

JAN - JUN 91

ISSUE No 21

# The Pharmacist



**MALTA**

10<sup>th</sup> Anniversary

Journal of the  
Malta Chamber  
of Pharmacists

# The Original Power

# Amoxil

amoxicillin

## Prescribing Information

AMOXIL is a broad spectrum antibiotic suitable for a wide range of infections caused by susceptible organisms.

### Indications

Respiratory, ear, nose and throat, genito-urinary and skin and soft tissue infections.

### Dosage

Children: Oral and injectable – up to 2 years: 62.5mg–125mg every 8 hours. 2–10 years: 125mg–250mg every 8 hours. Based on bodyweight (including neonates) 35–100mg/kg/day.  
Adults: Oral – 250–500mg every 8 hours. Injectable – I.M. 250–500mg every 8 hours or more frequently if necessary. I.V. 500mg–2g every 4–6 hours. (Doses in excess of 1g should be given by infusion over 30 minutes.)

### Presentations

Capsules: maroon and gold capsules, each containing 250mg or 500mg amoxicillin\*.  
Syrup: 125mg amoxicillin\* per 5ml.  
Syrup Forte: 250mg amoxicillin\* per 5ml.

Paediatric drops: 125mg amoxicillin\* per 1.25ml in bottles with calibrated dropper.

Injection: Vials containing 250mg or 500mg amoxicillin as the sodium salt. \*as the trihydrate.

### Precautions

Reduced dosage is required in patients with impaired renal function.

**Contra-indications** Penicillin hypersensitivity.

### Side-effects

Side-effects, as with other penicillins, are usually of a mild and transitory nature; they may include diarrhoea, indigestion or an occasional rash, which may be either urticarial or erythematous: in either case it is advisable to discontinue treatment.

Further information is available from

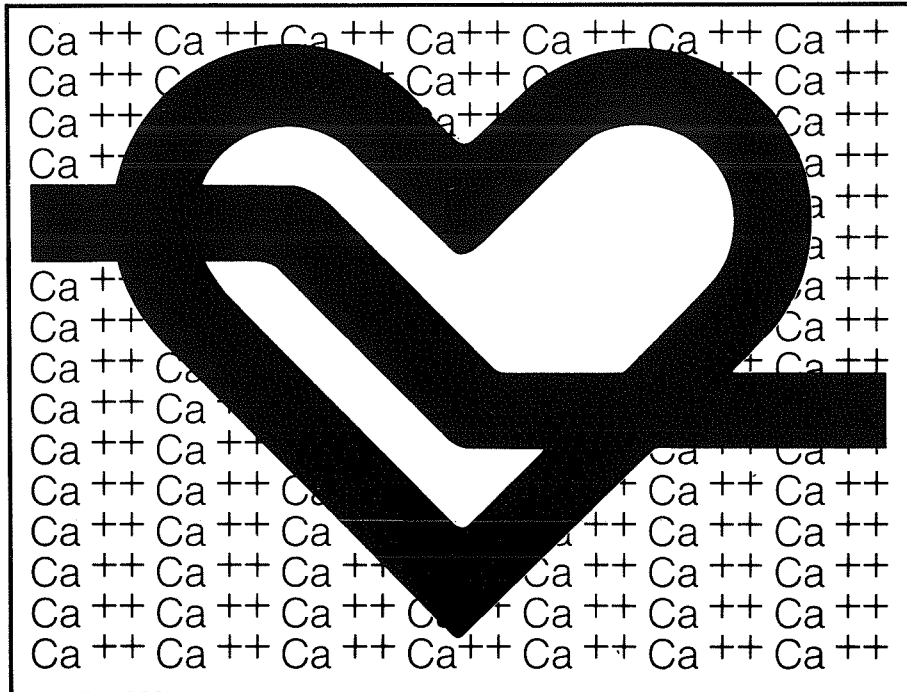
**Beecham  
Pharmaceuticals**  
BRENTFORD · ENGLAND

Amoxil is a trademark.

01/2139/10/88

# KNOLL

the pioneers of Calcium Antagonism



What could be more normal  
than treating hypertension and angina  
with

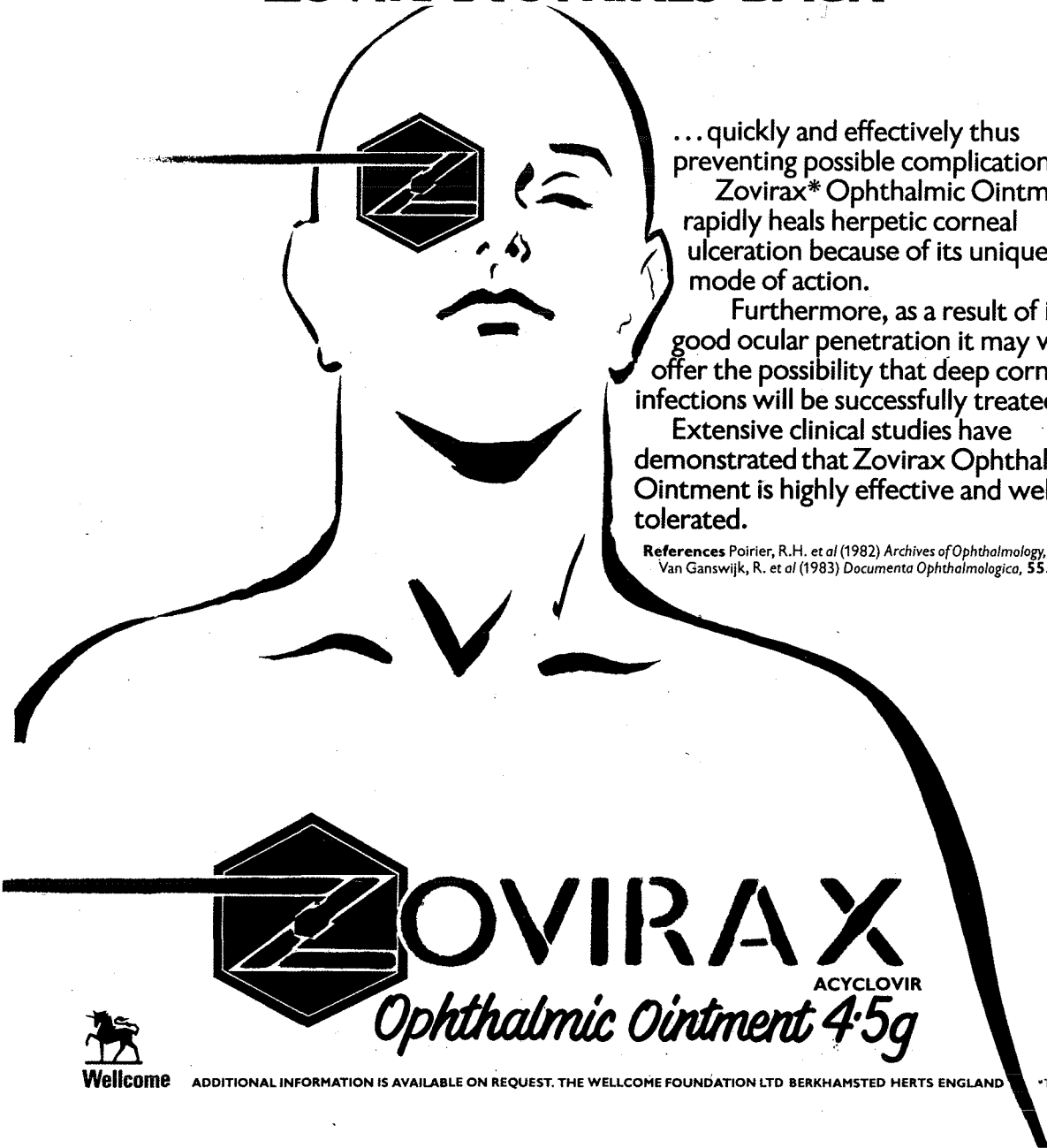
# ISOPTIN<sup>®</sup>



**Knoll AG · D-6700 Ludwigshafen · F.R. Germany**

Agent: Joseph Cassar Ltd., 54, Melita Street, Valletta, Malta

# WHENEVER OCULAR HERPES STRIKES ZOVIRAX STRIKES BACK



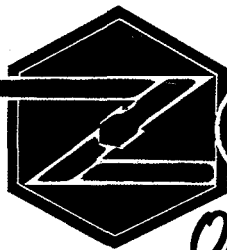
... quickly and effectively thus preventing possible complications.

Zovirax\* Ophthalmic Ointment rapidly heals herpetic corneal ulceration because of its unique mode of action.

Furthermore, as a result of its good ocular penetration it may well offer the possibility that deep corneal infections will be successfully treated.

Extensive clinical studies have demonstrated that Zovirax Ophthalmic Ointment is highly effective and well tolerated.

References Poirier, R.H. et al (1982) *Archives of Ophthalmology*, 100.  
Van Ganswijk, R. et al (1983) *Documenta Ophthalmologica*, 55.



# ZOVIRAX

ACYCLOVIR

*Ophthalmic Ointment 4.5g*



Wellcome

ADDITIONAL INFORMATION IS AVAILABLE ON REQUEST. THE WELLCOME FOUNDATION LTD BERKHAMSTED HERTS ENGLAND

\*Trade mark

# The Pharmacist

Published by the  
Malta Chamber of Pharmacists  
1 Wilga Street, Paceville, St. Julians,  
Malta.  
Tel: (356) 338851

**Editor:**

Mary Anne Ciappara B.Pharm.,

**Deputy Editor:**

Margaret Parascandolo B.Pharm.,

**Advertising Manager:**

Monica Abdilla B.Pharm.,

**Members:**

Maria Ellul B.Pharm.,

Mary Ann Sant Fournier B.Pharm.,  
M.Phil.

**Printers:** Dormax Press

Views expressed in the journal are the authors' own and do not necessarily reflect those held by the Malta Chamber of Pharmacists.

**Subscriptions:**

The Pharmacist is sent free of charge to all pharmacists and is distributed to doctors.

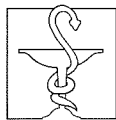
Others may subscribe at an annual subscription of Lm5.00

**Circulation:** 1000

© 1991 Malta Chamber of Pharmacists  
No part of this publication may be reproduced without prior written permission of the Malta Chamber of Pharmacists.

**Cover Photo**

**The European Region Workshop: (Page 11)**  
Front Row (left to right) Professor Arnold Beckett (Great Britain), Mrs. Mary Ann Sant Fournier (Malta), Miss Mary Anne Ciappara (Malta), Mr. Raymond Dickinson (CPA Secretary), Back Row (left to right) Mr. John Ferguson (Great Britain), Mr. Chris Ioannides (Cyprus), Mr. Josh Kerr (Northern Ireland), Mr. Josef Grech (Malta), Mr. Eric Zammit (Malta) - Mrs. Frances Charlesworth (Great Britain) is not shown.



**MALTA**

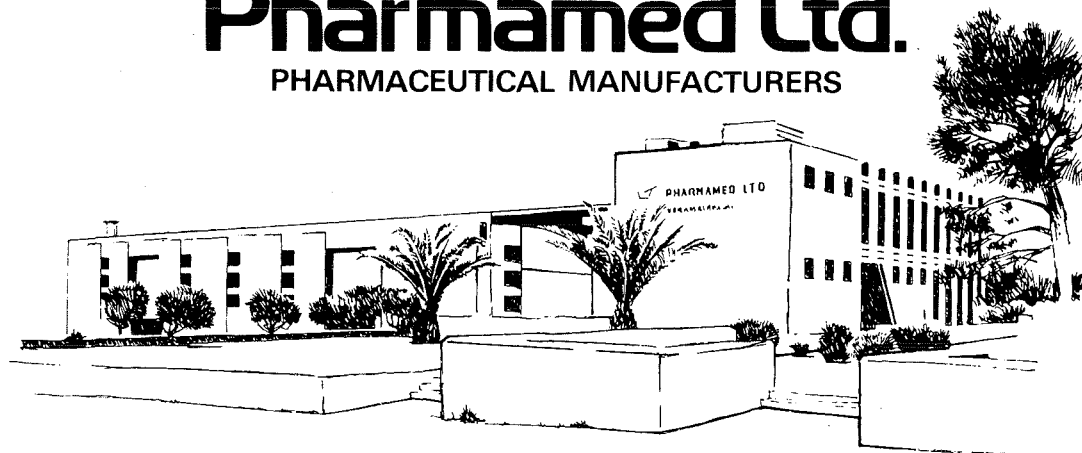
**Journal of the  
Malta Chamber  
of Pharmacists**

- 5 **Editorial**  
Professional Development  
*M.A. Ciappara*
- News**
- 6 Government Pharmacists to be Remunerated as Befits their Qualifications and Responsibilities  
Annual General Meeting
- 7 Symposium on the Reform of the Health System  
Paediatrics - An Update
- 9 First International Symposium on Drugs in the Elderly  
University Symposium  
Meetings with the CGMO
- European Community**
- 10 European Pharmacy in Europe of Tomorrow
- 11 Pharmacy in the European Community
- 18 **Drug Reactions and Interactions**  
*P.F. D'Arcy*
- 21 **Book Review**
- 21 **Letter to the Editor**
- 23 Risk of HIV Transmission via Blood Products  
*R. Camilleri*
- 27 Pharmacists, Patients and Payments in 17th Century Malta  
*P. Cassar*
- 37 Congress 1989  
Future Focus of Community Pharmacy Practice  
*M.A. Ciappara*
- Associations**
- 42 Commonwealth Pharmaceutical Association
- 42 Common Health-Common Wealth
- Pharmaceutical Students Association**
- 45 36 Annual Congress of IPSF  
*C. Zerafa*
- World Health Organisation**
- 46 The Role of the Pharmacist in the Health Care System
- Continuing Education**
- 49 Breast Cancer  
*G. Sammut*
- 52 **People**
- 52 Appreciation



# Pharmamed Ltd.

PHARMACEUTICAL MANUFACTURERS

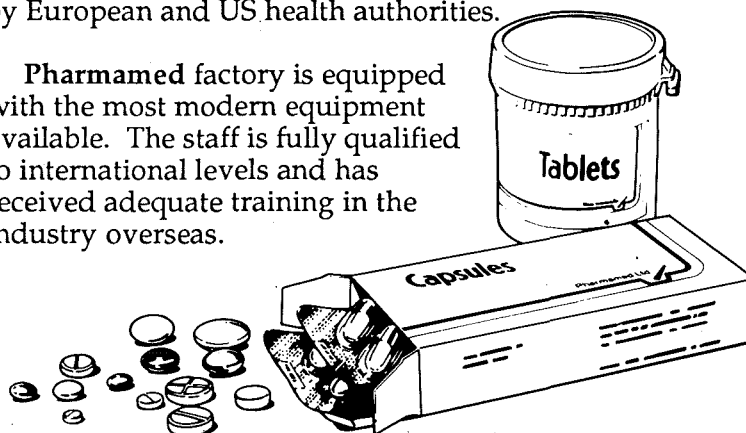


Pharmamed Ltd, a company established in Malta in 1974, is one of the island's major exporters.

Pharmamed Ltd produces generic pharmaceutical preparations, mainly for export. The Company produces some 1000 million tablets/capsules per year, 96% of which are exported to Europe for onward distribution to over 100 countries.

Pharmamed products comply with internationally recognised standards such as BP, USP, EP, and are manufactured under strict adherence to Good Pharmaceutical Manufacturing Practices as outlined by European and US health authorities.

Pharmamed factory is equipped with the most modern equipment available. The staff is fully qualified to international levels and has received adequate training in the industry overseas.



**Pharmamed Ltd.**

**The company carrying the 'Made in Malta' label around the world.**

PHARMAMED LTD., B16, BULEBEL INDUSTRIAL ESTATE, MALTA. TEL: 816558; 878297  
TELEX: MW 1427 PHAMED TELEFAX: 801063 CABLES: PHARMAMED

## PROFESSIONAL DEVELOPMENT

Education is an ongoing process. Pharmacists, like all other professionals, must embrace the philosophy that continuing education is an integral part of professional practice.

For pharmacists the challenge lies in learning continuously both during and after working hours. Continuing professional development concerns both the updating of knowledge and the acquisition of new skills and knowledge to meet the ever changing needs of healthcare services and of the community.

