

# COMMUNITY PHARMACIST PERCEPTION OF SUPPLEMENTARY PRESCRIBING

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## ABSTRACT

**OBJECTIVE** To determine the perception of Maltese community pharmacists regarding supplementary prescribing.

**METHOD** A self-administered questionnaire was developed, tested for validity and reliability and distributed to 50 community pharmacists selected by stratified random sampling. Statistical analysis was undertaken using Microsoft® Excel® XP and the BioMedical Data Package (BMDP) software.

**KEY FINDINGS** Cronbach's alpha correlation coefficient for the questionnaire was 0.8191. Forty-six pharmacists responded to the questionnaire. Twenty-three pharmacists were in favour of supplementary prescribing for a variety of conditions predominantly gastro-oesophageal reflux disease and asthma (both 19 pharmacists). Pharmacists (20) envisaged the introduction of supplementary prescribing by forming liaisons with general practitioners.

**CONCLUSION** The initial response to the concept of pharmacist prescribing is encouraging. Community pharmacy in Malta will need to make changes in order to provide such services to patients.

**KEY WORDS** supplementary prescribing, pharmacist perception, community pharmacy practice

## INTRODUCTION

Granting prescribing rights to pharmacists is likely to reduce fragmentation within the health care system, optimise medication management, improve continuity of patient care and improve patient access to medication. Knowledge and clinical significance of adverse effects, dosing, optimal routes, drug-drug and drug-food interactions, pharmacokinetics, pharmacodynamics and patient monitoring is required for prescribing.<sup>1,2</sup>

Eight models for pharmacist prescribing (Figure 1) have been implemented internationally (in the United Kingdom, the United States of America, Canada and New Zealand), varying in their dependency on protocols, formularies and collaboration with physicians.<sup>1,2</sup> Supplementary prescribing involves a partnership between an independent prescriber, who establishes the diagnosis and starts treatment, and a supplementary prescriber, who monitors the patient and prescribes further medication, to implement a patient-specific clinical management plan with the patient's agreement. In this scenario, independent prescribers are doctors or dentists and supplementary prescribers are pharmacists or nurses.<sup>1,2,3</sup>

In the United Kingdom, supplementary prescribing was introduced in the Health and Social Care Act 2001<sup>4</sup> and there is no restriction on the medical conditions to which this model applies. However supplementary prescribing is unlikely to be used for acute conditions. All medicines, excluding controlled drugs and unlicensed medicines may be prescribed. Supplementary prescribing is not restricted to one-to-one prescriber partnerships. The independent prescriber undertakes the initial assessment and the supplementary prescriber writes prescriptions, working towards a care management strategy agreed by the physician. The roles of the supplementary prescriber include contributing to clinical management plan monitoring, changing the medication and referring to the independent prescriber where appropriate, and recording clinically relevant facts.<sup>1,2,3</sup>

The aim of this study was to determine the perception of Maltese community pharmacists regarding supplementary prescribing.

## METHOD

A self-administered questionnaire was devised. It was divided into two sections with a total of 28 sub-divided questions; Section A was called 'Pharmacy Data', whilst Section B was called 'Patient Consultation'.

The main concept addressed was supplementary prescribing together with other issues including; the use of computer technology in the pharmacy, maintaining of patient medication records, setting up of consultation areas, remuneration for pharmacists' services, and continuing professional development.

After designing the questionnaire, psychometric evaluation of the tool was carried out to assess its validity and reliability. All data was inputted into Microsoft® Excel® XP and statistical analysis was carried out using the BioMedical Data Package (BMDP) software, where internal consistency was measured using Cronbach's alpha correlation coefficient.

The sampling frame consisted of 211 community pharmacies (subdivided into 5 districts according to the National Statistics Office demographic data) from which 10 pharmacies were selected from each district by stratified random sampling. A total of 50 copies of the questionnaire were personally distributed by the investigator (FW) to community pharmacists practising in the 50 identified pharmacies.

## RESULTS

### RELIABILITY OF THE QUESTIONNAIRE

Cronbach's alpha correlation coefficient was 0.8191 indicating high reliability of the questionnaire.

