THE COMMUNITY PHARMACIST AND DISPENSING IN THE ELDERLY

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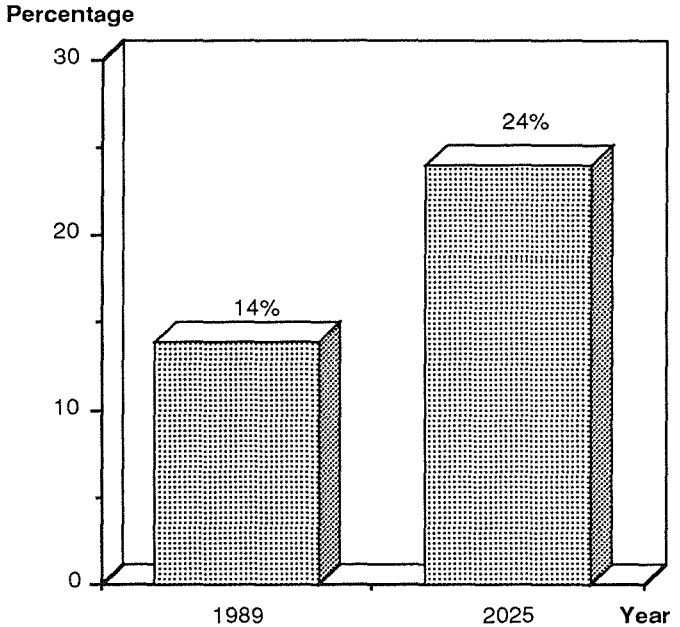
INTRODUCTION

In the last years, life expectancy has substantially increased. Similar to trends in other European countries, the number of elderly in Malta is sharply on the increase in an otherwise stable population. From data obtained from the demographic review, in 1989, 14% of the population was over 60 years of age and by the first quarter of the next century, the elderly will constitute 23.8% of the Maltese population[1] (Figure 1).

The elderly are being encouraged and supported to remain as much as possible in their habitual environment, in their town or village, rather than adopt to move into a large impersonal institution. In this way the elderly will acquire a healthy balance within the family unit, its extensions in the neighbourhood and take a more active role in various sectors of society.

This creates special needs within the community and an adequate support system has to be developed. This presents new challenges to the community pharmacist - a vital member of the Primary Health Care Team.

Fig. 1. Percentage of elderly constituting the Maltese population



THE CURRENT PHARMACEUTICAL SERVICES THAT THE ELDERLY ARE RECEIVING

The Pharmaceutical services in Malta are divided into those given through the National Health Scheme from:

The Hospital Outpatient Pharmacy
The Pharmacies at the district Health Centres,
The Government Dispensaries *Berga*

and those given by Community Pharmacies which are run on a completely free enterprise with no state intervention.

In a study carried out by Gatt (1985)[2], 69% of the patients who obtained their medication from the Government dispensaries were elderly and

most of them had their medication collected for them. At the Government dispensaries, elderly patients have no contact with a pharmacist. They collect their repeat prescriptions monthly and are not seen regularly by a doctor. The medicines are sealed in bags which are prepared at St Luke's Hospital, by Pharmacy technicians. Instances have been known of patients repeatedly supplied with a drug therapy months after the treatment had been stopped. A further complication is hoarding of medicines. There were times when large quantities of medicines were returned by relatives of recently deceased patients.

This lack of contact with a pharmacist is depriving the patients from the professional services that the phamacist alone can provide to improve compliance, to identify drug interactions and adverse drug reactions and to monitor treatment.

A study carried out by Galea and Cacciottolo (1988)[3] to examine the degree of control of blood pressure with respect to individuals on antihypertensive drug therapy attending a Health Centre for repeat prescriptions, revealed that only 35% of the individuals were found to be normotensive, whilst 27% were in the borderline range, whereas 38% were found to be hypertensive. This relatively high prevalence of poor controlled patients suffering from high blood pressure is a reflection of non-compliance to prescribed medicines.