**Professional associations, the University and the Government have a particular responsibility to ensure the continuous improvement in professional competence.**

### *Ten years of Continuing Activities*

The Malta Chamber of Pharmacists was one of the first to recognise this role and indeed it was in 1981, ten years ago, that the first continuing education programme was organised. These programmes have been held regularly since and have developed throughout the years. The approach is multidisciplinary and is strongly related to the practice and educational needs of pharmacists involved not only in Community practice but also in other areas. Lately, there has been liaison with the Hospital and Academic Heads of Departments in disciplines concerned to ensure the relevance of format and content of the subjects being considered.

1981 also saw the birth of 'The Pharmacist'. After many months of absence 'The Pharmacist' is once again with us. The journals of the Malta Chamber of Pharmacists have always had a significant place in Maltese Pharmacy. The Journal has been re-moulded to correspond to trends and professional opinion of its times. It is also educational and apart from the scientific articles and reviews of conferences and workshops, a special continuing education article, incorporating self assessment has now been introduced.

### *Incentives*

Participation to these Continuing Education programmes and educational activities organised by the Department of Pharmacy of the University of Malta and the Postgraduate Committee of the Faculty of Medicine and Surgery is voluntary, however it is the responsibility of the Health Department, the University and the Chamber to urge pharmacists to participate. Interesting programmes and the issuing of certificates by the Chamber to participants of its programmes is however not enough. **These should be formalised and accredited.**

### *Postgraduate Education*

The University must instil in its students an attitude of career and lifelong education. Incentives for pharmacists to regularly update, to participate in conferences and seminars both locally and abroad and to pursue postgraduate education and specialisation should be given. These incentives, career development and where possible financial, should be given to all pharmacists irrespective of their area of practice and independent of whether they are practising in the government or private sector.

It is not only in the interest of pharmacists but also for the enhancement of the profession, that postgraduate education should be encouraged and provided by the University. The number of pharmacists pursuing a master or a doctorate degree at the University of Malta should be increased and resources allocated to the Department of Pharmacy so as to be able to further develop its postgraduate programme.

### *Specialists in Hospital & Community Pharmacy*

In addition to postgraduate education which usually involves research, specialisation is an area which should also be developed. This specialisation in hospital and community pharmacy will enable pharmacists to respond effectively and more rapidly to developments. It is not only the responsibility of the University but also of the Department of Health, which should institute the support structures for practising pharmacists, in community as well as in hospitals to specialise.

### *Adequate Structures for Development*

This continuous development of pharmacists can only materialise if there is a strategy and a focus. The envisaged Reforms in the Health Services will necessarily identify and cater for this development. Therefore, any reform will have to provide the necessary structures. This will ensure that the Country will be provided with the optimal Pharmaceutical Services.

Mary Anne Ciappara

## Government Pharmacists to be Remunerated as Befits their Qualifications and Responsibilities

During an important meeting held on Monday 21st May 1991 at the Palace, Valletta, between the President, Mrs M.A. Sant Fournier, and the newly elected Council of the Chamber and the Minister for Social Policy, the Hon. Dr. L. Galea, an agreement was finally reached between the two parties on the plight of Government Pharmacists. Government has recognised the contingency existing in this sector and pending the beginning of talks between the Chamber and the Management and Personnel Office (MPO) on the Reform of Government Pharmaceutical Services, arrangements are being made so that the remuneration of Government Pharmacists is commensurate with the nature of the service given by and the qualifications of these pharmacists.

This is an interim arrangement pending the finalization of the classification and regrading exercise within the ambit of the discussions on Reform with the Management and Personnel Office to follow the signing by the Chamber of the Preliminary Agreement between Government and Trade Unions on Public Service Reform.

Present also at this eventful meeting were the Hon. Dr. G. Hyzler, Parliamentary Secretary for Health, Hon. Prof. J. Rizzo Naudi, Parliamentary Secretary for the Care of the Elderly, Dr. A. Vassallo, the Chief Government Medical Officer, and Mr. J. Curmi, Chairman, Management and Personnel Office.

The achievement of this important and positive step by the Chamber on behalf of Government Pharmacists is the result of a carefully planned and prudent campaign.

As published in 'Interaction', the Chamber's newsletter, in June 1990, meetings were held with the Establishments Division and

Management and Personnel Office, Office of the Prime Minister about the delay in accordance of professional status; these were complemented by continuous one-way correspondence with the Minister for Social Policy, the Hon. Parliamentary Secretary for Health and with the Secretary General, Office of the Prime Minister.

In December 1990, the Chamber was invited to a meeting with Mr J. Curmi, Chairman, Management and Personnel Office whence the Preliminary Agreement between Government and Trade Unions on Public Service Reform was placed before the delegation which refrained from committing itself, in the face of a 'fait accompli', but went before the extraordinary meeting for Government Pharmacists, who supported the Chamber's stand and strategy.

Following the Chamber's refusal to sign the agreement, letters were written to the Hon. Prime Minister, Hon. Minister for Social Policy, and Chairman, MPO. Three further meetings were held with MPO in an attempt to find a solution which would be acceptable to both parties. Meanwhile, contacts with the Confederation of Malta Trade Unions (CMTU) were intensified culminating in the presentation of a motion by the Chamber at the 18th CMTU Congress where our President presented the case of Government Pharmacists and called for the Confederated Unions to support the Chamber's claim that Government should honour the commitment made.

This was passed unanimously and given much publicity.

January also saw the launching of a public relations campaign on this matter followed by a coordinated letter writing campaign in the media. Professional status was also

discussed during the University Students' Programme 'Il-Kokka fuq ir-Radju' and at the Pharmacy Symposium organised by the Pharmacy Department, University of Malta in March 1991.

During the final session of the Reform in the Health Service Symposium held on 21st April 1991, the Hon. Minister announced that he would be taking emergency measures in view of the contingency presenting itself in the Government Pharmaceutical Services.

The Chamber immediately wrote asking for an urgent meeting to discuss these measures. A letter was also written to the Hon. Prime Minister, the text of which was also released to the press. The rest is history.

## Annual General Meeting

The annual general meeting was held on the Wednesday, 15th May 1991 at the Federation of Professional Bodies. The new Council is composed as follows:

*President:*

**Mrs Mary Ann Sant Fournier**  
B.Pharm, M.Phil.

*Vice-President:*

**Ms Mary Anne Ciappara**  
B.Pharm.

*Secretary:*

**Mr Eric Zammit**  
B.Pharm.

*Treasurer:*

**Mrs Margaret Parascandolo**  
B.Pharm.

*Ass. Secretary:*

**Mrs Margot Pisani**  
B.Pharm.

*Ass. Treasurer:*

**Ms Marie Ellul**  
B.Pharm.

*Members:*

**Mr Massimo Borg Millo**  
B.Pharm.

**Mr Josef Grech**  
B.Pharm.

**Mr John Scicluna**  
B.Pharm.



## Symposium on the Reform in the Health System

The Malta Chamber of Pharmacists participated actively on the personal invitation of the Hon. Minister for Social Policy at all the stages of the Symposium on the Reform in Health Services organised recently by the Minister for Social Policy.

The President of the Chamber, Mrs M.A. Sant Fournier addressed the Plenary Session of Seminar I held on 10 March 1991 at the Mediterranean Conference Centre. Mrs Sant Fournier stated that 'the Chamber is convinced that well-trained pharmacists in position of authority in those areas of the Health Service dealing with medicines are a cost-effective asset to the government' and reiterated that the delivering of healthcare should be multi-disciplinary. The President of the Chamber expressed her concern at the delay in accordance of the proper professional grade to pharmacists within the public service, a delay which is still causing a grave lack of pharmaceutical expertise at all stages of the delivery of the Health Service.

Mrs Sant Fournier also emphasized the Chamber's call for the immediate institution of a Medicines Regulatory Agency in the interests of public health and reiterated the Chamber's recommendation that the Scheme for the distribution of National Health Service medicines from the Community Pharmacy of Patient's Choice should be introduced concurrently with that for the Family Doctor Scheme with true interdisciplinary cooperation at Primary Health Care level.

The Chamber also called for the total involvement of Pharmacists at all levels and especially at policy-making level when matters concerning pharmacy, pharmacists and healthcare especially dealing with

medicinal products, are considered - in the interest of the administration and public health.

Members of the Chamber participated actively in the Workshops held on March 24th, 1991 and at the Forum, where during the presentation of the Report of the Workshop on Pharmaceutical Services, Mrs Sant Fournier announced that the Reports of the Chamber had been endorsed by the Workshop participants. The most important points that arose out of this Workshop called for the institution of a self-regulatory, autonomous Pharmacy Council responsible for implementation and enforcement of legislation, representative of the profession to guarantee also the autonomy of a decentralized pharmaceutical service managed by a competent pharmacy body; the integration of pharmacists as key members of the primary healthcare team and at all levels of healthcare delivery. Pharmacists also made personal submissions to various other workshops.

The Chamber looks forward to intensive discussions of the recommendations of the Workshops between the parties concerned and also invites other health professionals to an open dialogue with the Chamber for better patient care.

### MEMBERSHIP 1991

Have you paid your membership for year 1991?

If not do so now.

Remit Lm10 to the Treasurer,  
Malta Chamber of Pharmacists,  
1 Wilga Street, Paceville.

## Paediatrics - An Update

Paediatrics - An Update was the theme of the series of lectures and fora organised as part of the Continuing Education Programme 1990/91 by the Malta Chamber of Pharmacists.

The programme comprising nine sessions was divided into two parts, Part 1 held between 31st October and 5th December, and Part 2 between the 9th and 16th February 1991. The programme was strongly related to the practice and educational needs of pharmacists involved in both community and hospital practice.

The invited speakers in this year's programme included Ms Anne Boffa, Ms Anna Debattista, Mrs Maria Gatt, Mr Anthony Sant Portanier, Ms Helen Vella, - Pharmacists; Dr Herbert Lenicker, Dr Raymond Parascandolo, Dr Nadette Spiteri, Dr Paul Vassallo Agius, Dr Cecil Vella - Specialists in Paediatrics; Professor George Camilleri - Dean, Faculty of Dentistry; Dr Peter Muscat - Specialist in Psychiatry; Mrs Angela Abela - Clinical Psychologist.

Each subject was presented from a multidisciplinary approach. The course was brought to an end by a forum, 'A Healthy Child - A Healthy Adult: The Pharmacist's Contribution' which was chaired by Ms Mary Anne Ciappara, Programme Coordinator. The forum identified the role and contribution of pharmacists involved in the community, hospital and in research.

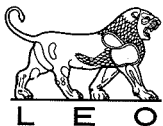
Mr Eric Zammit Vice-President, Malta Chamber of Pharmacists closed the programme by thanking all the guest speakers and sponsors for their contribution towards the success of this Continuing Education Programme, and distributed certificates to all those pharmacists who participated.

# Fucithalmic<sup>®</sup> twice daily fusidic acid treatment in eye infections



- Twice daily dosage
- Depot formulation
- No wash out
- No blurred vision
- Penetrates the cornea
- Extremely low allergenic potential
- Highly effective against bacterial eye infections
- Convenient as eye drops
- Long acting as ointment

Full information available on request



**Leo Pharmaceutical Products – Denmark**

Regional office: Leo Pharmaceutical Products Sarath Ltd. 224, Syngrou Avenue, GR 176 72 Kallithea, Athens, Greece

## First International Symposium on Drugs in the Elderly

This successful event was organised by the Pharmacy Department, University of Malta, and the Secretariat for the Care of the Elderly between the 16th and 20th March 1991. Local and foreign experts presented interesting papers on various aspects of drug therapy in the elderly. Two council members of the Chamber, Mrs M.A. Sant Fournier and Ms M.A. Ciappara, participated representing the Pharmacy Department, with con-

tributions entitled "Psychotropic Medication in the Elderly" and "The Community Pharmacist and Dispensing in the Elderly", respectively. Other pharmacists from the Pharmacy Dept., who are members of the Chamber participated. These included Prof. Anthony Serracino Inglott, Ms. Janet Mifsud, Mr. Carmel Fenech, and Ms. Caroline Buhagiar.

All the papers presented at this symposium will be published in abstract form in the International Pharmacy Journal, official organ of FIP. The Pharmacy Department will be publishing the papers in full in a separate publication.

## Meetings with the CGMO

The Chamber has had two intensive meetings on the incoming invitation of the outgoing CGMO, Dr J. Giglio and the incoming CGMO, Dr A. Vassallo. During these meetings held on 27th February and 2nd April 1991 respectively the Chamber delegation insisted on the implementation of the Pharmacy Inspectorate to enforce existing legislation together with the constitution of a statutory Pharmacy Council to govern effectively the Pharmacy profession.

Other important matters discussed included the urgent need for repeal of the amendments to the Dispensary (Licensing) regulations; the Saturday and Sunday Roster for opening of pharmacies; abuses by wholesalers who sell pharmaceuticals direct to the public and the urgent need for pharmacists to be responsible for such wholesale/distribution depots.

The President of the Chamber presented copies of the Recommendations of the Workshop 'Pharmacy in the European Community' organised by the Chamber and European Region of CPA last November-December.

## Chamber's Participation in the 37th IPSF Congress

The Reception Committee of the 37th Congress of the International Pharmacy Students Federation has invited the President of the Malta Chamber of Pharmacists, Mrs M.A. Sant Fournier, to deliver and address during the opening ceremony of the Congress which will be held on Wednesday, 31st July 1991 at Sir Temi Zammit Hall, University of Malta. Other speakers include the Co-chairpersons of the Reception Committee, the Head of the Department of Pharmacy, representative of F.I.P. and the President of IPSF. The congress will be officially opened by H.E. Dr V. Tabone, President of Malta.

---

## University Symposium

The Chamber participated in the Pharmacy Symposium and Exhibition organized by the Department of Pharmacy, University of Malta on 21, 23, 24 March 1991. This year the President of the Chamber was invited by the Head of Department to address the opening session of the Symposium which was held at St Vincent de Paule, Residence for the Care of the Elderly, Luqa.

In her address, Mrs Sant Fournier, whilst bringing greetings of the Malta Chamber of Pharmacists to show its support of the efforts made by the Department of Pharmacy in organising successful events such as the Pharmacy Students Symposium and the International Symposium on Drugs in the Elderly, called on the University authorities to channel resources for the development of the Pharmacy School.

When referring to the commitment which was made the previous year on the same platform regarding the recognition by Government of the professional status of pharmacists practising in Government Service she called for a stop to the delay that is keeping

young graduates from remaining in the service in pursuit of what could and should be a rewarding career. This has a direct effect on the possibilities of ever starting to bring about a true reform on the Government Pharmaceutical Service because of the lack of manpower to start to build upon. She ended her short address by reaffirming the Chamber's stand, that, while being open to dialogue, it will go on striving for the goals that it has set.

The Chamber's participation at the Pharmacy Exhibition took the form of a protest with a stand, bearing the title 'Malta Chamber of Pharmacists' and the slogan running across asking 'Professional Status - When?'

The official opening of the exhibition by the Hon. Minister for Social Policy was marked by the silent protest of Pharmacists in Government Service led by the President and members of the Council of the Chamber. Pharmacists and students carried various banners and posters on the subject of the delay in accordance of professional status.

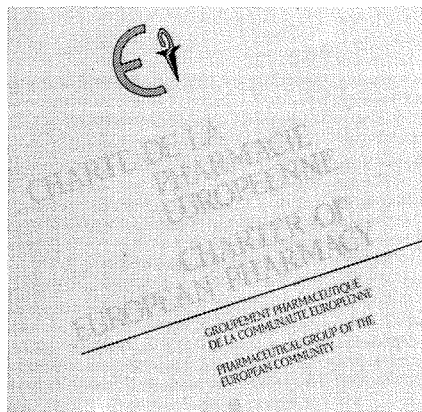
## EUROPEAN PHARMACY IN EUROPE OF TOMORROW

The Pharmaceutical Group of the European Community has recently published a 'Charter of European Pharmacy' which is being reproduced in full. The principles stated in this charter are the same principles that the Malta Chamber of Pharmacists has set as its goals.

