units (phrases), which enable the discourse of the interview to be described.²⁴ To do this, the discourses were split into segments and coded according to the dimensions analysed.

Results

The mean duration of the interviews was between 40 and 80 minutes, with the total time for interviews recorded being slightly less than 33 hours.

The barriers identified were grouped into 6 categories depending on whether they referred to, the pharmacist, the pharmaceutical profession, pharmacy as an organisation, the health administration, and the doctors and their associations or the patients (Table).

Pharmacist

The lack of suitable training received by pharmacy students was identified as a barrier. Training was seen as ex-

TABLE 1

Farmacist

Lack of suitable training, not oriented towards attending to the needs of the patients

Attitude:

Need for a change of attitude

Fear of change

More business than professional activity

Uncertainty over professional future

Pharmacy

Lack of payment for cognitive services on offer

Absence of clear, and unequivocal messages

Structure of the pharmacies: too small, basically oriented towards the distribution and sale of products, with no personal care areas, too many administrative tasks, with limited time

Pharmacy profession

The current remuneration system of the pharmacy does not make it easy to implement new services

Lack of clear leadership at professional association level

Lack of preparation by the University in responding to teaching clinicalhealthcare subjects that the profession demands

Health Admnistration

Lack of decisive support by the health authorities

Poor relationship with doctors, who are unaware of these services and who, due this ignorance, are afraid that the pharmacist is encroaching in their domain

Patients

Lack of demand of the services

cessively centred on the basic sciences, and more oriented towards industrial professional activity than preparing professionals who may be able to respond to the needs of patients as regards the use of medications.

... (the group of young people who join the world of work...)...continue being taught in depth of knowledge, but barely trained on the subject of care and clinical aspects...Because they have not been taught about these in their pre-graduate phase..." (ES-13 C1)

One group of problems identified as barriers to implementing cognitive services are those relating to the pharmacist not being inclined to implement these services. Although they maintained that a change in attitude was required, they also stated that the implementation of an innovation always requires a change in behaviour to ensure that the new idea is put into practice. It is not the same for an individual to decide to adopt an idea to put the new innovation into practice.²⁵ Even when one is convinced of the importance of an innovation, in many cases its implementation is not followed through.

"...we are few...those who have liked an idea (cognitive services) and those who practice it. Because one thing is to like it and another is to practice it... I believe that many people have liked the idea, but not enough to change attitude, to change the mental structure, to put it into practice, to offer it to people..."

In this sense a fear of change by the pharmacist of what this transition meant was also detected.

"They are afraid that the structure of the pharmacy, such as it is functioning economically at the moment, a change might be detrimental economically" (FC-05)

The interviewees gave the opinion that the current reality of the pharmacy is that there is more concern about the economic aspects than professional or care ones, which was also identified as a barrier to change.

"...the pharmacist is prepared to sell, and knows what is for sale..." (FC-08)

They also stated that the pharmacist suffers from uncertainty over his/her professional future, which also makes him/her reticent to any change, such as implementing new services, whose use they are not sure about.

"...the uncertainty over what type of changes are expected of them (pharmacists), that people tell them (the pharmacists) where they have to go...what they are expected to do in the future...and how they do not know it and they believe that different paths are marked out for him/her...,it is worrying" (ES-16 A1)

Pharmacy

The lack of payment for the new cognitive services or the low specific weight that is attributed to charging for services currently implemented, such as supplying methadone, magistral preparations, or dry chemistry analytical determinations, was also identified as a barrier by the interviewees.

"...I will have to charge for what I do, no?...because, why do I have to charge for one thing and do a follow up without charging?; you do follow up but I pay you again" (FC-05)

They stated that in the world of pharmacy, particularly as regards management or professional leaders, there are no clear signs that show the pharmacist the path they have to adapt to. It was made clear that the existence of different schools or different ways of teaching the future professional is a barrier to the implementing of cognitive ser-

"Some say that follow up should be made and MRPs (medication-related problems) detected; others that it is better to start with dispensing and that the MRPs are not what they deal with...they confuse us..., but in the end...what is important is that it is not defined..." (FC-08)

"Well, tell me what I have to do and how" (ES-08 C1)

It showed that the size of the Spanish pharmacy is also a key point when explaining the lack of implementation of cognitive services. They said that the Spanish pharmacy, unlike other European ones, is too small, both in turnover and human resources.

"The European pharmacy is far above the Spanish pharmacy. It is much bigger objectively. Therefore, what does the pharmacist see as a problem today? That there are pharmacies that serve a very small population nucleus..." (ES-11 E)

"...the model should be to get away from small shop mentality..." (ES-13 C1)

They also stated that the physical structure of the pharmacy is too oriented towards the distribution and sales process of products, so they lack, in general, specific patient care areas that would ensure a degree of privacy, which have come to be called "personalised service areas."

"...to convert it in to a more specialised establishment, by areas, where a more private health care service could be given, like that which many of us try to do..." (FC-15)

"The majority of pharmacies have a layout more like a business establishment than a professional establishment. And I believe that this should be changed..." (ES-05 A2)

They recorded that the internal organisation of the pharmacy is subjected to bureaucratic and administrative work which takes up a great amount of time for the staff, tasks which, in many cases are seen as "senseless" by some of the interviewees (Es-06 A2).

"...the rest of the time you have to spend on whether the order is made out well, if it has to be returned to the store, or not, or yes, or maybe, etc..." (FC-04)

Finally when reference is made to pharmacy as an organisation, a lack of time to implement new services that they do not carry out now, and to administrative tasks that require management of the product.