### DESCRIBING THE SAMPLE

Forty-six pharmacists responded to the questionnaire giving a response rate of 92%. Thirty-four were managing pharmacists, 20 were aged between 30 and 39 year and 30 were females. Twenty-eight pharmacists were owners of the pharmacy.

### PHARMACIST PERCEPTION

Twenty-three pharmacists were in favour of supplementary prescribing. Pharmacists accepted supplementary prescribing, predominantly for chronic conditions namely gastro-oesophageal reflux disease and asthma (both 19 pharmacists), hypertension (18 pharmacists) and diabetes (14 pharmacists). Pharmacists were most reluctant to accept supplementary prescribing for long-term anticoagulant therapy (2 pharmacists). 'Other' conditions included minor infections such as upper respiratory tract infections and skin conditions (Figure 2).

Pharmacists envisaged the development of supplementary prescribing locally mainly by forming liaisons with general practitioners (20 pharmacists) and by keeping records of interventions (12 pharmacists) (Figure 3).

### BARRIERS

Many barriers for the implementation of supplementary prescribing were identified, principally the lack of specialised training and continuing professional development (16 pharmacists), the fact that patients would still refer back to his or the general practitioner (15 pharmacists) and no access to patient medication records (11 pharmacists) (Figure 4).

### CONTINUING PROFESSIONAL DEVELOPMENT (CPD)

Thirty one out of the 46 pharmacists interviewed felt that they did not possess sufficient knowledge to carry out consultations such as supplementary prescribing and 42 out of the 46 pharmacists were willing to participate in programmes for professional development in the area.

### COMPUTERISATION AND PATIENT MEDICATION RECORDS (PMRS)

A majority of 44 out of 46 pharmacists did not maintain patient medication records (PMRs). Thirty seven pharmacists stated that the main reason for not keeping PMRs is that patients did not always buy medications from the same pharmacy, resulting in incomplete records. Other limitations were that many patients collected free medications from government-owned pharmacies (26 pharmacists), time constraints (28 pharmacists), increased workload for the pharmacist (24 pharmacists), and the cost of installing the computer system and the PMR program (6 pharmacists).

A computer system was installed in 18 out of the 46 pharmacies. Pharmacists used the computer for pharmacy management (14 pharmacists), for point-of-sale purposes (12 pharmacists), for labelling (3 pharmacists) and to aid pharmaceutical advice (1 pharmacist). One pharmacy used the computer to maintain PMRs. Ten pharmacists from the 28 pharmacies without a computer system considered lack of space as the main limitation. Nine pharmacists felt that a computer was unnecessary, 7 pharmacists perceived cost issues to be a limitation and 4 pharmacists were computer illiterate.

### **CONSULTATION AREAS**

Only twelve out of the 46 pharmacists had an area available for consultations. The main limitation for setting up a consultation area was lack of space (32 pharmacists). The need to employ another pharmacist and/or additional pharmacy personnel to cover for the pharmacist whilst s/he is carrying out a consultation was perceived to be another important limitation by 18 pharmacists. Forty one out of the 46 pharmacies had one pharmacist on duty in the pharmacy at any time and only 11 of these were willing to employ other personnel. Twenty two pharmacies out of the 46 had no salespersons employed in the pharmacy.

### **CONSULTATION FEES**

Thirty nine out of the 46 pharmacists would consider charging a fee for carrying out consultations. Nineteen of these pharmacists would charge 1.16 or 2.33 euro per consultation, whilst 1 pharmacist would charge 4.66 euro. None of the pharmacists interviewed would charge more than 4.66 euro.

### **DISCUSSION**

The initial response from community pharmacists towards pharmacist prescribing is encouraging. Half (11 out of 22) of the pharmacists who were against the introduction of supplementary prescribing perceived the lack of patient medication records as a barrier. Fifty-four percent (12 out of 23) of the pharmacists envisaged the local implementation of supplementary prescribing only if the pharmacist keeps records of interventions carried out, together with other information that may be used for that patient if the need arises in the future.