In a survey carried out by Scicluna (1986)[4] on 230 elderly patients at different government dispensaries, the patients interviewed were having an average of 3.8 different prescribed drugs during any one period and 57% where having more than 4 different types of drugs. The problem of non compliance increases with the number of drugs a patient is taking concurrently. Gibson and Hare (1968) suggested that the elderly can usually only manage to take three prescriptions at a time and that this number of different drugs should not be exceeded. Apart from the problems of non compliance, polypharmacy increases the risk of drug interactions and adverse drug reactions.

In the UK, the Royal College of Physicians and others estimate that 20 - 25% of the elderly admitted to acute care hospitals are suffering from adverse drug effects[5]. This re-enforces the argument that the elderly who are on a continuous drug regimen are candidates for additional support and help from the pharmacist.

The current government services leaves much to be desired by way of the personalising services which are so appropriate and needed by the elderly.

Whilst the elderly are getting medicines for a chronic condition from the Government dispensaries or hospital pharmacy, some will also be obtaining prescriptions from:

- their family doctor for an acute condition
- a specialist for some other symptoms he might be getting
- a doctor from the health centre in case of an emergency

The fact is, that many elderly consult with a number of doctors and specialists.

Apart from prescribed medication some of them will also be taking:

- over the counter medication for a minor ailment
- herbal medicines
- medicines recommended by a pharmacist

They also do not obtain all their medication from one community pharmacist. In all cases, although pharmacists might enquire what other medication the patient is taking, only a few would give the complete medication history, others might mention one or two which they consider to be important, whilst some might refer to the condition for which they are receiving treatment.

REGISTRATION WITH COMMUNITY PHARMACISTS

The elderly form a very important group of individuals on whom the skills and knowledge of pharmacists can be concentrated. They consume far more drugs than the population at large.

Community pharmacists are being underutilised. At the end of 1990 the number of pharmacies in Malta totalled 159. Of these 5 pharmacies are in Gozo and the others distributed throughout Malta. They are within easy access to the elderly. Community pharmacies have always been a point of contact between the public and the health services, and have always played an essential role in providing the community with

professional and effective pharmaceutical service.

The elderly require both greater and more specialised attention. Those living in the community should be encouraged to register with one community pharmacist - the community pharmacist of their choice from where they would obtain all their medication.

One of the advantages in registering with one community pharmacist is the rapport that the pharmacist can develop with the elderly patient who regularly visits the pharmacy and who can establish confidence in the minds of patients in the familiar and unthreatening environment of the pharmacy.

Advising the elderly on the use of prescribed medicines

Although dispensing continues to be an important activity, the pharmacist is becoming more involved in educating the patient about his medication. This information is given in a language that the patient will understand and must reinforce and compliment the prescriber's directions.

Information that the pharmacist considers of importance to the patient includes:

- how the medication is going to help him
- how to administer it
- when and for how long he should take the medication
- some expected side effects he might experience
- storage advice
- special warnings

The importance of communication with the patient cannot be over emphasised. Various studies have shown that talking to patients for up to 15 minutes about their medication significantly improves compliance. One must take into consideration that new information is assimilated less readily by the elderly and advise may need re-iteration particularly if the patient is confused. It is common practice to have written material to back up verbal advice. Apart from appropriate labels, the use of memory cards are also important.

The information and advice that the pharmacist is able to give can be of great assurance, interest and need to the patient. It is this adequate

communication of information that is an important factor in the improvement of the health of the elderly.

Patient medication records

Towards improved Pharmacotherapeutic safety, pharmacists in several countries have compiled patient medication records 'Patient profiles'. The pharmacist notes all the medicines prescribed or otherwise taken by the elderly patient. The aim is:

- to detect prescription errors
- to advice the doctor on the possibility of drug interactions and excessive duration of treatment
- to help the pharmacist in possibilities of interactions with self medication
- to detect misuse of certain medicines
- to ensure that the patient is not taking excessive medication

These records can only be of significance if the patient is registered with one pharmacist.