### Charter of European Pharmacy

The European pharmacists, represented by the Pharmaceutical Group of the EC, aware of the fact that the society of today requires a better and more complete health aid, also aware of the new European prospects that have to result in the construction of a Europe without frontiers and in the achievement of its Internal Market, state the principles that will serve as the basis for the present and future practice of the profession within the European Community:

1. Pharmacy is a liberal and independent health profession, reserved to holders of a university pharmaceutical degree.
2. The medicinal product plays an irreplaceable part in the prevention and curing of diseases. Through his scientific training the pharmacist is the only specialist in the field of medicinal products.
3. For reasons of public health and in the consumer's interest, the pharmacist has to be present at every stage, from the manufacturing of medicinal products to their dispensing to the public.
4. The community pharmacist's role is of prime importance in



- the prevention of disease and in the safeguarding of public health, which makes the pharmacy a first rate health centre for conducting health education campaigns, detecting less known diseases; the pharmacist also has to see that medical prescriptions are complied with; he is in charge of pharmacovigilance and home care, as well as of certain other indispensable health acts which have to be performed in coordination with the other members of the health professions.
5. The safeguarding of public health requires the rationalisation of the community pharmacy network based on geographical and demographic criteria.
  6. The surveillance, preservation and distribution of medicinal products shall exclusively be carried out in community pharmacies authorised to do so by law and in the pharmaceutical services of hospital centres.

7. The pharmacist has to be the owner of the pharmacy in order to prevent interests that are unconnected with public health from interfering with the dispensing of medicinal products.
  8. The freedom to choose his pharmacist is a fundamental right of the patient.
  9. It is essential that pharmacy should be integrated in the various health services of a country to achieve an optimal public health.
  10. The relations between the pharmacist and the various health systems shall be established on the basis of freely concluded agreements, guaranteeing the pharmacist's independence and the patient's freedom to choose a community pharmacy.
  11. The pharmacist's honorary fees shall have to be in proportion to their responsibilities, their duties and the services they supply to the patient.
  12. Professional confidentiality has to be respected and has to be considered a right of the consumers.
- Consequently, the pharmacists:
- Are aware of their mission as guardians of public health who are permanently at the disposal of the population.
  - Undertake to perform their professional duties and maintain at all times the professional ethics and the independence of pharmacy.

# PHARMACY IN THE EUROPEAN COMMUNITY

'Pharmacy in the European Community' was the title of the workshop which was organised by the Malta Chamber of Pharmacists and the European Region of the Commonwealth Pharmaceutical Association, which consists of the member associations from Great Britain, Northern Ireland, Cyprus and Malta. The workshop was held at the Federation of Professional Bodies, Malta between the 28th November - 1st December 1990.

## Objectives of the Workshop

1. To confirm the current state of pharmacy legislation within the region.
2. To identify in order of priority the improvements that are needed in the legislation governing pharmacy in each constituent country, especially those that have applied recently (Malta and Cyprus) for full membership in the EC; and those to whom 1992 presents new problems in pharmacy

(Great Britain and Northern Ireland).

3. To discuss the implications of the EC Pharmacy Directives.
4. To make recommendations for action with an indication of priorities by member associations, by CPA European Region.

## Proceedings

The official opening of the workshop was held on the 28th November 1990 and was attended

by the workshop participants together with members of the Malta Chamber of Pharmacists, members of other professions, and invited guests.

Mrs M.A. Sant Fournier, President, Malta Chamber of Pharmacists, welcomed all present and said that it was most opportune for Malta to host such a workshop as at present the Malta Chamber of Pharmacists is looking at the legislation concerning Pharmacy in view of Malta's proposed entry into the European



Mrs Sant Fournier welcoming participants during the official opening of the workshop. third from left The Hon. Dr. Noel Buttigieg Scicluna, Malta's Ambassador to the Council of Europe.



Mr J. Ferguson giving the keynote address.

Community. Mrs Sant Fournier concluded by reaffirming the Chamber's commitment to continue in its efforts to upgrade the profession of pharmacy in all its aspects.

Prof. A.H. Beckett, Vice-President, Commonwealth Pharmaceutical Association, said that it was wise for the Malta Chamber of Pharmacists to take the initiative for the workshop to take place and consider the implications that the European Community has for the profession at this early stage. He added that it was most unfortunate that the CPA Founder President, Mr A. Howells and Prof. P.F. D'Arcy, were unable to attend in spite of the fact that they would have very much wished to participate in this workshop. Prof. Beckett expressed his gratitude to the Malta Chamber of Pharmacists for hosting the

workshop and for its contribution to the planning and to the Commonwealth Foundation for funding this workshop.

The workshop was then officially opened by the Hon. Dr. Noel Buttigieg Scicluna, Malta's Ambassador to the Council of Europe who said that all professions in Malta including Pharmacy, need to be upgraded to European Community Standards. Dr. Buttigieg Scicluna added that the government was giving great importance to the pharmacy profession. There was an ongoing dialogue between the Malta Chamber of Pharmacists and the Ministry for Social Policy whereby means are being discussed to enhance the pharmacists' role in society.

In his keynote address Mr John Ferguson, Secretary and Registrar of

the Royal Pharmaceutical Society of Great Britain, outlined the various aspects of the Pharmacy EC Directives and gave a general direction for the workshop's discussion during the following days.

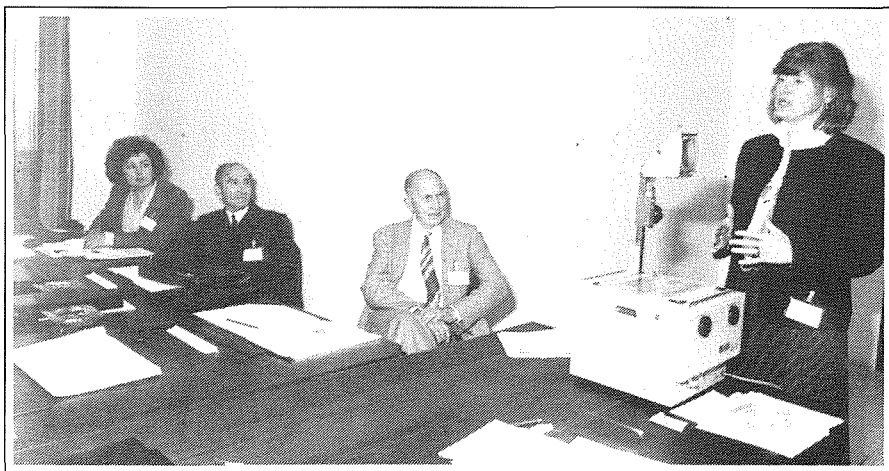
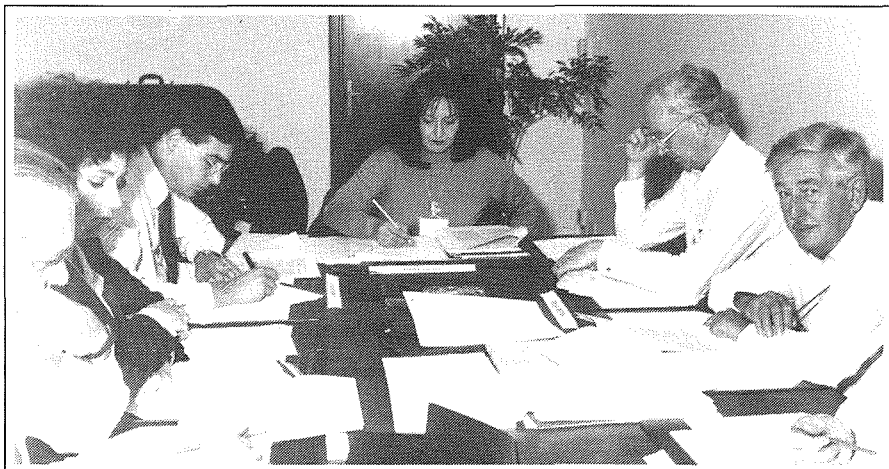
Position papers from each participating country and other background papers were submitted before the workshop. The position papers were based on statistics about pharmacists and their major activities. Regulations governing community pharmacies, hospital pharmacies, importations, industry, wholesale and marketing and representation of pharmaceuticals.

The workshop had two main themes: Session 1 dealt with the 'Free Movement of Pharmacists and the Right of Establishment' and was chaired by Mrs Sant Fournier. The function of rapporteur was performed by Mr Josef Grech, Malta Chamber of Pharmacists. Mr John Ferguson participated as the expert on the theme of this session.

The theme of session 2 was 'Free Movement of Proprietary Medicinal Products'. The session was chaired by Mr Raymond Dickinson and Ms Mary Anne Ciappara, Malta Chamber of Pharmacists was rapporteur. Mrs Frances Charlesworth, Director of the European and International affairs of the Association of the British Pharmaceutical Industry was the expert.

The concluding session held on Saturday, 1st December 1990 was chaired by Prof. Beckett, the rapporteurs presented the reports for the two sessions and the preliminary draft of the workshop recommendations was presented by Mr Raymond Dickinson, Secretary, Commonwealth Pharmaceutical Association. (Page 14 - 17)

The workshop brought information from the two experts and from those who have had experience of the European Community to the delegates from the countries who have applied for entry. That



Mrs Frances Charlesworth (Great Britain) leading one of the Workshop sessions.

information will be available to the professionals and to the applicant Governments as a very useful information source on all the directives and other proposals relating to pharmacy and to medicinal products.

The workshop identified action that might be taken by all the participating countries. All the directives are based on the promotion of good health, and so the actions that are proposed have tremendous value in themselves as well as being related to the EC.

It is now up to the pharmaceutical associations of Cyprus, Great Britain,

Malta and Northern Ireland to take up the recommendations made during this workshop that apply to them and work on them, and more importantly to the positive response from Governments so as to achieve a good pharmaceutical service.

As Mr Dickinson concluded, it is believed that the information obtained from this workshop will be of great benefit to the Governments as well as to the profession. Prof. Beckett and Mrs Sant Fournier also addressed the concluding session.

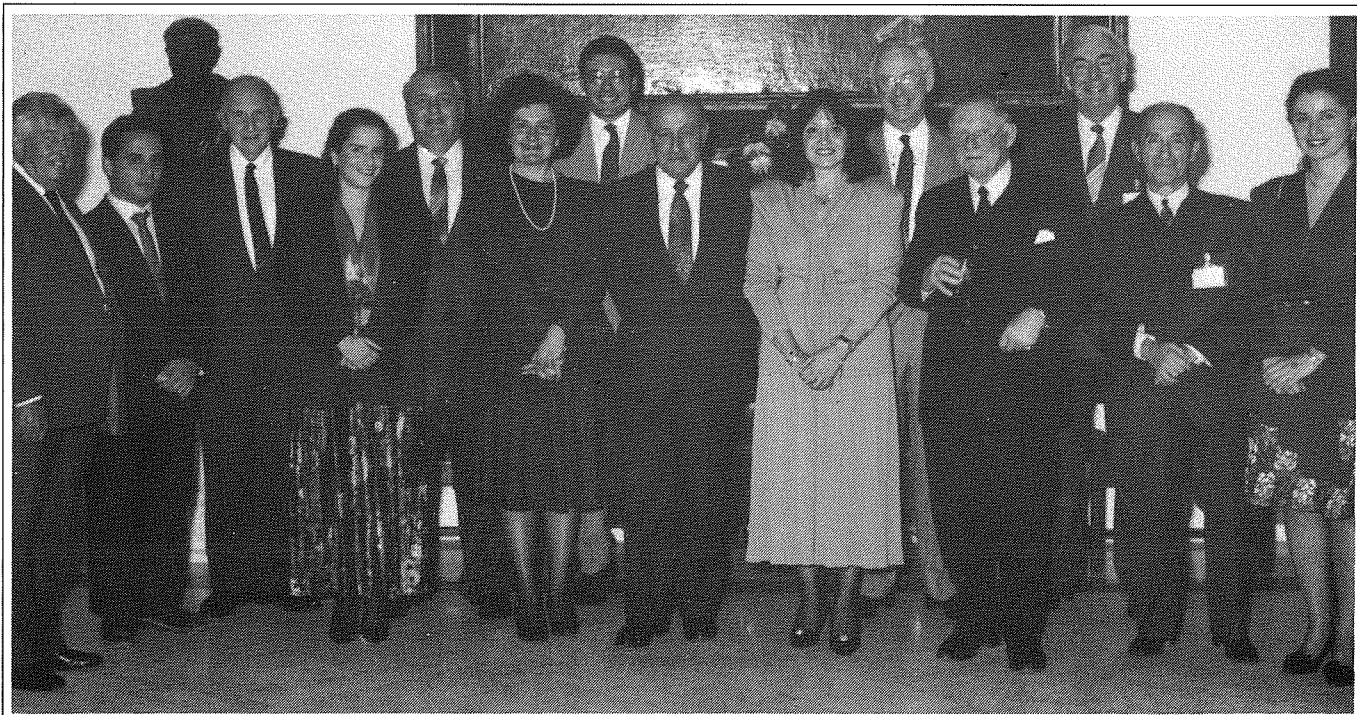
The workshop was officially closed by the Hon. Dr. George Hyzler, Parliamentary Secretary for

Health. Dr. Hyzler expressed his concern that today, the pharmacist still does not form an integral part of the primary health care team and thus the profession is skill not fully recognised by society for the services it is in a position to provide. One of the main areas of concern in community pharmacy is undoubtedly the lack of implementation of legislation. Referring to Medicinal Products, Dr. Hyzler said that Malta is a member of the WHO Certification Scheme. The next step will be the Registration of Medicinal Products which are imported into Malta.

Left Mr Dickinson presenting the workshop recommendations during the closing session. Fourth from left, The Parliamentary Secretary for Health, The Hon. Dr. G. Hyzler.

Bottom Workshop delegates and Council, Malta Chamber of Pharmacist with the Hon. Dr G. Hyzler, Parliamentary Secretary for Health, during a reception at Palazzo Castellania.

(left to right) Prof. A. Beckett, Mr A. Tonna, Mr J. Kerr, Ms M. Pisani, Mr E. Zammit, Ms M.A. Ciappara, Mr J. Grech, The Hon. Dr G. Hyzler, Ms M.A. Sant Fournier, Mr R. Dickinson, Dr P. Storie Pugh, Mr J. Fergusson, Mr C. Ionnides, Ms M. Abdilla.





## PHARMACY IN THE EUROPEAN COMMUNITY

CPA European Region Workshop  
Nov. 28 - Dec 1, 1990  
**Recommendations**

### 1. Free Movement of Pharmacists and the Right of Establishment

Major proposals for the education and training of pharmacists to achieve comparability of standards before EC entry.

1.1 Preamble to Directive 432 relates to the broad comparability of education and training of member countries of the EC. It is in the interests of Malta and Cyprus to achieve a similar comparability to enable pharmacists to benefit from the movement if they so wish. This education and training will have an effect on the quality of the pharmaceutical services in the future.

1.2 Considering that the Advisory Committee on Pharmaceutical Training is now looking at the quality of education and training in terms of content and resources (staff and equipment) whose work will continue during the next several years. The workshop felt that the Pharmacy School in Malta should continue to develop further the academic framework of the pharmacy course to bring it into line with the broad comparability of other EC courses.

1.3 Since it will take several years to implement the changes that will be required, it is necessary to

start now if they are to be made before entry into the EC. *Even if EC entry were to be deferred, these standards would, in any event, relate to the equivalent UK standards thereby achieving academic equivalence between the Maltese and UK pharmacy degrees.*

1.4 The workshop felt that it is essential that there should be an independent assessment of the developments that are needed in the academic framework. *CPA is therefore offering to the Malta Government, to coordinate a visit to the University by appropriate experts, with funding obtained from the Government, in collaboration with CPA, from such organisations as the Commonwealth Fund for Technical Cooperation, the Commonwealth Foundation or the British Council.*

The visit should not only relate to the changes that are needed in academic standards per se, but should take into account the practice developments required to achieve a well developed pharmaceutical service. It is suggested that the visiting panel should include members who were involved in the Nuffield Foundation Inquiry into pharmaceutical services in the UK, which made a very detailed study of the contributions that pharmacy can make to the health services and general health of the population. It is envisaged that two pharmacists and a medical doctor, representatives from that Inquiry,

and two academic pharmacists who are currently serving on the EC Advisory Committee who will be involved in future EC quality considerations, will form part of this visiting party.

It is proposed that this relatively small visiting party would cover all of these factors and each aspect of the pharmaceutical sciences. Their report would be of great benefit to the country and the profession as a first step in the process of reaching comparability.