Computer technology will make the recording of pharmacist interventions and prescriptions less time-consuming and the storage and access of patient histories more reliable. Maintenance of patient records is also required for pharmacist prescribing. The system should be effective and may require transfer of information back to the medical practitioner. For pharmacists to be able to prescribe any medication and to provide the best possible care, all medical information concerning the patient must be collected.<sup>5,6</sup>

Pharmacies are now installing a computer system due to the introduction of the Pharmacy Of Your Choice (POYC) scheme. This computer system should be able to be adapted to facilitate the maintenance of patient records which are essential for supplementary prescribing.

A consultation area is described as a clearly designated area for confidential consultations. It must be an area where the pharmacist and patient can talk at normal speaking volumes without being overheard by other clients or by staff.<sup>7</sup> Consultation areas are a prerequisite for pharmacist prescribing. Community pharmacies in Malta are small, therefore the main difficulty with setting up consultation areas is lack of space. Areas within the pharmacy which provide privacy could be created.

Securing remuneration for professional responsibility is another step in the adoption of prescribing rights. Changes to the roles of the current workforce may be needed as a result of offering pharmacist prescribing. If a pharmacist is engaged in a private conversation with a patient, mechanisms need to be put in place to ensure the rest of the work continues. This may involve employing another pharmacist.

Training is also necessary. Pharmacists who wish to become prescribers may be offered optional life-long learning programmes which they could follow. There may be resistance to change from within the pharmacy profession, and other professions may feel that prescribing pharmacists intrude on their area of professional responsibility. The development of collegial working relationships is essential in the acceptance of new prescribers. The success of pharmacist prescribing will be determined by the ability of pharmacists and doctors to work as a team.

### **CONCLUSION**

The barriers for the implementation of supplementary prescribing include computerisation, lack of access to patient records, lack of space for consultation, and lack of pharmacist motivation. The implementation of a fee for professional services provided could be an incentive to promote supplementary prescribing. The success of pharmacist prescribing is determined by the ability of pharmacists and other prescribers to work as a team.

In the United Kingdom the issue of pharmacist prescribing has moved a step further. In November 2005 it was announced that pharmacists in the United Kingdom will have powers to independently prescribe medicines. This means that pharmacists were given the right to prescribe any licensed medicine for any condition within their competence, with the exception of Controlled Drugs.<sup>8</sup>