Some pharmacies in the UK are putting medication records on computers, others are producing their own medication cards. In several Dutch Community Pharmacies the computer is used for prescription handling. In France, they have developed the medication record which is retained by the patient himself[6] and both the doctor and the pharmacist will have access to it. The advantages of this system are that there are no problems of confidentiality, as the patient controls access to it. Whether medication records should be kept by the pharmacist of patient is an area that needs to be researched.

Monitoring of drug therapy

Regular monitoring of the patient's treatment is important for those suffering from chronic conditions, to see that they are complying and that their condition is stabilised by the drug regime, and that they are not taking any unnecessary medicines.

This can be done verbally by the pharmacist and by the use of medication records. Monitoring is also accomplished via diagnostic testing, blood pressure reading and interpretation of results. Patients suffering from diabetes and hypertension are at present being monitored by pharmacists. By monitoring

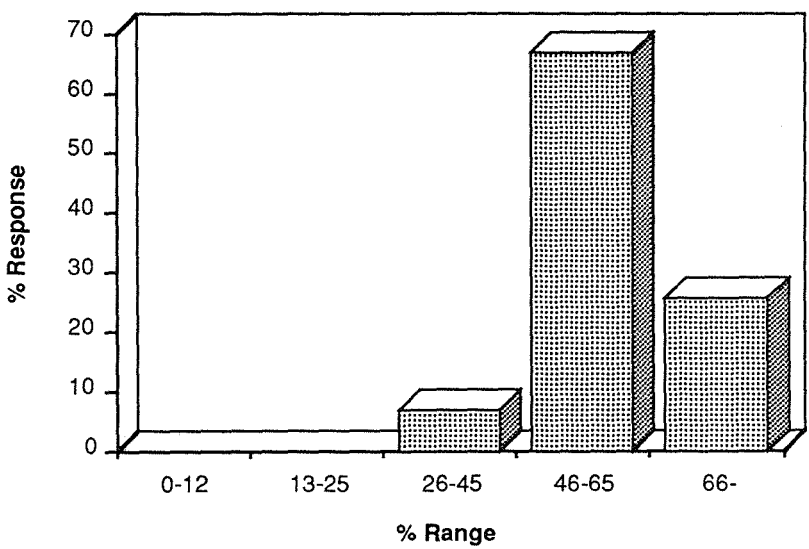
these patients, pharmacists are able to give them additional advice regarding their condition, their lifestyle and nutrition, to refer to the patient's doctor if the patient is not responding to treatment and recommend changes in the drug regime.

The pharmacist can improve patient care by monitoring for dose related side effects and evidence of adverse drug reactions. The pharmacist is well placed to collaborate with other health care professionals and the appropriate authorities to detect adverse drug reactions. His contribution lies in identifying possible adverse reactions especially those related to different formulations.

Assisting the elderly in self care

While polypharmacy in prescribed medicines has been recognised as a problem in the care of the elderly, concurrent self-medication can aggrevate management. The pharmacist also assists the elderly in self care and in the giving of advice on the right choice of treatment for a minor ailment whilst taking into consideration the overall health of the patient and the medication he is taking. From experience in a community pharmacy, self medication is very common in the elderly.

Fig. 2. The predominant age of patients requesting laxatives - The pharmacists' views



In a study carried out this year by Zerafa, on 'The Use and Abuse of Laxatives'[7], 30% of the pharmacists interviewed indicated that the elderly are the predominant group of patients who request laxatives and that 10% of these indicated that they are over-used (Figure 2). A large number of patients who request medication are reassured and extremely grateful for the positivie attitude from the pharmacist who devotes time to find out about their condition and recommends the most appropriate treatment which is necessary.