1.5 The EC advisory committee on in-service training is about to look at the detailed structure of the training period and has already agreed on the principles upon which it should be based. *Malta needs to develop an appropriate supervising and training infra-structure with appropriate pharmacists in both hospital and community practice.*

1.6 With regard to Cyprus, the situation is quite different. There is no pharmacy school in Cyprus and they recognise qualifications from the UK, Greece and Turkey and any other qualification which is approved by the Cyprus Pharmacy Council as being equivalent. The workshop expects to see for Cyprus a similar situation to that which applies to Luxembourg which also has no pharmacy school. On EC entry, Cyprus will, no doubt, automatically recognise



the qualifications in the other member countries.

## 2. Proposals to enable pharmacists to specialise

- 2.1 There is a requirement in the first directive that the commission must make proposals for specialisation to be undertaken by pharmacists already registered to practice pharmacy in EC countries.

*Specialisation in hospital pharmacy has to be given priority so as to enable the services in hospitals to respond more rapidly and effectively to developments and thus benefit patient care.*

The Advisory Committee will soon be looking at proposals for additional specialisation in community pharmacy – to enable pharmacists to act more effectively as a filter for minor ailments and to liaise with medical colleagues to encourage more rational prescribing.

- 2.2 The workshop urges the Governments in Cyprus and Malta to take on board the philosophy of these specialisations in Pharmacy now.

## 3. Composition of the Advisory Committee

The composition of the Advisory Committee on Pharmaceutical Training comprises, from each country, three members and three deputies representing competent authorities, academic

pharmacy and the practising pharmaceutical profession. *It is the strong view of the works that the Malta Chamber of Pharmacists and the Pancyprian Pharmaceutical Association should be consulted by the Government when the member and deputy is appointed to represent the practising pharmaceutical profession.*

## 4. Geographical Distribution of Pharmacies

The preamble of Directive 433 recognises that some countries have introduced a requirement "to ensure the satisfactory dispensing of medicinal products over their entire territories".

*It is therefore essential that countries such as Malta, that have geographical distribution legislation should ensure that it is properly implemented and that there are no loopholes in the system.*

## 5. General Standards of Pharmacy Practice

There have been two important developments, one linked with Europe, namely the production of an updated Charter for Pharmacy Practice by the EC Pharmacy Group. This has been complemented by a WHO document published within the last two or three months on the 'Pharmacist in the Health Care System'. *The workshop recommended both of these documents to the professions and the governments of the participating countries.*

## 5.1 Supply of National Health Service Medicines through Community Pharmacies

The workshop is disappointed to learn that the Government of Malta has not implemented its policy for the distribution of National Health Service Medicines from the Community Pharmacy of the patient's choice. The workshop urges the recognition of the value of the community pharmacist, in terms of ease of access; advice and information to chronic patients; improvement of compliance and the more cost effective distribution of medicines – by the early introduction of these arrangements.

## 6. Proposals relating to the Free Movement of Medicinal Products

- 6.1 Pharmaceutical associations should discuss with their Government the range of consultations that will take place on EC proposals. Directive 432 clearly states in the preamble that "Pharmacists are specialists in the field of medicinal products". Therefore, the consultation with the pharmacy profession should be on every aspect of pharmacy and of medicinal products.

- 6.2 The workshop recommended that the pharmaceutical associations of the participating countries should study carefully the definition of medicinal products which appears in the EC documents and adopt it in their legislation.

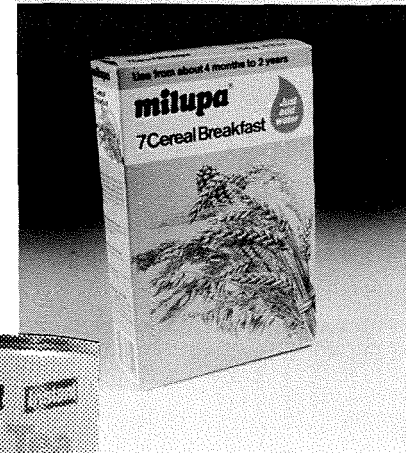
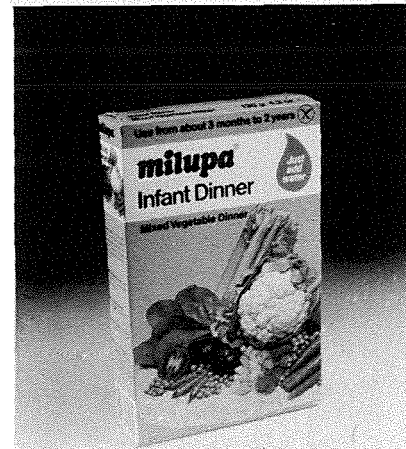
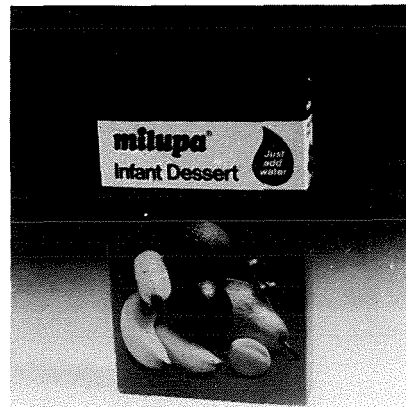
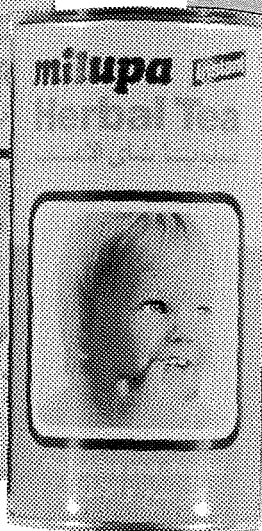


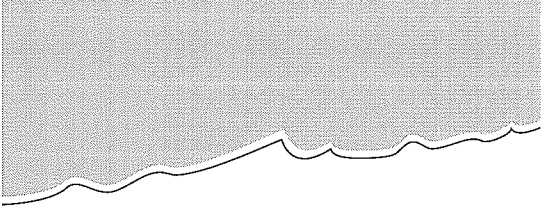
# milupa

Trusted by Millions of Mothers



TRADE ENQUIRES:  
IMPEX LTD.  
Tel:440319, 411355





6.3 An immense amount of effort is put in by the pharmaceutical industry in the accumulation of scientific data on packages which are appropriate to particular medicinal products particularly to high technology products. It is essential in the practice of pharmacy to preserve the integrity of the manufacturers' package throughout the complete chain from manufacturers to patient, to ensure the stability of a product until it is taken by the patient.

Pharmacists and doctors have to meet and reach some accommodation for dispensing the amount of tablets prescribed so that in future original packs will remain intact.

In the case of the Government Health Services, pharmaceutical associations should liaise with the Government to reach some agreement.

6.4 Each country must have the required medicines control authority to protect public health. As there is no Medicines Control Agency or Specific Registration Authority in Malta, the workshop urges that work should begin immediately to establish arrangements that are appropriate to the country and the range of the country's activities. The best arrangements can be achieved for Malta in the interim period before EC entry.

The workshop urges that work should commence now and that CPA will be happy to help Malta to liaise with overseas agencies that have the necessary experience and expertise.

6.5 Training for inspectors can be arranged through the World Health Organisation and the International Federation of Pharmaceutical Manufacturers Associations (IFPMA).

6.6 In Cyprus, this regulatory machinery exists but some amendments to the existing legislation may be necessary to bring it in to line with the respective EC Directives.

6.7 There is going to be a Wholesale Directive. In addition to requirements relating to premises, good housekeeping and record keeping, there will be a requirement for a suitable 'qualified' person responsible for each wholesale depot. The workshop feels that this suitable 'qualified' person should be a pharmacist.

6.8 A Directive on the legal status of medicines is imminent. The workshop urges that the pharmaceutical associations of the participating countries should immediately collaborate with the government in a review of the mentioned legislation in order that these EC standards are met.

6.9 The workshop reaffirms that the laws relating to the legal status of medicines should be implemented and more importantly, should be effectively enforced. National law can sub-divide the category of non-prescription medicines into over-the-counter and a pharmacist-recommended list so as to enhance the role of the pharmacist in the treatment of minor ailments.

6.10 There is a Draft Directive on Advertising and Medicinal Products. The workshop supports the moves being taken by the Malta Chamber of Pharmacists to introduce professional rather than bureaucratic controls, over the advertising of medicinal products with a considerable dimension of control by peer pressure. The workshop feels that this should be upheld in the other participating countries.

6.11 The second Directive on medicinal products states that each of manufactured or imported medicines should carry the certificate of a 'qualified' person before it is placed on the market. Maltese law stipulates that the ultimate person responsible for the safety, efficacy and quality of medicinal products should be a registered pharmacist. The workshop would like to impress upon the Government that the 'qualified' person should be a pharmacist as their education comply with the Directive knowledge requirements and they are subject to their own professional codes of practice and discipline.

6.12 When a medicinal product reaches the market, adverse effects must be closely followed. Future proposals within EC requires that there shall be notification of serious and life threatening reactions. In Europe, there has to be a network of pharmacovigilance data. The workshop urges that Malta should consider an adverse drug reaction reporting system involving both doctors and pharmacists.

# DRUG REACTIONS AND INTERACTIONS

*P.F. D'Arcy, O.B.E., D.Sc., Ph.D., F.R.Pharm.S., F.R.S.C., F.P.S.N.I.  
Professor of Pharmacy in The Queen's University of Belfast and Visiting Professor,  
Centre for Pharmacy Practice, The School of Pharmacy, University of London, UK*

## Risks of diazepam treatment in acute neurological injury

Eldridge and Punt<sup>1</sup> from the Department of Neurosurgery, University Hospital, Nottingham, UK, have found that benzodiazepines are used inappropriately, often with risk to patients who have head injuries, spontaneous intracranial haemorrhages, or other neurological conditions. They have tabulated the details of 10 cases (aged 6-75 years) who presented to their unit over 18 months with complications after receiving i.v. diazepam. They report in detail on three of these patients.

*Case 1.* A 66-year-old man, who was an alcoholic and drank in excess of one bottle of spirits per day, presented to a casualty department after falling in his bathroom and becoming unconscious. On arrival he was disorientated in time and place; skull radiographs showed a left parietal skull fracture. He then had three generalised seizures which were self-limiting and he recovered consciousness between each seizure. He was given 10mg diazepam i.v. for each attack. He became unconscious again and had a respiratory arrest, which necessitated emergency ventilation and transfer to the neurosurgery unit. He was given phenytoin i.v. followed by maintenance treatment and he was extubated 24 h later without problems.

*Case 2.* A six-year-old girl was admitted to neurosurgery after being hit by a car. She had received a head injury and became unconscious.

Computed tomography showed intracerebral contusions and features of raised intracranial pressure. Hypothermia (32°C) and hyperventilation with sedation were started, to control the pressure. These measures were continued for three days and then reversed sequentially while intracranial pressure was monitored. After reversal of the sedation, she was alert but unable to breathe or move her arms and legs. Radiographs of the cervical spine, a computed tomogram of the head, and results of magnetic resonance imaging were all normal. Concussion of the high cervical cord was diagnosed and over the next few days she recovered enough function of the spinal cord to breathe and was gradually taken off the ventilator.

She then had a self-limiting generalised seizure and was treated with 3.75 mg diazepam i.v. She had respiratory failure and required ventilation for a further 48 h. She was then given loading and maintenance doses of phenytoin and no further fits occurred.

*Case 3.* A 32-year-old miner was struck on the head by a piece of machinery and became unconscious. On arrival in casualty he responded to verbal commands and was extremely agitated although breathing adequately. He was given 10 mg diazepam i.v. so that his extensive scalp lacerations could be sutured. His level of consciousness deteriorated rapidly and he developed respiratory failure which required emergency intubation and ventilation. He required ventilation for 48h and thereafter made a good recovery.

Eldridge and Punt have commented that, although with their 10 cases many factors could be blamed for the deterioration of the patients' condition, in all cases diazepam was given inappropriately and was likely to be harmful. In their hands, seizures were controlled with phenytoin with a success rate equal to that obtained with diazepam and neither respiratory depression nor depression of the level of consciousness were problems.

### Reference

1. Eldridge, P.R. and Punt, J.A.G. (1990). Risks associated with giving benzodiazepines to patients with acute neurological injuries. *Br. Med. J.* 300, 1189-1190.

*Reprinted by courtesy of International Pharmacy Journal (1991) Vol. 5 No. 1, 4-5.*

## Colonic ulceration and bleeding with diclofenac

Carson et al,<sup>2</sup> from St. Peter's Hospital, Albany, NY, USA, have reported the development of colonic ulcerations in two women after the initiation of diclofenac therapy. The first of these patients, aged 60 years, was prescribed diclofenac (50 mg three times daily) for osteoarthritis. Her other medications were chlorpropamide, triamterene-hydrochlorothiazide, clonidine, amitriptyline and ferrous sulphate. After four months of diclofenac treatment, she was found to have positive stool tests of occult blood, and her haematocrit had decreased from 0.37 to 0.29. Oesophagogastroduodenoscopy revealed minimal antral gastritis. Colonoscopy showed

an ulcer in the ascending colon and several superficial ulcerations in the region of the hepatic flexure. A biopsy of the colonic mucosa showed focal necrosis and an acute inflammatory infiltrate. Diclofenac was stopped and she was started on sulindac (200 mg twice daily) and sucralfate (1 g four times daily). A second colonoscopy three months later showed no ulcerations.

The second patient, aged 67 years, was prescribed diclofenac (75 mg twice daily) for rheumatoid arthritis. She was also taking ranitidine and gemfibrozil every day and aurothio-glucose once a month followed by prednisone for three days. After two months of diclofenac she was found to have positive stools for occult blood. Her haemoglobin level had decreased from 8.3 to 7.8 mmol/l. Oesophago-gastro-duodenoscopy revealed minimal antral gastritis, and colonoscopy showed ulceration of the caecum and ascending colon. Results of a colonic biopsy were consistent with an ulcerative process. The patient continued to take diclofenac and was started on sucralfate (1 g four times daily). One month later, she still had positive stools of occult blood; the diclofenac was then stopped and ibuprofen substituted. Subsequent stool tests were negative, and her haemoglobin level increased to 8.4 mmol/l.

A review of the literature by the authors of this report gave no evidence of caecal or colonic ulcerations associated with diclofenac. They commented that the possibility of colonic ulcerations should be considered in patients with gastrointestinal bleeding who are receiving diclofenac.

#### Reference

2. Carson, J., Notis, W.M. and Orris, E.S., (1990). Colonic ulceration and bleeding during diclofenac therapy, *N.Engl. J. Med.* 323,135.

*Reprinted by courtesy of International Pharmacy Journal (1990) Vol. 4 No. 6 p.245.*

## Life-threatening diarrhoea after misoprostol use

Kornbluth et al.<sup>3</sup>, from the Mount Sinai Medical Center, New York, NY, USA, have reported a case of a patient with unrecognised Crohn ileocolitis who developed a nearly fatal secretory diarrhoea after short-term use of the prostaglandin E analogue, misoprostol.

The patient, a 56-year-old woman, was admitted to hospital with profuse diarrhoea, obtundation, and shock. She had been treated with naproxen, 400 mg four times daily, for eight weeks for symptoms of osteoarthritis. Two days before her admission, she started taking misoprostol (200 µg four times daily) because of a history of a bleeding ulcer while on another non-steroidal anti-inflammatory drug (NSAID). She took a total of six doses of misoprostol and then began passing voluminous watery, non-bloody diarrhoea. She required 7 l of normal saline to restore her systolic blood pressure from 76 to 100 mm Hg and was treated with clindamycin and aztreonam. Her large-volume diarrhoea persisted for the first two hospital days, despite the fact that she had no oral intake. On hospital day 9, colonoscopy showed severe cobble-stoning and linear ulcerations consistent with Crohn disease, extending from the distal transverse colon proximally and continuing into the terminal ileum. She admitted to treatment for 'Eisenhower disease' (Crohn disease) and terminal ileitis some 27 years earlier, for which she had received treatment for several months, although there was no follow-up afterwards. The disease had remained quiescent, until the present episode.

After her secretory-type diarrhoea resolved over the first five hospital days, she had five to six

loose bowel movements daily, that were associated with abdominal cramping. Over the next two months, she was treated with sulphasalazine and oral ciprofloxacin and the Crohn disease-related symptoms resolved.