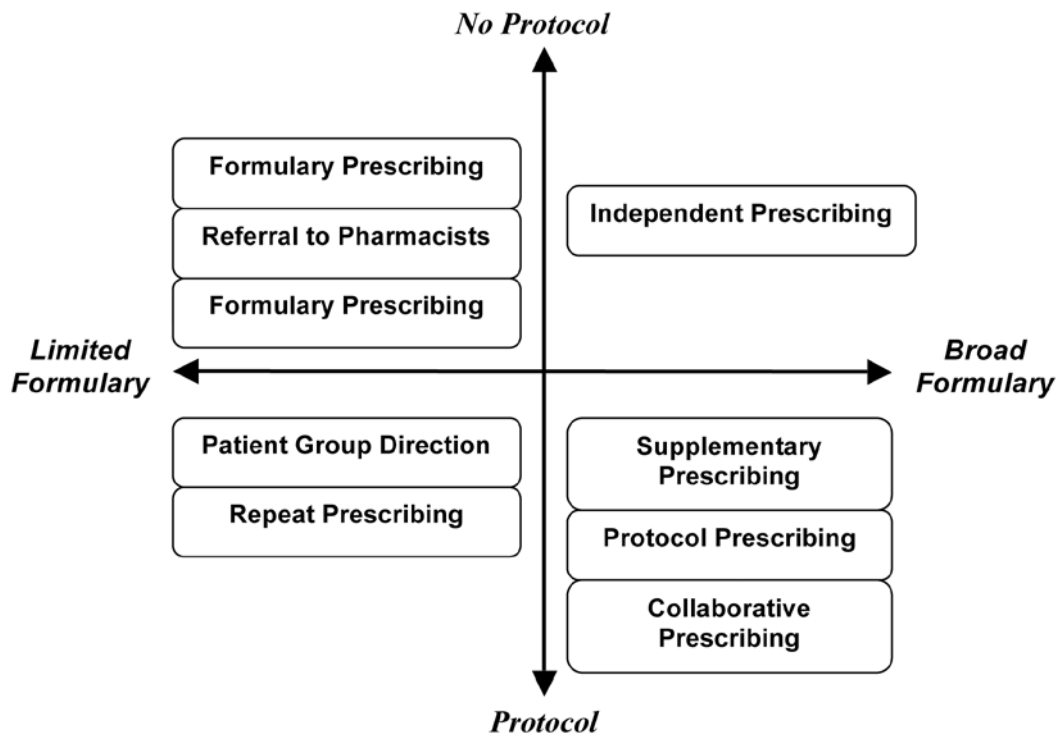
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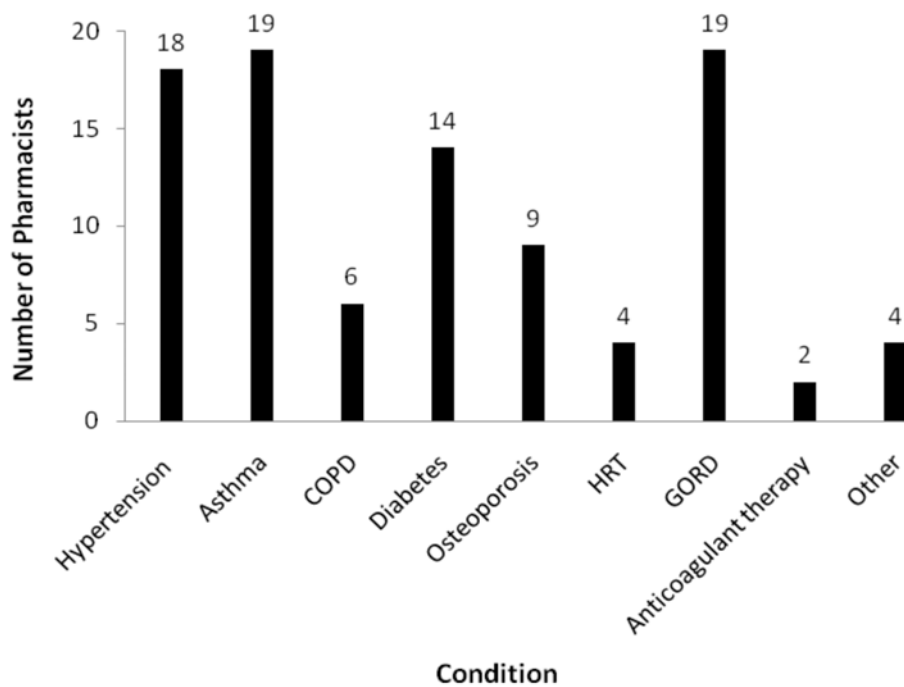
“THE BARRIERS FOR THE IMPLEMENTATION OF SUPPLEMENTARY PRESCRIBING INCLUDE COMPUTERISATION, LACK OF ACCESS TO PATIENT RECORDS, LACK OF SPACE FOR CONSULTATION, AND LACK OF PHARMACIST MOTIVATION”