"...to do this...that new service...you have to give up time for the other things..." (FC-10)

"I, more than the financial impact, depend on time..." (ES-15

Pharmacy Profession

The current payment system, based on a fixed margin per drug, was also identified as an important barrier.

"...with that sort of remuneration, we cannot take on other things (the implementation of cognitive services)" (FC-04)

They recognised a lack of leadership by current professionals and mainly by the professional organisation which was said not to be interested in whether the profession changes, going as far as to call them "opportunist leaders" (ES-14 E).

"... I feel that they (the professional organisations) will be incapable of leading something that would only, we might say, serve a few..." (FC-08)

It was also stated that the university system is not ready to tackle the change that is required and therefore is unable to offer teaching in the clinical-care subjects that the profession is demanding.

"The faculty does know that it has a problem...that our teachers do not have clinical experience..." (ES-13 C1)

Health Administration

Despite many health administration representatives having given their support for pharmaceutical care in several forums, the interviewees declared that they lacked a more decisive and explicit support in implementing cognitive services and that this lack of support must be seen as a barrier to their implementation.

"...but in practice (the Administration) it does not help in carrying them out" (ES-14 E)

Doctors

A poor relationship between doctors and pharmacists was highlighted. It was said that this was mainly due to the current lack of knowledge by doctors and other health care workers on the functions of the pharmacists, and the patient advantages deriving from better inter-professional collaboration. They were sure that this ignorance was the reason that doctors were afraid that the pharmacist was encroaching into their professional domain. However, it was also mentioned that some medical societies had started to recognise the role of the pharmacist as a health broker.²⁶

"...their ignorance (the doctors) which is profound...pharmacy care and in both cases they declared their opposition" (ES-14 E)

Patients

The lack of demand for cognitive services by patients was also identified as a barrier to implementing these services since "nobody offers it, they don't ask for it" (FC-09)

"...the patient still does not ask for these services..." (ES-16

Discussion

In a recent review it was made clear that an exhaustive study was needed that might identify the barriers to implementing cognitive services in Spain.³ A study of this nature, qualitative, does not allow extrapolations to be extended to the general population,²⁷ but its exploratory nature does allow it to be said that, after almost 33 hours of conversations with practicing pharmacists and strategists, the real barriers were identified.

Different studies questioned that money, either lack of payment for services or due to the pharmacy remuneration system, was a barrier to implementing cognitive services in Spain. 11,18,21 The results of our study did include both elements as barriers, which means that financial questions should be considered as barriers to implementing new cognitive services in the Spanish community pharmacy.

The lack of uniformity of some projects and approaches carried out by different groups, as well as the lack of clear messages by the professional leaders, were identified as barriers. This probably should not be seen as a reason for not implementing new services, but more an alibi or excuse to justify their implementation. In the health field, it is normal to have several scientific schools of thought on the use of different techniques, methods and practice guidelines. It would be the results of each group or method and their comparison which would make the professionals choose between them.

The set of barriers associated with the current structure of the pharmacy, including the lack of time to perform these services, is another of the barriers identified in our study. It is said that Spanish pharmacies are small, with an appearance and organisation which is too business oriented, and with no areas for personal care that would ensure patient confidentiality. The continuing decrease in size of the Spanish pharmacy, a result of applying different planning laws, is not positive, for the pharmacists or the health administration or for users and patients.²⁸

The university was also identified as a barrier, due to offering little training directed towards satisfying the needs of patients, the inability of the university itself to provide the appropriate staff prepared to respond to the demands of the profession. This could be done, for example, by contracting prestigious professionals and creating areas of knowledge or departments of pharmaceutical practice.²⁸

There are a series of barriers associated with associations outside pharmacy: health administration, doctors and patients. As regards the doctors, the pharmacists were of the opinion that the lack of knowledge on the wishes of the pharmacists is the reason that doctors fear encroachment

What Is Known About the Subject

- Currently, cognitive services are not widely implemented in the Spanish community pharmacy.
- There have not been many studies in Spain that have analysed the barriers that make their dissemination and implementation difficult, and their results have also been discrepant.

What This Study Contributes

- Twelve barriers that make it difficult to disseminate, implement and/or sustain cognitive services in the Spanish community pharmacy have been identified.
- These barriers, which are grouped into 6 categories, are basically no different to those reported in other countries, which reinforces the idea that the problems of pharmacy are similar, regardless of the pharmacy model and the socioeconomic situation of the country where it is studied.
- New studies need to be designed to identify the facilitators that might help to overcome these barriers, as well as others to examine the opinions of doctors and patients on cognitive services.

into their professional domain. It seems, therefore, that, why the pharmacist is trying to introduce new cognitive services, needs to be clearly communicated to the rest of the health professionals. Finally, the users of the pharmacy do not know what these establishments can offer. Thus, satisfaction with the current distribution services offered is very high, although this does not mean that the need to implement new cognitive services does not exist.²⁹ It would be of interest to design new studies to analyse the opinions of the doctors themselves in this respect, as well as to examine the opinions of pharmacy users on cognitive

As conclusions, strategists and practicing pharmacists identified 12 barriers to the dissemination, implementation and sustainability of cognitive services in Spanish community pharmacies. These barriers could be grouped into 6 categories: pharmacist, pharmacy, pharmacy profession, health administration, doctors, and patients.

The barriers identified in Spain are basically no different from those described for other countries, which reinforces the idea that pharmacy problems are similar, regardless of the pharmacy model and the socio-economic situation of the country that is studied.

It seems that new studies are necessary to identify facilitators that might help to overcome these barriers, as well as others to examine the opinions of doctors and patients on cognitive services.

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