Diarrhoea occurs in 4-13 per cent of patients treated with misoprostol through several mechanisms although in a review of 2272 patients treated with the drug only four had to stop taking the drug because of diarrhoea<sup>4</sup>. The authors of the present report were of the view that misoprostol unmasked and exacerbated ileocolitis that had been long quiescent in their patient; they could not, however, exclude the possibility that naproxen, used concomitantly, had contributed to this flare-up, although the patient had tolerated several previous regimens of NSAIDs without diarrhoea and had been on a NSAID for two months before the present illness, whereas a total of only six doses of misoprostol was followed by the near fatal diarrhoea. They cautioned against the use of misoprostol in patients with known inflammatory bowel disease.

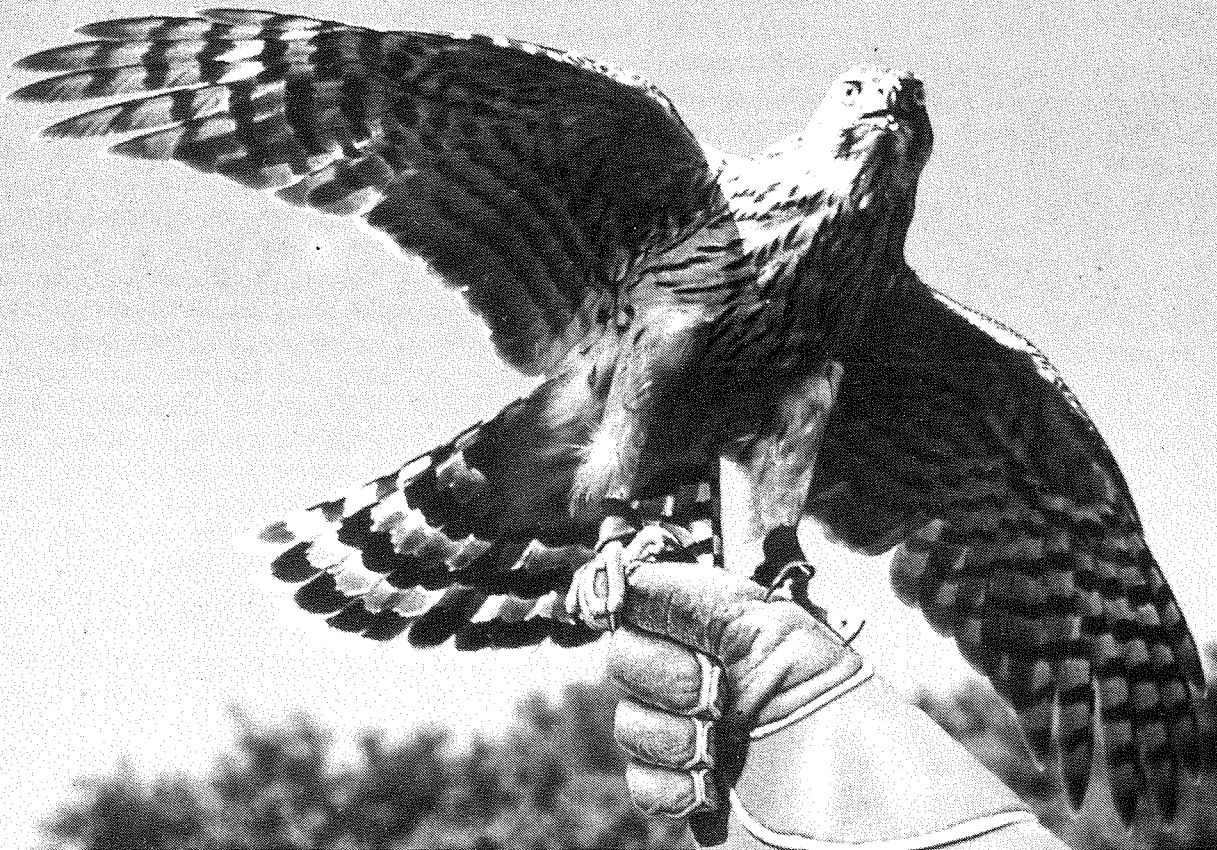
#### References

3. Kornbluth, A., Gupta, R. and Gerson, C.D. (1990). Life-threatening diarrhoea after short-term misoprostol use in a patient with Crohn ileocolitis. *Ann. Intern. Med.* 113, 474-475.
4. Hertig, R.I. and Clay, G.A. (1985). Overview of clinical safety with misoprostol. *Dig. Dis. Sci.* 30, 1855-1935.

*Reprinted by courtesy of International Pharmacy Journal (1990) Vol. 4 No. 6 p.245.*

FIRST OF A NEW  
GENERATION OF MACROLIDES

**RULID**® 150 mg bd  
roxithromycin



## A TURNING POINT IN THE TREATMENT OF R.T.I.

Form and presentation: Film-coated tablets: 150 mg. Box of 10 tablets. • Pharmacological properties: Roxithromycin is a semi-synthetic macrolide. • Indications: The indications are limited in the adult patients: to infections from sensitive organisms, particularly: U.R.T.I. - L.R.T.I. - Uro-genital infections and sexually transmitted diseases, with the exception of gonococcal infections - Skin and skin structure infections. To prophylaxis of meningococcal meningitis in contact subjects. • Contra-indications: Known allergy to macrolides. Association with ergot derivatives. • Adverse reactions: Digestive: nausea, vomiting, gastralgia, diarrhoea. Allergic skin rash. Possible transient rise in ASAT/ALAT transaminases and/or alkaline phosphatases. • Precautions: In patients with hepatic insufficiency, the prescription of Rulid should be avoided. If considered necessary, hepatic function must be monitored and dosage adjusted accordingly. • Pregnancy: The safety of roxithromycin in pregnant women has not been demonstrated. However, studies in various animal species did not show any teratogenicity or foetotoxicity. • Lactation: Minute quantities of roxithromycin have been found in human breast milk. • Drug interaction: Associations contra-indicated with ergotamine-type compounds and vaso-constrictive derivatives of ergot. • Dosage: Adults: 150 mg twice daily before the morning and evening meals.



For further therapeutic information, please see data sheet or request to:

Laboratoires ROUSSEL - Interphar - 1, terrasse Bellini - Puteaux Cedex 3 - 92080 Paris La Défense - France

01-90

## THE HANDBOOK OF PHARMACY HEALTH-CARE

Diseases and Patient Advice

Editor: Dr Robin J. Harman  
Publishers: The Pharmaceutical Press,  
London  
1990 - 587 pages  
Order No.: 085369 230 0  
Price: £48.00

Today, the pharmacist, whilst being the specialist on medicines, is developing his role as a vital member of the health care team.

In The Hand Book of Pharmacy Health Care as stated in the preface, is one of a series of new books designed to replace the Pharmaceutical Handbook and the Pharmaceutical Codex.

This book reflects the continuing changes in the skills required by today's pharmacists in their practice, taking into account the 'patient' rather than the drugs themselves. Emphasis is placed on the need for a basic knowledge of the fundamental diseases including anatomy and physiology and general health care,

for which medicines are prescribed and for the provision of advice to patients.

The book is divided into four parts. Part A, the bulk of the book, provides pharmacists with the necessary knowledge of diseases. The presentation of each disease is in a monograph comprising the definition and ethiology, its symptoms and treatment. A detailed description of pathology and pathophysiology complements the disease monographs.

Part B directs Pharmacists towards the most effective way in which the knowledge outlined in part A can be applied to inform and advise patients. The need for effective communication between the pharmacists and the patient and between pharmacists and other health care professionals is stressed. Particular emphasis is laid upon problems encountered by the elderly and the very young.

Unfortunately this section deals only with responses to symptoms presented by patients highlighting how pharmacists can contribute to self determination in minor illness and ignores monitoring of patients with chronic diseases by Pharmacists.

As a reference guide, Part C, lists all the common symptoms associated with diseases and helps to differentiate between serious and minor disease. A glossary of medical terminology is listed in part D. A selected bibliography serves as a guide for further reading and as a reference source.

The introduction of this Book is well timed and will help pharmacists to develop their roles as members of the health care team. It is thus essential for all pharmacists whether they practice in a hospital or community pharmacy. This book will also be of particular help to pharmacy students.

Copies can be obtained from The Pharmaceutical Press, 1 Lambeth High Str., London SE1 7JN U.K.

M.A.C

### ✉ LETTER TO THE EDITOR

#### Quality of Medicines

Dear Madam,

Pharmacists may have followed recent correspondence in local newspapers on quality of Medicines imported into Malta and intended for distribution through private and public initiatives.

This correspondence dealt with, on one part, concern by a member of the public and also by the profession, at the dubious origins and quality of certain medicines available through community pharmacies and on the other, a DOI 'statement' in which the public was reassured by the information that 'the importation of any pharmaceutical product into Malta,

whether for public or private sector, is strictly controlled to ensure that only products that are manufactured according to international standards are available today.'

In my opinion, and in view of Malta's proposed entry in the European Community, the Authorities concerned should seriously embark on the establishment of a Medicines Regulatory Agency with the total involvement of pharmacists and liaison with such agencies in other European countries. This would control the quality of medicines imported into Malta intended for distribution through public and private pharmaceutical services.

Moreover, the Importation/Wholesale Distribution of Medicinals should be more carefully controlled by a suitable pharmacy inspectorate and wholesale depots should have access to the expertise of a pharmacist on a full or part-time basis depending on the extent of such enterprises.

Unless all concerned accept the maxim 'Medicines are not ordinary items of commerce' and the necessary safeguards are guaranteed, Malta will fall short of the Health Standards of the European Community that the authorities wish us to form part of in the not too distant future.

Yours sincerely,  
Vigilant



# V. J. SALOMONE LTD

Manufacturers, Agents, Merchants and  
exclusive distributors for:-

ABBOTT LABORATORIES S.A.	.....	Pharmaceuticals
AMERICAN CYANAMID S.p.A.	.....	Lederle Pharmaceuticals Divn.,
AMERICAN CYANAMID S.p.A.	.....	Agricultural Divn.,
BEIERSDORF A.G.	.....	Atrix – Nivea Cremes & Sun Preparations & Toiletries
CIBA-GEIGY	.....	Agro-Chemicals
FISONS LTD.	.....	Pharmaceutical Divn.,
GERBER PRODUCTS CO.	.....	Baby Foods
JEYES OVERSEAS LTD	.....	Disinfectant & Tissue Paper
PROCTER & GAMBLE AG	.....	Detergents, Soaps & Toilet preparations
SANDOZ LTD	.....	Pharmaceuticals & Dyestuffs
SYNTEX LTD.	.....	Pharmaceuticals
SMITH & NEPHEW LTD.	.....	Pharmaceuticals, Surgical Dressing & Hospital Products
THERMOS LTD.	.....	Vacuum Flasks
UNION CARBIDE LTD	.....	Transistor Radio Batteries & Flashlights
UPJOHN LTD.	.....	Pharmaceuticals
WANDER LTD.	.....	Pharmaceuticals

**UPPER CROSS ROAD, MARSA. TEL: 238026, 234032**

**Postal Address: P.O. Box 55, Valetta**

**TELEX: BRITCO 1538 MW. CABLES: BRITIMPCO - MALTA. FAX: 222837**



# RISK OF HIV TRANSMISSION VIA BLOOD PRODUCTS

Ruth Camilleri B.Pharm.

Comprehensive Genetics Programme, Department of Health, Malta.

This article is based on the author's B.Pharm thesis entitled 'Safety of Blood Products'

## Introduction

Blood services are inevitable and life-saving. However, the therapy with blood products includes the risk of virus transmission. This is reflected by the high infection rate observed in haemophiliacs by acquired immunodeficiency syndrome (AIDS) – inducing viruses which varies between 50 and 100 percent<sup>1,2</sup>. Unfortunately in Malta we have the figure of almost 100 percent. But not only AIDS can be transmitted by blood products: hepatitis B (HBV) is a long- and well-known risk of blood products, and since the early seventies an additional form of serum hepatitis has been diagnosed; the so-called Non-A, Non-B hepatitis (NANBH). Further viral diseases such as cytomegalovirus (CMV) and the Epstein-Barr virus (EBV) infections are of less importance and only life-threatening for immunosuppressed patients.

## Donor Selection

The appropriate selection of blood donors is of prime importance towards the achievement of a safe blood supply. For this reason, the two blood banks in Malta are both non-profit organizations. In addition, the donors undergo a physical examination and are asked to answer a questionnaire. Nevertheless, since a full medical check up is not practicable, they rely heavily on the good faith of the donor. In a study

carried out to analyse the motivations and social characteristics of the volunteer donor attending the National Blood Transfusion Centre, during a period of three weeks (Nov. 1989) it was found that the majority of donors are young men between the ages 18-35 years. Approximately 28% of donors are new donors, 9% make a donation every year, 21% twice a year, 25% three times a year while 17% donate blood four times a year. The majority, about 70% of both the new and regular donors stated that they give blood for altruistic reasons. The main motivations (Fig. 1) were a desire to help others and a sense of duty towards the com-

munity. Other reasons stated were to get a day off work, to get rid of headaches and for the benefit of a free medical check up which are rather egoistic reasons. An interesting fact which emerged was that although housewives, students and professional people (Fig. 2) form only a small percentage of donors they are the most altruistic.

It was concluded that out of 12,500 donations about 2,500 are made for non-altruistic reasons each year. This implies that the selection of donors by the establishment of a voluntary blood organization and on a medical examination and interview are not fully efficient.

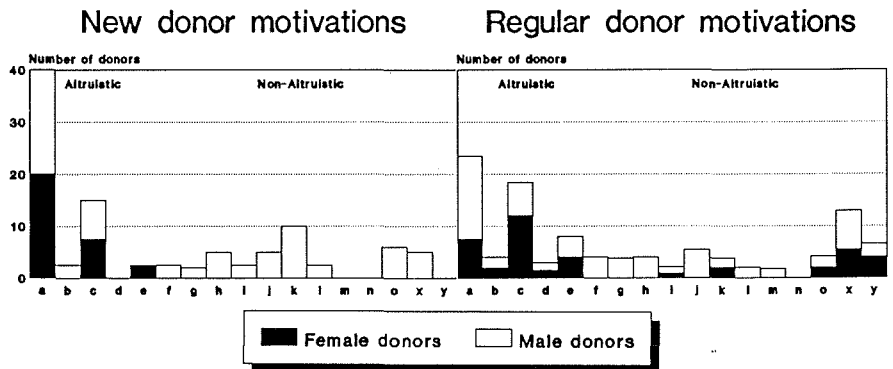


Fig. 1: New and Regular Donor Motivations

- a. a desire to help others
- b. gratitude for good health
- c. awareness of need of blood
- d. sense of duty to the community
- e. the discovery of a rare blood group
- f. to get a day off
- g. for a free medical check up
- h. to feel less tense
- i. to get rid of 'excess' blood
- j. to get rid of headaches
- k. because a member of the family needed blood
- l. persuaded by friends or relatives
- m. as a member of the armed forces
- n. to feel heroic, superior, proud ...
- o. others
- x. a combination of altruistic reasons
- y. a combination of non-altruistic reasons

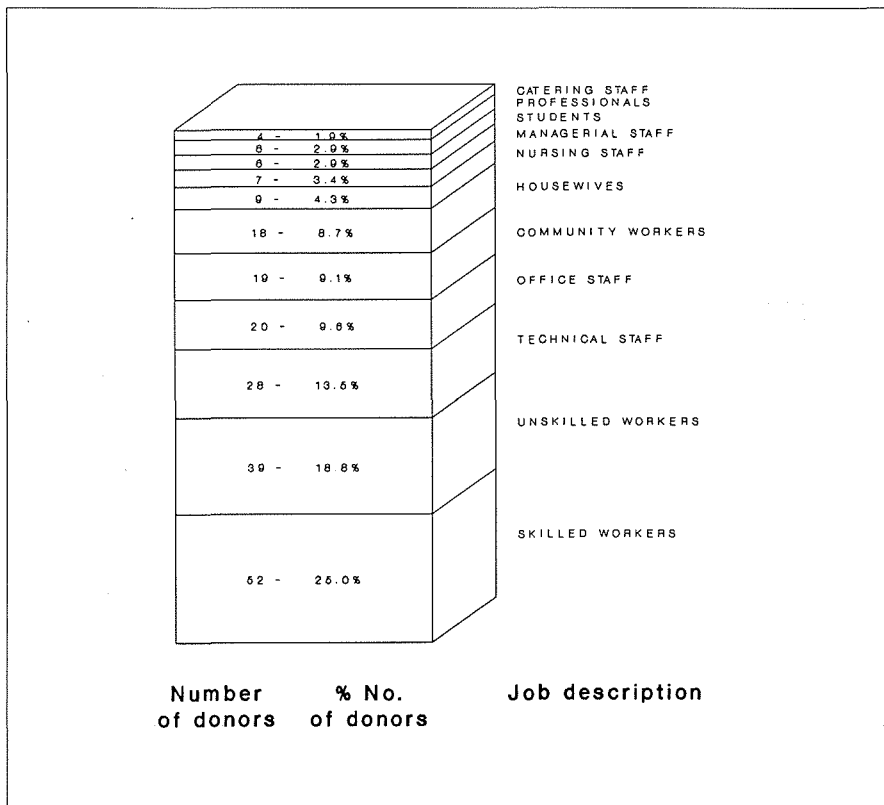


Fig. 2: Classification of Donors' occupations

### Laboratory Screening

It is evident that laboratory HIV antibody screening has to be included together with other measures to prevent the transmission of HIV by blood and blood products especially those products which cannot be heat-treated eg. cryoprecipitate.