**Figure 1:** Models for pharmacist prescribing



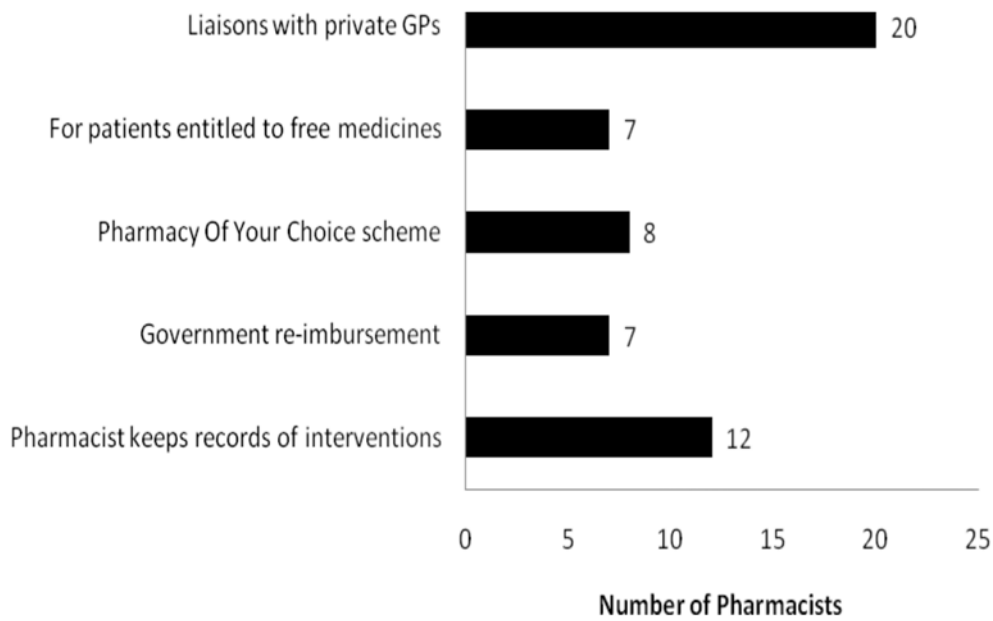
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**Figure 2:** Conditions for which pharmacists accepted supplementary prescribing (n=23)



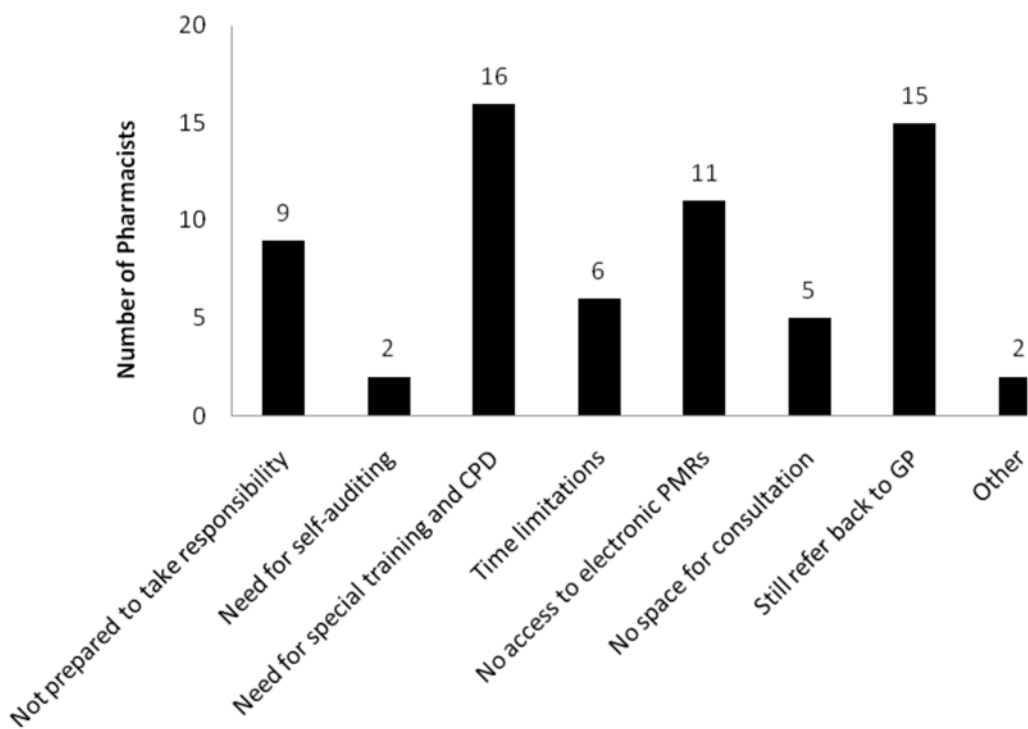
COPD = Chronic Obstructive Pulmonary Disease; HRT = Hormone Replacement Therapy; GORD = Gastro-Oesophageal Reflux Disease

**Figure 3:** How pharmacists envisage the implementation of supplementary prescribing (n=23)



GP = General Practitioner

**Figure 4:** Barriers for the introduction of supplementary prescribing (n=22)



CPD = Continuing Professional Development; PMRs = Patient Medication Records; GP = General Practitioner