Health education

Not all the elderly people are ill. Growing ill is not preventable but some medical problem can be forstalled. What can the elderly person do for himself to remain healthy? What can the elderly patient do to prevent complications? Pharmacies are ideal places for health promotion as they are visited by both the 'healthy' and the 'ill' elderly alike. The role of the pharmacist in this area was studied in depth during a seminar organised by the Malta Chamber of Pharmacists in May 1989 on 'Health Education, Lifestyle and Pharmacy'.

In a WHO workshop on 'Community Oriented Rehabilitation of the Elderly' which was held at St Vincent de Paule Residence in 1988[8]. Instructional Packages to be used by the elderly where proposed. These are to be designed to assist the elderly:

- to stay healthy
- to cope with disorders and disabilities
- to preserve independence and remain in their natural environment.

These type of publications, together with other health education material on living with a chronic condition, can be distributed from pharmacies. Leaflets can be instrumental in opening a conversation between the pharmacist and the elderly on a subject which otherwise would not have been talked about.

Health education is not just directed to the elderly but also to his family, friends and guardians. What can a family do to assist the elderly? It is essential to educate the family on the changing psycology and the needs

of the elderly. The moment a medical crises hits a family, the patient is admitted to hospital, because they give up their capacity to look after him. For example how does one cope with incontinence? Leaflets on incontinence will reinforce what the pharmacist is advising them to do.

Considering all these services, there is scope therefore, for encouraging the elderly to register with a single pharmacist - the pharmacist of their choice from whom they would expect to receive special advice and assistance.

NURSING HOMES AND PHARMACEUTICAL HOME CARE

In Malta a number of elderly are in nursing homes run by the Government or the church or they are house bound. Many of these elderly are on medication. As seen from the survey carried out by Mamo on 250 elderly in nursing homes, 15.9% were taking one medication, 38. 2% of the elderly were taking 2-3 medicines, 25.3% were taking 4-5 medicines and 20.6% were taking over 6 medicines.

Many doses are administered daily without adequate supervision. In the home they are either self administered or administered by a member of the family. In the nursing home this is done either by the patient himself or by members of the staff who have no nursing or paramedical background.

Many countries including the UK are committed to a policy of ensuring that those who are unable to visit a pharmacy because they are house bound or in a nursing home should have available to them the same standard of pharmaceutical services as would be available when they are able to visit a pharmacy.

Visits to nursing homes

The concepts of visits to nursing homes by pharmacists are being developed and practised in a number of European countries and in the USA.

Since 1974, Pharmacists in America have been required to review

nursing home patient drug therapy and to recommend changes to improve that therapy. In one study[9], most pharmacists (60%) consultants to nursing homes said that they found some kind of problem in one out of every 20 or fewer medication orders they reviewed. 12% of those surveyed found problems in one out of every 6 prescriptions they evaluated. This same survey indicates that consultant pharmacists recommended the full range of drug therapy changes to patients' doctors. Surprisingly the most frequent recommendation was to discontinue a drug from the patient regime - that is not needed. Almost as often pharmacists recommended a change of dose or route of administration, that a different drug would be better, to change treatment because of problems based on laboratory tests. The most striking finding from the survey was that doctors accepted and implemented the consultant pharmacist's recommendation. These services are provided by community pharmacists who only service nursing homes.

Recently, in the UK, community pharmacists have extended their services to institutions of the elderly. In Canada[5], they are provided by community pharmacists under contract to nursing establishments who are helped by computer linkage between the pharmacy and the family doctor.

The concepts of pharmaceutical Home Care

In America and in some European countries the strict division that existed between care in the hospital environment and at home are breaking down. For pharmacy the challenge lies in ensuring that the patient receives the best possible pharmaceutical care in both environments.

Home health care requires the Pharmacists' total involvement. During the FIP Congress which was held in Munich in 1989, home health care was discussed at length and threw light on the role the pharmacist is expected to play. It involves team work among health care professionals namely doctors, pharmacists and nurses - a team work which is of the utmost importance for the welfare of the patient.