Anti-HIV screening became mandatory in most countries by the beginning of 1986. In Malta, routine screening for HIV antibodies started in mid-1985.<sup>3</sup>

During the period July 1985 up to the end of 1989, a total of 40,600

donations were anti-HIV tested (Table 1). The majority of tests were performed using the Wellcome assay. With this assay 2.3/1000 tests were initially positive or equivocal but only 0.33 in 10,000 were positive on repeat testing.

Of the 10,410 donations tested with Abbott assay, 8.0/1000 were initially positive and 3.8/10,000 were repeatedly positive. One confirmed positive result has been found with the Wellcome assay and one with the Abbott assay. The two donors found anti-HIV positive were male new donors. They were a homo-

sexual and a bisexual i.e. both belonging to high risk categories. The former was found in 1985 when probably access to testing through the blood transfusion centre was the easiest, if not the only way of being tested. So, one may suppose that some first time donors - who suspect that they are at risk for HIV infection - attend the blood centre in order to ascertain their serological status. This emphasises the importance of access to alternative testing sites. Fortunately, free screening and testing facilities are now available in Malta.

The frequency of confirmed anti-HIV positive blood donations varies in different countries (Table 2)<sup>4</sup>. The incidence in Malta, which is 0.005% is comparable to most European countries but higher than in the U.K. and Scandinavia and lower than in Italy.

Table 2:  
The incidence of HIV positive donors in various European countries

Country	Incidence %
U.K.	0.002
Malta	0.005
Italy	0.019
F.R.G.	0.007
Scandinavia	0.002

The two ELISA assays studied are clearly associated with a significant percentage of false positive results. However the results seem to suggest that the Wellcome assay is of superior specificity.

Although both methods (the Abbott and the Wellcome assays) are reliable initial screening tests for the presence of HIV antibodies, it is important to adopt the most specific method in order to decrease the number of false positive subjects detected on screening and confirmatory stages.

In spite of donor and donor blood screening the transmission of viral infections may still be a serious complication of blood product therapy. This can be due to various

Table 1:  
Results obtained using commercial ELISA assays for the detection of anti-HIV in Maltese blood donations, July 1985 to December 1989.

Test kit	Total number of donations tested	Number of tests repeated	Number of tests repeatedly positive	Number of tests confirmed positive
Wellcome	30,190	70 (0.232%)	1 (0.003%)	1 (0.003%)
Abbott	10,410	83 (0.797%)	4 (0.038%)	1 (0.010%)
Total	40,600			2 (0.005%)

reasons, one reason being that anti-HIV screening tests do not detect infected donors who are in the window period which is said to be at least three months. Another reason is the poor specificity and sensitivity of commercially available methods to identify and quantitate NANBHV. In addition, by one wrong determination only the total plasma pool can be infected and all the fractions isolated therefrom.

So another approach towards the production of a safe blood supply would be the introduction of virus removal/inactivation techniques. These techniques include application of heat, irradiation or detergents. Many plasma fractionation centres seem to agree that the solvent/detergent technique is the most efficacious. Its increase in popularity is mainly due to two factors: (1) it does not affect plasma proteins and (2) it has been shown to have a high inactivation efficiency and product safety.

The method of detergent treatment is based on the principle that solvent/detergent mixtures cause extraction of essential lipid resulting in either total disruption of the viral structure or disruption of the receptor recognition site, thereby inactivating the virus. Products treated this way are approved for use in the USA and many other countries. Now since Malta is considering of becoming self-sufficient in the supply of Blood Products adoption of an efficacious virus inactivation technique will be essential in order to produce safe Blood Products.

### Conclusion – The Blood Centre Pharmacist

The pharmacist involved in the preparation of Blood Products is in a good position to promote safety (Table 3). The pharmacist can play a role in assessing quality of techniques used to screen blood which must be subjected to continuous

critical review for faults, omissions and improvements. For example as stated above, one of the problems associated with screening tests involving ELISA assays is the relatively high incidence of 'false' positive results. As a consequence there is a considerable loss of blood and hence additional need of blood collection. Choosing the appropriate screening method is hence of great importance to minimize or eliminate the problem.

Changes in procedure and policy may sometimes be required such as in the recent implementation of surrogate testing for NANBH. The pharmacist's role when introducing such changes is to evaluate the benefits versus costs. Although, reimbursement of costs are not in the pharmacist's purview, the final decision can be a direct result of the decision made by the pharmacist.

Another role of the pharmacist involves the quality control of the procedures employed and of the final product. The importance of undertaking every possible means to assure the safety of the finished product cannot be over-emphasized. This involves rigid control of reagents, testing kits and equipment plus vigilant control of all steps in the production procedure and finished product. Supervising this control programme is the direct responsibility of the Blood Centre pharmacist.

For the pharmacist to accomplish the above mentioned duties he/she must possess certain characteristics. Adequate training and knowledge is the main requirement for the pharmacist to function efficiently. Transfusion safety involves certain challenges which cannot be resolved unless the pharmacist is well prepared. Employment of specialized techniques to screen blood donations and methods used to eliminate viral infections require skill and sound judgement. A control programme must be established to assess the safety of blood and its

**Table 3:  
The Pharmacist's Role at the Blood Centre**

Educating and providing information.  
Assessing quality of techniques.  
Quality Control of the preparation procedure and finished product.  
Decision making.  
Maintaining interaction among the blood centre, manufacturers of reagents and equipment, clinicians and tech-nologists.  
Participating in research.

derivatives. This involves the ability to evaluate all the steps in the production procedure and of the finished product. The blood centre's pharmacist must also possess and apply high moral professional ethics. The proper attitude of the pharmacist is of vital importance since transmission of viral infections through blood and blood products can result in serious, even fatal situations. An obvious example is the transmission of AIDS through transfusion which before screening tests were developed, have resulted in grave consequences. Scrupulous procedures have now nearly eliminated this problem.

The Blood Centre pharmacist can also be greatly involved in clinical or bench research. The blood centre offers an excellent setting for doing research and hopefully this will enhance the safety of the blood and blood product supply.

### References

1. Allain, J.P. (1986). Prevalence of HTLV/LAV antibodies in patients with haemophilia and intersexual partners in France. *New Engl. J. Med.* 315, 517-518.
2. Johnson, A.J., Semar, M., Newman, J., Brandt Harris, R.B., Brand, D., Middleton, S., Smith, J. (1975). Removal of Hepatitis B surface antigen (HBsAg) from plasma fractions. *J. Lab. Clin. Med.* 98.
3. Camilleri Ruth, (1990) Safety of Blood Products, B.Pharm Thesis, Department of Pharmacy, University of Malta.
4. International Society of Blood Transfusion (I.S.B.T.) (Dec 1988). The International experience in anti-HIV screening, third update (Meeting).

# Elotrans<sup>®</sup>

10 sachets  
of 6.03 g each

Powder

**Oral rehydration therapy  
(compensation of salt and water  
losses) in diarrhoeal diseases**

## Fresenius

**The New WHO recommended oral rehydration formula (BNF 1989) Sodium citrate is used instead of Sodium bicarbonate.**

*The formula has a:*

- more pleasant taste
- better shelf life when made up with water
- 20% lower stool output due to better reabsorption of Na<sup>+</sup>/H<sub>2</sub>O

*Local Pharmaceutical Agent: Pharmasud Ltd., Tel. No. 441354, 316882.*

# PHARMACISTS, PATIENTS AND PAYMENTS IN 17TH CENTURY MALTA

Paul Cassar M.D., Ph.C., D.P.M., F.R.Hist.S (Lond.), D.Litt., (Hon. Causa).  
Hon. Fellow of the University of Malta.

## Introduction

The meeting of the Commonwealth Pharmaceutical Association held in Malta in 1989 provided a convenient vantage point for casting a glance backwards in time on (a) the activities of Maltese pharmacists three hundred years ago, when our Island was dominated by the Order of St John of Jerusalem; and (b) on the kind of *materia medica* which they handled and dispensed for the sick.

The sources on which this paper is based are a number of unpublished manuscript volumes containing the *spogli* or "spoils" of members of the Order of St John who died during the 17th century. They are preserved at the Cathedral Museum, Mdina.

The *spoglio* was a kind of inventory of the property, personal belongings, assets and liabilities of the Order's member at his death. It formed part of a dossier containing, among other documents, the requests from various creditors to be paid for services and for goods supplied to him during his life time.

The claims for the settlement of the outstanding bills were submitted to the *Commissione degli spogli* which was made up of two or three dignitaries of the Order. After examining the creditor's claims and ascertaining their validity, the Commission would approve the honouring of the debt.<sup>1</sup>

In the manuscripts forming part of these dossiers, one comes across items of pharmaceutical interest and of requests by pharmacists for payment for medicaments supplied

to Knights and other members of the Order of St John during their illnesses.

Being concerned only with wealthy and higher levels of the state and church hierarchy of the population of the time, the *spogli* furnish only fleeting glimpses of contemporary pharmaceutical practice; but even such restricted sidelights are not to be ignored as they focus attention, apart from the *materia medica* of their time, on some of the economic aspects of pharmaceutical business of the past that would otherwise have remained unknown. Indeed this paper is complementary to the author's previous studies on the history of Maltese pharmacy to which the reader is referred for a panoramic view of the conditions and practice of pharmacy in Malta from the 16th to the nineteenth centuries and of the type of pharmaceutical services available for the low-income groups and for the indigent in our population.<sup>2</sup>

In the text that follows, I have retained the Latin/Italian terms and abbreviations of the drugs in the form in which they are written in the manuscript bills but I have given their English equivalents and added short notes about their ingredients and uses.

The names of at least ten pharmacists and of nineteen patients served by them appear in the records examined. The former are considered in the alphabetical order of their surnames. In the case of the earliest patient in the series, however, there is no mention of the pharmacist who

provided him with the drugs. The patient was no less a person than the Grand Master himself – Hugues Loubenx de Verdalle (1582-1595).

## Grand Master Hugues Loubenx de Verdalle

Grand Master Hugues Loubenx de Verdalle has been described as a "practical and shrewd" man whose rule was marked by troubles with his own refractory knights, by fear of invasion by the Turks, and by an outbreak of plague in 1592. Pope Sixtus V honoured him with a cardinal's hat<sup>3</sup>.

It is said that he suffered from gout but from the medicinal items contained in the inventory drawn up following his death on the 4th May 1595<sup>4</sup> it appears that he was subject to other ailments as well. The items were:-

A small vial containing an oil for the treatment of wounds.

A fragment of *Bolo armeno*

*The Bolo armeno was a reddish-yellow clay originally obtained from Armenia.*

*Used as astringent in dysentery and bleeding.*

A piece of bone reputed to be effective in relieving difficult micturition

A number of roots used for the alleviation of pain.

A stone for the treatment of colic.

A small vase made of box-wood containing *Teriaca*.

*Theriaca was an electuary which could contain up to seventy-three ingredients, the most important of which was the flesh of vipers. An antidote against poisons and bites of serpents.*

Ten pater nostri di pietra di rocca said to be effective in arresting bleeding.

*The paternosters are the small beads in a rosary indicating that the Lord's Prayer is to be said. Here the paternosters are said to have been of stone of a rocky consistency but the name was also applied to the fresh bark and fruit of the tree Melia Azedarach, indigenous to the orient, that was administered as a vermifuge in the form of a decoction<sup>5</sup>.*

#### Two petri benzoar

*The bezoar stone was a calculus found in the stomach of certain ruminants. Used as a sudorific and antidote against poisons.*

A small spouted glass vial containing oglio di balsamo.

*This balsam oil would be either Liquid Balsam of Peru, an expectorant; or Copaiba Balsam for the cleansing of ulcers; or Oriental Balsam used "to fortify the heart" or as an antidote against bites of poisonous animals.*

Other glass vials with various liquids of unknown nature.

A quantity of balls of terra sigillata.

*The terra sigillata or Sealed Earth was also known as Terra Lemnia because originally it consisted of clay derived from caves in the Island of Lemnos. The seal consisted of an impression of the figure of Diana. A similar terra was obtained from the cave of St. Paul in Rabat, Malta, hence its name of Terra Sancti Pauli. It was in the form of clay tablets bearing the effigy of St Paul on the obverse and the eight-pointed cross of the Order of St John on the reverse. It was used as an astringent in diarrhoea.*

#### A vase of terra sigillata

*Vases or drinking cups were made of the same clay from Malta in the belief that they acted as antidotes "to any poisonous liquid" placed in them<sup>6</sup>.*

### THE PHARMACISTS

The pharmacists are referred to as *aromatari* and occasionally *speziali*.

I. LUCIO AZZUPARDU of Valletta had furnished medicaments to Commendatore Francois de la Roche. On the 23 May 1663 he presented his bill for payment to the Commissioners of Spoils.

To prove his claim he called as witness the "Most Illustrious Doctor of Art and Medicine and Proto-medicus (Chief Government Physician)" Blasius Cazzola, who

had treated the Commendatore. Dr Cazzola stated that he knew that the late Francois de la Roche had bought medicaments from Lucio Azzupardu "because he had, on many occasions, seen his own prescriptions in Lucio's shop"<sup>7</sup>.

II. PETRICO AZZUPARDU, *speziale*, had supplied medicines to Bailiff Antoine de Puget-St Marc, Bailiff of Manosque. Petrico's bill, dated 8 May 1664, amounted to 6 scudi and 10 tari.<sup>8</sup>

Among the preparations figure:-  
Syr, magistralis

*A magistral medicament was any preparation, in this instance a syrup, prescribed by a physician for a particular case.*

Infusum rosae pallidae

*Infusion of petals of white rose. Laxative.*

Salis prunis

*Preparation of sodium or potassium nitrate. For renal colic.*

Flor, genist. viol. et bugloss.

*Flowers of broom, violets and bugloss.*

*Diuretic.*

Salis pruneti, absint et tamar.

*Salts extracted from prunes, absinth and tamarind. Promote urination.*

Agar hortus

*The fungus white agaric. Purgative.*

Conf. alchermes

*A syrupy preparation named after the kermes insect which is one of its ingredients. Astringent.*

Epithema pro corde.

*Fomentation for the heart.<sup>9</sup>*

On the 2 May 1666, the same Petrico submitted a bill for 2 scudi being the price of drugs supplied to the Knight Giorgio Berencles. Among the items mentioned are:-

Ol. ros. lumbrici

*Oil of roses and earthworms. Diuretics. For bladder stone.*

Foment. anodini

*Fomentation for the relief of pain.*

Dia cassia

*Preparation made from the cassia plant, a kind of cinnamon. Laxative.*

Dia catholicon

*Electuary from senna leaves, rhubarb etc. Purgative*

Theriaca

*Electuary composed of many ingredients the most important of*

which was the flesh of vipers. An antidote against poisons (10).

III. GIO. PAOLO BUTTIGIEG was owned 30 scudi and 3 tari for medicines, by the Knight Bernardo Nerognia. The bill, dated 26 May 1662, was accepted for payment by the Commission of Spoils after the friends, servants and neighbours of the deceased knight had confirmed on oath that the medicaments were actually obtained from Buttigieg.

The medicines were:-

Capelli veneris

*Dried fronds of the plant Adiantum capillus-Veneris. Promotes expectoration.*

Cremor tartar

*Cream of tartar (Acid potassium tartrate). Used as a "refrigerant" and purgative.*

Reubarb

*Rhubarb. Dried roots from species of rheum. Purgative.*

Tamarind

*Pulp of the fruit of Tamarindus Indica used to make cooling drinks in fevers.*

Oxymel volut, diuretic

*A mixture of honey and vinegar to promote diuresis.*

Mirob, mistura

*A mixture of myrobolans - a plum-like fruit. Astringent.*

Sanguinis hircus

*Dried blood of billy goat. Powdered and administered to promote sweating and urination.*

Spirit. vitrioli

*Sulphuric acid. A caustic<sup>11</sup>.*

In 1663, Gio Paolo Buttigieg was the creditor for 70 scudi for medicaments supplied since February 1661 to the Venerable Grand Hospitaler Antoine de Conflans-Saint-Remy, for his personal use and for the contents of a medicine chest, furnished on the 13 May 1662, for the Hospitaler's galeotta (a small galley) engaged in corsairing under Captain Gioe Ardizzone.

Buttigieg's claim was presented on the 19 May 1663.

Several witnesses were heard on oath by the Spoils Commission including a surgeon, a barber-surgeon, who attended on the Knight for eighteen months, and a servant.

It took some time before the Commission was convinced that Buttigieg's claims were genuine and before it authorised payment on the 16 May 1665 – two years after the bill was presented.

The preparations for the Hospitaller's personal needs comprised:-

- Lavand. pro ocul.  
*An eye-wash.*
- Zucc. cand.  
*A candied confection. Expectorant.*
- Cons. borag.  
*Preparation made from borage and sugar. Cordial.*
- Mel. viol.  
*Honey of violets. Cordial.*
- Ol. de nuc. musc.  
*Oil of nutmeg. A carminative.*
- Ung. digest.  
*Ointment of wax, turpentine, etc used to promote suppuration.*
- Ung. de plumbi.  
*Lead ointment. Astringent and resolvent.*
- Clist. lenit.  
*Emollient enema.*
- Ung. sandal.  
*Ointment from white and red sandal wood. Astringent<sup>12</sup>.*

On the 12 February 1664, Buttigieg asked for the settlement of a bill amounting to 403 scudi. This sum represented the cost of medicinal preparations, as assessed by the Protomedicus, supplied to the Bishop of Malta, Fra Giovanni Balaguer Camarasa, Grand Prior of the Order of St John (1636-1663), over a period of twelve years.

Buttigieg, however, received only 350 scudi because the Bishop had declared in his testament that he only owed the pharmacist about 300 scudi. The Spoils Commission, therefore, approved a payment of 350 scudi "with the consent and agreement" of the pharmacist.

The list of the medicaments obtained by the Bishop runs into 28 folio-sized pages containing an average of 32 preparations per page (a total of about 896). It included:-

- Ol. de cappar.  
*Oil from flower buds of capers. Aperitive.*

*Indicated in obstruction of the spleen.*

- Ung. de althea.  
*Ointment of roots of marsh mallow herb.*
- Renal colic. Expectorant.*
- Mist. anisi  
*Anise mixture. Cordial and pectoral.*
- Hiera picra  
*Electuary of aloes, cinnamon, saffron, etc., A purgative.*
- Emp. de ranis  
*A plaster of frogs, mercury and storax. A "resolvent" for swellings.*
- Aq. funiculi  
*Fennel water made from the leaves and roots of the plant. Carminative.*
- Emp. de panis cum mercurio.  
*Poultice of bread and mercury. Against infestation by lice and fleas.*
- Decoc. fol. senae.  
*A decoction made from the pods of Cassia acutifolia. Purgative.*
- Cons de acido citr.  
*A sugary preparation of citric acid. Refrigerant for fevers.*
- Sarsaparill. contus.  
*Crushed saraparilla roots. Powder of decoction in Venereal Disease<sup>13</sup>.*

Following the death at the Lazzaretto of the Chaplain of the Langue of Italy, Fra Fabrizio Cagliola on the 7 May 1665, Buttigieg endeavoured to obtain payment for drugs furnished to the priest over a period of "almost thirty years". The list which he submitted to the Spoils Commission consists of eight folios of closely written entries of pre-parations averaging forty-eight lines per page!

To substantiate his claim, Buttigieg produced as witness the physician Dr Joseph Lanza who had treated Cagliola for twenty-five years and who declared that this patient had acquired his medicaments from Buttigieg's shop. It so happened, however, that Cagliola, in drawing up his last will and testament, did not declare his debt to Buttigieg as he had done in the case of his other creditors. The Spoils Commission was, therefore, very reluctant to accept the pharmacist's claim. On the contrary it criticised Buttigieg "for failing to obtain payment during Cagliola's lifetime; and, especially because having known that Cagliola

had made his will, the pharmacist did not endeavour to tell the patient to declare his debt to him (Buttigieg) in his will. The Commission, therefore, decided to meet the bill only in part, i.e. limiting it to those medicaments supplied to the priest since his return to Malta following his freedom from captivity. The amount, as taxed by the Protomedicus and approved by the Commission, amounted to 197 scudi<sup>14</sup>.

#### IV. ANTONIUS HAGIUS

On the 2nd September 1673, Antonio Hagius asked for the sum of 14 scudi and 5 tari to cover the cost of medicaments supplied to the French Knight Jean de Bellure.

The Commissioners called Dr Jacobus Cassia, the physician who attended the Knight during his illness, to testify on oath that the medicaments prescribed by him were "for the use of the late Knight". They also interviewed the knight's servant who stated, also on oath, that he used to go himself to the pharmacy (*spezzaria sic*) of Antonio Hagius to collect the medicaments ordered by the physician. Having satisfied themselves that the case was genuine, the Commissioners approved payment.

Among the ingredients included in the bill were:-

- Confectio de hyacinti et alchermis  
*Syrup preparation of hyacinth root and kermes insect. In dysentery.*
- Saccar. alb.  
*White sugar. Pectoral and expectorant.*
- Sandal  
*White or red sandal wood. Astrigent and "to fortify the heart, stomach and brain".*
- Ung. aegyptiacum.  
*Ointment of copper acetate and honey. For the treatment of ulcers.*
- Aq. scorson.  
*Water from the roots of Viper Grass. Antidote to poisonous bites, smallpox and plague<sup>15</sup>.*

#### V. LORENZO HAGIUS

The Knight of the French Langue Antoine de Bataille died on the 22nd August 1703. He owed the pharmacist Lorenzo Hagius the sum of 4 scudi and 5 tari for medicaments





supplied during his last illness. The bill, dated 9 September 1703, includes:-

Saccar. fumar.

*Sugar with the Common Fumitory herb. Promotes urination; in disease of the spleen.*

Hypericon magist.

*A preparation from the plant St John's Wort. In renal colic and diuretic.*

Cataplasma da mica pan. cum lactis

*A poultice made from bread and milk.<sup>16</sup>*

Another client was the Knight, Francisco Cinevailla, who had bought drugs to the value of 3 scudi and 11 tari. The bill, dated 11 December 1704, contained, among other drugs, the following items:-

Syr. da cicor. Nicol (aus) cum rheobar

*Syrup of chicory and rhubarb. To purify the blood.*

Aq. still, cicor.

*Distilled water of chicory. To purify the blood.*

Ung. ex cort. castan.

*Ointment of cortex of chestnut. Astringent.<sup>17</sup>*

#### VI ANTONIO HELLUL

This pharmacist from Birgu asked to be remunerated for the medicaments furnished to the French Knight Pietro de Vivier, Captain of the Magistral Galley. He submitted a long list of preparations, dated 9 March 1665, with the following statement from Dr (Gio Domenico) Xeberras, physician at Birgu, in support of his claim:- "I, the undersigned, bear testimony that the above mentioned medicaments were prescribed by doctors for the treatment of Fra Pietro de Vivier".

Among the preparations listed were:-

Ung. refrigerantis

*Ointment of oil of roses or of oil of sweet almonds for the treatment of inflammatory conditions.*

Semen anisi fiat decoc. In aquis cordialibus

*Decoction of anisi seeds (Pimpinella anisum) prepared by boiling the anisi seeds in water followed by straining of the liquid. Heart tonic.*

Emulsio melon.

*Emulsion of melon seeds (Cucumis melo). Heart tonic.*

Ol. viol.

Oil made from petals, seeds and leaves of plants of the genus Viola (violets). Heart tonic.

Vesicatori.

Emplastrum vesicatorum. A poultice made from cantharides and other ingredients. For raising blisters on the skin.<sup>18</sup>

#### VII GIO FRANCESCO MAGRO

Gio Francesco Magro claimed 5 scudi and 4 tari on the 22 May 1663, for over twenty-eight preparations dispensed from his shop in Valletta for Fra Angelo Taneredino, Chaplain of the Langue of Italy.

Among the medicinal items can be distinguished:-

Confectio Hyacinti

*Syrup preparation made of honey, myrrh and terra sigillata of Lemons. A sudorific and antiemetic.*

Amygdala dulcis

*Oil of sweet almonds. Prescribed for the relief of renal colic and expulsion of bladder stones.*

Syr. ros. solut.

*Syrup of pale roses. Astringent for dysentery.*

Ung. rosae et litarg.

*Ointment of roses and oxide of lead. Emollient.*

Syr. de cort. cit.

*Syrup of lemon peel. Refrigerant for fevers.*

Syr. de artem et cap. ven.

*Syrup of the herbs mugwort (Artemisia vulgaris) and Maiden Hair. Aperitivo<sup>19</sup>.*

#### VIII NICOLO' MALLIA

On the 11 December 1702, he advanced his claim for 3 scudi by the Knight Francisco Cinevailla, of the Langue of Castille, for a number of medicaments the cost of which had been assessed by the Protomedico Dr Archangelo Grech. They comprised:-

Conserv. borag.

*Sugar preparation made from flowers of borage. "Purifies the blood" and heart-tonic.*

Pulv. stomac. querc.

*Stomachic powder from the bark and leaves of the oak tree. For the relief of stomach pain.*

Syr. de limonis et corallini

*Syrup of lemon and sea-moss. To purify the blood.<sup>20</sup>*

#### IX ANTONIO MANNO

He submitted a list of no less than seventy-two items, acquired from him by the Knight Giacomo Duretta, on the 23 December 1704 and costing 22 scudi and 9 tari. Here are some of the medicaments dispensed:-

Philon. ros.

*A preparation from opium and other ingredients for the relief of pain and insomnia.*

Oxymel squill

*A potion of honey, vinegar and bulb of squill (Urginea maritima). Diuretic.*

Conf. ros. damascen.

*Confection of Damask Rose. Purgative.*

Ol. castor, et de euphorb.

*Oil made of a resin from the euphorbia stem and a substance from the sacs near the genital organs of the beaver. "Fortified the brain" and indicated in epilepsy and paralysis.*

Sang. hircini.

*Dried goat's blood. To promote urination and sweating.<sup>21</sup>*

#### X PIETRO MEISONAT

This pharmacist had delivered medicaments and vases, to contain them, to the Knight and Sea Captain (name?) La Carta to the value of 5 scudi and 2 tari.

"Three years ago", wrote Meisonat on the 16 May 1662 to the Spoils Commission, "La Carta came to Malta on his ship and fell sick with colicky pains while he was in the apartment of Nicholas Loste ... " He took various medicaments "for his infirmity and for the preservation (of his health) ... He departed suddenly from Malta without paying me".

The bill, which was settled in the following year, contained:-

Ol. sesami

*Oil of sesame seeds. Emollient and anodyne.*

Melis rosati

*A balm from leaves of Melissa officinalis and rose petals. "To fortify the heart."*

Ung. ros. refrig. galeni et sandalini.

*Ointment of oil of roses and of scandalwood according to Galen of*

M<sup>mo</sup> Sig<sup>ri</sup>

Pietro Meisonat v<sup>mo</sup> ser<sup>re</sup> de le ss. vv. M<sup>mo</sup> river spono che si debbia  
creditore del spoglio del fu Cavallier Capitano la Carta tre anni  
sono che venne in Malta con suo fratello e si amalo con dolor colico nel  
alloggiamento de Nicolo Loffe e prese diversi medicamenti y de la infer  
mita e p<sup>re</sup> sua preservatione nella somma de 75-2 come y lincluso <sup>presente</sup> <sup>presente</sup>  
e se ne parti al improvviso senza darli satisfatione alcuna e dico ne dar  
e testimoni Per tanto Ricorre alle ss vv M<sup>mo</sup> si degnino Ordinare che loro  
sia satisfatto sopra il suo spoglio e resten oblig<sup>ato</sup> ser<sup>re</sup> de le ss. vv. M<sup>mo</sup>

The pharmacist Pietro Meisonat complains that the Knight Capitano La Carta failed to pay him the sum of scudi 5 and tari 2 to cover the cost of the medicaments supplied. (Courtesy Cathedral Museum, Mdina. Spogli 17A, f.111 (177)).

Pergamon (AD 130-201) one of the renowned physicians of Classical Antiquity who was noted for his writings on *materia medica*. The ointment was indicated in the treatment of inflamed parts and joints<sup>22</sup>.

Another bill to the value of 5 scudi and 8 tari was presented on the 12 October 1663 for drugs furnished to the priest Fra Alfonso Cassar. The bill, as taxed by the Protomedico Dr Blasius Cazzola, was paid in full seven months later.

Among the eighteen preparations dispensed were:-

Ol. camomill

Chamomile oil. Used in the form of a poultice as a "resolvent" or softening agent.

Fomenta stomach.

Poultice for application over the stomach region.

Diaphaenicum

Electuary compounded from dates, scammony, etc. Used in the treatment of dropsy and paralysis.

Mannae elect.

Electuary made of the exudation from the stem of *Fraxinus ornus*. A laxative.

Ol. scorp

Oil of scorpions. The animal was immersed in olive oil and exposed to sunlight. An antidote against bites of scorpions and other poisonous creatures.<sup>23</sup>

Bailiff Domenico Enrico Roccaful

owed Pietro Meisonat the sum of 14 scudi 1 tari and 17 grani for medicaments at the time of his death on 11 May 1665; and also the sum of 100 scudi which Meisonat had lent to be Bailiff. The pharmacist eventually received the full payment of 114 scudi 1 tari and 17 grani.

Among the ingredients listed in the bill on 6 June 1665 are:-

Gargarisma cons. ros.

Gargarium of conserve of roses. For throat ailments.

Cat. de malv.

Poultice of roots and leaves of common mallow. Emollient.

Julep violat.

Julep of violets. Mixture of sugar and distilled violets. Febrifuge.

Syr. de sena.

Syrup of leaves of Cassia senna. Purgative.

Syr. de fumar.

Syrup of the herb Common Fumitory. Used in "diseases of the spleen"<sup>24</sup>

The Prior of Toulouse, of the Langue of Provence, Horace de Blacas d'Aups was another client of Meisonat at the time of his demise on the 9 September 1666. He had been supplied with a number of drugs among which were:-

Aqua fortis

Nitric acid. Used as a "resolvent".

Amareni cordial.

Heart tonic made from bitter tasting herbs.

Epitema pro hepatis

Fomentation for the liver.

Aqua cuscute.

Water prepared from the plant *Cuscuta major*. Taken "to purify the blood"<sup>25</sup>.

On the 17 October 1676, Meisonat drew up the following request, expressed in the formal wording of the time (translated from the original Italian):- "Antonio Meisonat, most humble servant of your Illustrious Sirs, petitioning with profound reverence, submits that he is the creditor of the late Knight Francesco Pecci for the amount of three scudi and eight tari, being the cost of medicaments supplied to him during his last illness as certified by his physician Dr. Del Cosso and as assessed by the Protomedico Dr (Gio. Domenico) Xeberras. He, therefore, petitions that Your Illustrious Sirs be pleased to accord him the said amount from the spoils of the said Knight for which favour he would be most grateful".