The elderly at home can benefit from this system. Home health care avoids admission to hospitals or to shorter hospital stays. Currently a

number of hospital beds in the medical wards at St Luke's Hospital are occupied by the elderly. If adequate structures are set up these patients can be reunited with their families.

In the Netherlands, Dutch pharmacists have established a new foundation which has been in operation for these past three years, for the development and promotion of Pharmaceutical Home Care[10]. It is a cooperative effort of community and hospital pharmacists. It has directed its effort to:

- organise training programmes for pharmacists to provide pharmaceutical home care
- preparation of health education material to be given to the elderly
- encourage regional activities in which pharmacists joined together with the aim of providing pharmaceutical home care

Adequate structures should be set up in Malta for the inclusion of services provided by community pharmacists to the elderly who are home bound and to nursing homes. The services should be individualised depending on the need. In some cases it can be in the form of an initial control visit to give advice to the patient and members of his family followed by periodic visits. This service would improve the drug therapy of the elderly patient and thus their quality of life.

MULTIDISCIPLINARY APPROACH

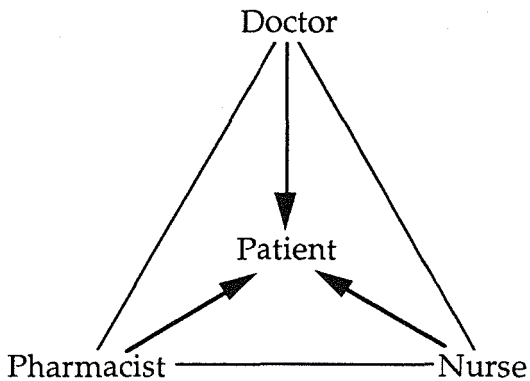
Optimum health care for the elderly involves a multi disciplinary approach (Figure 3).

The Pharmacist, an important member of the health care team, must communicate effectively with other members of the team. Recommendations of the WHO report at the meeting on The Role and Functions of Community and Hospital Pharmacists held in Madrid in 1988[6] highlighted:

- The role of the Pharmacist in advising the physician and other health care professionals on the choice of medicines to be used

- The Pharmacist should cooperate effectively with the physician to ensure a common approach to patients in the provision of advice and information
- The Pharmacist should participate in a multi disciplinary approach to promote the rational use of medicines.

Fig. 3. Home health care



Only good communication between the many disciplines will ensure that the elderly patient in the community is properly looked after. To develop these communication skills a module has been developed and is incorporated in the curriculum of Pharmacy students of the Department of Pharmacy, University of Malta.

SPECIALISATION

To develop the pharmaceutical services in the nursing homes and pharmaceutical home care, a good deal of specialisation in this area is envisaged. Specialisation in Geriatric pharmacy is necessary so as to enable the pharmacists to respond more rapidly and effectively to developments, expand their activities and thus benefit patient care[11]. The EC advisory committee will soon be looking at proposals for additional specialisation in community pharmacy. The University and the State should institute the structures and support and encourage pharmacists practising in the community to specialise in geriatric pharmacy.

PHARMACY PRACTICE RESEARCH

Pharmacy practice research is an increasing important discipline. At present a number of pharmacy students are conducting research in Pharmacy practice and three of this year's students are tackling aspects of geriatric pharmacy.

But research should not be restricted to students alone. Community pharmacists should be encouraged to develop research projects to evaluate treatment, patterns of drug usage, and services being given to the elderly. This kind of research should be coordinated through a research centre which is multidisciplinary and international. The experience and results benefits both health care professionals and the elderly.

CONCLUSION

With the proper structures being developed and set up, community pharmacists would expand their activities and meet the challenges of the future. They would provide an optimal pharmaceutical service to the elderly living in the community including those who are house-bound or in a nursing home.

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