This plea was addressed to the Treasury Council, the Auditors of Accounts and the Commissioners of the Spoils. Having satisfied themselves that the drugs were prescribed for, and actually taken by Fra Francesco Pecci, the Commissioners approved the request for payment.

The following items appear in the bill:-

Lapid. Belzuar. or.

Oriental bezoar stone. The bezoar stone was a concretion found in the stomach of certain animals. It was prescribed as a sudorific and hence as a means of getting rid, by the sweat, of the poisons that enter the human body.

Pulv. preser. contr. infest.

Powder for preservation from infection. What were the ingredients? It is known that "theriaca" and scordium (the herb *Teucrium scordium*) were taken internally in Malta during the plague of Dec. 1675 to September 1676<sup>26</sup>.

Conto de medicamenti che prese il fu sig. Caualier Capitano 112.  
 la Carta lib. mag. 1662

Rx olei sesamini libior ana ℥ij mellis rosati ℥ij dia Cassie  
 edia Catoliconis chiere pigre an ℥ij decocti quatuor an  
 dinor et erbas emolientium q.s. f. chister. ℥ij

Rx meng<sup>ti</sup> rosati refri<sup>ti</sup> galeni e sandalini an ℥ij

Rx olei amigdal dul<sup>ci</sup> f. fomentu anodinū dupli<sup>cat</sup> an ℥ij  
 16 det. p portar son hui del vascali

Rx olei camomilla ℥ij anodinor an ℥ij

Flos rosar rub in Completar mund sine pediculis ℥ij

Rx dia Catoliconis ℥ij dia ptericon ℥ij

dia Cassie e chiere pigre an ℥ij

Rx q<sup>ue</sup> erbas emolientu siccis ℥ij

Rx olei samomiba Saretini ℥ij

Rx mellis rosati e uolati ana ℥ij

Rx olei amigdal dul e sesamini an ℥ij

Rx menguenti cres<sup>ti</sup> galeni an ℥ij

f. d. m. ha ceringace li sopra sentti chister calidi semini  
 f. vasi p mettere le sopra sentti ℥ij 2. w

Cap. lib. 1665.

Segl dia in tutte sandi cinque an ℥ij 5. r.

il  
 Calbi

List of medicaments obtained by the Knight  
 Capitano la Carta from the pharmacist Pietro  
 Meisonat on the 16 May 1662 (Courtesy Cathed-  
 ral Museum, Mdina. Spogli 17A, f.112 (178)).

### Syr. de limon

Syrup of lemon. To promote urination.  
Corn. cerv.

*Stag's or hart's horn. It was boiled in water or calcined or formed into gelatine. In the form of a syrup it was recommended in epilepsy apoplexy and paralysis*<sup>27</sup>.

### Epilogue

According to the records here studied, none of the ten pharmacists met with, over a period of more than a century, were celebrities or pioneers in shaping the destiny of their profession in Malta. The view we get of them is rather narrow as it merely shows them as a set of men (a) clinging to the routine round of dispensing drugs against the backcloth of contemporary pharmaceutical practice in Europe; and (b) intent in obtaining from their rich clients the financial rewards for their labours. The dossiers merely record cold facts and do not afford us the opportunity of coming face to face with these pharmacists as living personalities.

The same may be said of their customers although in the latter's case we can hazard a guess as to the kind of diseases from which they suffered from a consideration of the materia medica – long obsolete – dispensed for them. There are indications, for instance, that one of the common ailments of these aristocratic clients was constipation having regard to the frequency with which purgatives and laxatives were prescribed; that the fear of poisoning often haunted them judging from the variety of medicaments with which they were supplied – such as Theriaca, Oil of Scorpions, Terra Sigillata and Bezoar Stones – all of which were meant to ward off the effects of poisons; that the pathology of the urinary system – in the form of renal colic, bladder stones and difficulty of micturition (from enlarged prostate?) – also played a dominant role. Less prominent seem to have been such episodes as cardiac pain, dysentery, ulcers and inflammatory conditions which called,

respectively, for the dispensing of fomentations for the heart, astringents, digestive ointments and anodyne poultices for the relief of pain from inflamed parts.

The pathological concepts of the seventeenth century pharmacist, as those of his contemporary physician and surgeon, were certainly inadequate as they followed the ancient humoral theory according to which disease was the result of disturbances or imbalance of the "humours" of the body – a belief that harked back to the time of Hippocrates (460-377 BC). The overall impression, however, is that our pharmacists were held in high esteem by the community which they served, that they gave scrupulous and dependable service and that they were always at hand when their professional help was needed in spite of the absence of many scientific and technical aids which to-day are accepted as routinely as if they were always available to the profession.

### References

1. Galea, J. (1988) An inventory of the Manuscript Volumes of the Spoils 1549-1772, Preserved in the Archives of the Cathedral Museum, Mdina, Malta, Introduction.
2. Cassar, P. (1976) Inventory of a Sixteenth Century Pharmacy in Malta, The St. Luke's Hosp. Gazette, Vol. XI, pp. 26-34.  
Cassar, P. (1967) Importation of the Drugs and Equipment for the Pharmacy of the Holy Infirmary of Valletta in the Eighteenth Century, Jour. of the Malta Union of Pharmacists, Vol. I, pp. 19-31.  
Cassar, P. (1970) Drugs for the Holy Infirmary, The Bureaucrat, Sept. pp. 33-36.  
Cassar, P. (1965) Medical History of Malta, London, pp.497-512.  
Cassar, P. (1974) A Note on the Economics of Medical Practice in Eighteenth Century Malta, The St. Luke's Hosp. Gazette, Vol. IX, pp.166-172.
3. Laferla, A.V. (1939) The Story of Man in Malta, Vol. I, Malta, pp.92-95.
4. Spogli A 1, fol. 17t-19.
5. Winkelmann, J.P. (1966) Catholic Pharmacy, no place of publication, p.56.
6. Cassar, P. (1965) Medical History of Malta, London, p.506.  
Dannenfeldt, K.H. (1984) The

Introduction of a New Sixteenth Century Drug Terra Silesiaca, Medical History, Vol. 28, p.174.

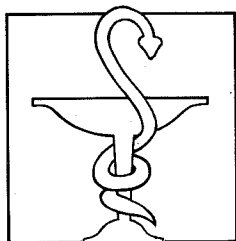
Stilon, A. Alcuni nostri amuleti. Archivum Melitense, Vol. VII, p.103 (no date).

Anon. (1932) A Mediaeval Poison Cup made from the Terra Sigillata of Malta, The Daily Malta Chronicle, 18 January  
Thompson, C.J.S. (1932) A Mediaeval Poison Cup made from the Terra Sigillata of Malta, The British Medical Journal, 9 January pp.73-74.

7. Spogli A 16, fols. 81-3.
8. One scudo would correspond to about 8 cents and one tari to about 6 mils in to-day's currency.
9. Spogli A 17, fol. 55.
10. Spogli A 17, fol. 365.
11. Spogli A 16, fols. 101-102.
12. Spogli A 16, fol. 343.
13. Spogli A 16, fols. 455-459.
14. Spogli A 17, fols. 158-60 & 237.
15. Spogli A 22, fol. 26
16. Spogli B 11, fols. 13-14.
17. Spogli B 11, fols. 104-6.
18. Spogli A 17, fols. 201-4.
19. Spogli A 17, fols. 315-8.
20. Spogli B 11, fol. 110
21. Spogli B 11, fol. 298.
22. Spogli A 17, fol. 177.
23. Spogli A 16, fols. 397-8.
24. Spogli A 17, fols. 163-5.
25. Spogli A 17, fol. 488.
26. Cassar, P. (1965) Medical History of Malta, (London) p174.
27. Cassar, P. Two Centuries of Medical Prescribing etc. pp.105-12.  
Spogli A 22, fols. 17-8.

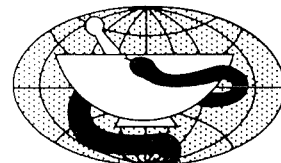
### Materia Medica Bibliography

- Baume, A. (1780) Elementi di farmacia, (Venezia).  
Boussel, P. (1949) Histoire illustree de la pharmacie, (Paris).  
Donzelli, G. (1743) Teatro farmaceutico, (Venezia).  
Drey, R.E.A. (1978) Apothecary Jars, (London).  
Farigiani, L. (1769) Taxa recens pretii omnium pharmacorum, (Malta).  
Lemery, N. (1737) Dizionario ovvero trattato universale delle droghe semplici, (Venezia).  
Zwelfer, J. (1775) Animadversiones in pharmacopoeiam augustinam, (Nuremberg).  
Zwelfer, J. (1775) Pharmacopeia regia, (Nuremberg).



# CONGRESS 1989

*Mary Anne Ciappara B.Pharm.*



Congress 1989, held on Sunday 30th April 1989 at the Aula Magna, Foundation for International Studies, University of Malta was organized by the Malta Chamber of Pharmacists and the Commonwealth Pharmaceutical Association (CPA).

It formed part of the Pharmacy Week held on the occasion of the holding of the Executive Committee meeting of CPA in Malta.

It incorporated the official opening of the Executive Committee Meeting together with two seminars entitled "Professional Services and Control in Community Pharmacy" and "Health Education, Lifestyle and Pharmacy".

The congress was a major event. It highlighted that:

1. Pharmacy is a profession rightly controlled by legislation and by professional codes of practice, the effective enforcement of which will safeguard public interest.
2. The Pharmacist is not just dispensing medicines but he is also dispensing advice on the medication and educating the members of the community on matters of healthcare.
3. The Pharmacist is an important member of the healthcare team.

The Congress was attended by the President and delegates, CPA the President and Council, Malta Chamber of Pharmacist, the Secretary and Registrar, Royal Pharmaceutical Society of Great Britain, the Deputy Prime Minister, the Chief Government Medical Officer, the Deputy Chief Government Medical Officer, Head, Pharmacy Department, University of Malta, members of the Malta Chamber of Pharmacists other Healthcare Professionals, and students.



*Rev. Prof. Peter Serracino Inglott, Pro. Rector, University of Malta officially opening the Congress. (left to right) Rev. Prof. P. Serracino Inglott, Mrs M.A. Sant Fournier, Mr A. Scales, Mr A. Howells*

## Official Opening

In her welcome address, the President of the Malta Chamber of Pharmacists, Mrs Mary Ann Sant Fournier, made reference to the historic building, the newly refurbished Aula Magna, where the Congress was being held, where in 1769, the Malta University in the academic sense of the word was established. The academic study of Pharmacy dates back even further, for it is probable that it began at the Holy Infirmary in 1676 when the School of Anatomy and Surgery was founded. In 1729, the first regulations for the running of a School of Pharmacy were enacted. Subsequently advances in medicinal and pharmaceutical knowledge brought about various legal enactments. By 1900 Chapter IV of the Second Sanitary Ordinance regulated the practice of pharmacy in Malta. In the

same year, the Malta Chamber of Pharmacists was founded to safeguard the prestige of the profession and ensure the ethical behaviour of Maltese Pharmacists. Today these same principals are enshrined in the statute of the National Association. The Chamber has always led the profession in its quest for excellent pharmacy education and professional practice. It is a member of CPA with which it has had close links since that exploratory founding conference held in London in 1969.

Mrs Sant Fournier continued by saying that the titles of the two seminars were carefully chosen to reflect areas of concern and progress and trusted that through the seminars there would be a greater awareness, indeed a reevaluation of the pharmacy profession in Malta by all concerned.



*The Council, Malta Chamber of Pharmacists, the Executive Council, CPA with the President of Malta, H.E. Dr V. Tabone and Mrs Tabone at their residence, San Anton Palace.*

Mr Alfred Scales, President, Commonwealth Pharmaceutical Association in his address spoke about CPA, which during these twenty years has been organised into an effective mechanism for promotion of better health care through the rational use of medicines and the appropriate use of the pharmacists manpower within the 37 member countries.

One of the stated goals of CPA is to provide assistance to any member country in developing a strong national association. Such association needs to be involved in both the licensing of pharmacists and in the on going registration and re-licensing procedures. In order to do this, to be a self disciplinary body, needs the full support of the national government in that country. He concluded by saying that "We are encouraging each member country to seek such a status, and to try to show governments that such legislation is in the best interests of its health service and its people. Legislation of itself is good and necessary but the enforcement of good legislation is also of the highest priority.

The congress was declared open by Reverend Professor Peter Serracino Inglott, Pro Rector, University of Malta. Prof. Serracino Inglott, a philosopher by profession, referred to the prototype of the Western Philosopher Socrates, who pictured himself as the administrator of Pharmako, drugs, that is substances which could be either medicine or poison, beneficent or maleficent, but in either case fascinating, full of charm with cryptic powers, the ambivalence of which could not entirely yield to analysis. Socrates considered writing and his own oral teaching as a form of drug useful as a cure for an ill. Socrates' view of his role as pharmakeus, of the philosopher as a spiritual pharmacist, culminates of course in his drinking of the drug with which he was condemned to put himself to death regarding it as a liberation from imprisonment in the disease-prone human bodily condition.

Prof. Serracino Inglott continued by saying that whereas the Socratic or Platonic view of education is complex, controversial and contestable, the view of healthcare in

general and of pharmacy in particular which is used as its model has an astonishingly modern air about it. It chimes with the emphasis on self responsibility for one's own health, with the Pharmacist as one of a team of scientific advisors to assist with rational counsel against distortion of the processes of natural growth, as much as with material aids for redress, in as much as possible when the distortion occurs. It is also in harmony with the emphasis on quality control of the delivery of drug services and their recognition as evils which are necessary to cure worse evils.

In a similar vein Prof. Serracino Inglott concluded by wishing CPA and the Chamber success in their efforts aimed at bettering the therapeutic, or sanitary use of the poisons that are their bread and butter.

Mr Albert Howells, Founder President, Commonwealth Pharmaceutical Association, thanked the Rev. Prof. Serracino Inglott for opening the Congress and the Malta Chamber of Pharmacists for inviting the Commonwealth Pharmaceutical Association to host this important executive meeting.

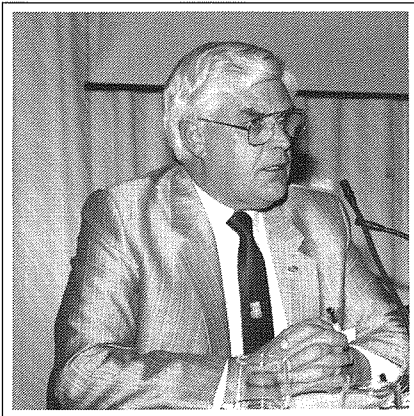
Mr Howells expressed his pleasure in once again being in Malta, an island rich in culture and history as is evident in the historic building where the Congress was being held and the Cathedral Museum of Mdina which was the venue of the welcome reception and the inauguration of the 'Pharmacists in Art' Exhibition. As founder President of CPA, it is the third time that he had experienced the warm and friendly hospitality of the Maltese Pharmacists.

When referring to the two joint seminars he said that it would give an opportunity for members of the executive committee to join together and help colleagues in Malta to make a fresh and, hopefully, successful advance with some long standing problems.

## Professional Services and Control in Community Pharmacy

The morning seminar "Professional Services and Control in Community Pharmacy" was chaired by Mrs Mary Ann Sant Fournier, BPharm, MPhil, President, Malta Chamber of Pharmacists and Mr Raymond Dickinson, FRPharmS, MCPP, Secretary, CPA was rapporteur.

Three presentations were made, each of which focused on a particular aspect of the theme.



Mr B. Tidswell

Mr Brian Tidswell, FPS, JP, MIPharmM, Council Member CPA (New Zealand), CPA Pacific Region Representative, a community pharmacist, spoke on the 'Modern Community Pharmacist' and referred to the services a pharmacist gives with a particular reference to the situation in New Zealand.

Mr John Ferguson, FRPharmS, FPS (New Zealand), JP, Secretary and Registrar of the Royal Pharmaceutical Society of Great Britain, spoke on the general trend for the future of legislation governing the context of Pharmacy. The current situation of Maltese community pharmacy practice and the problems being faced were highlighted by Mrs Patricia Mintoff, BPharm, a community pharmacist, member of the Malta Chamber of Pharmacists. A lively discussion followed the presentations.



The afternoon session (left to right) Dr G. Galea, Prof A. Serracino Inglott, Ms M.A. Ciappara, Mr A. Scales, Mr J. Grech and Mr M. Sesay.



Dr Banerjee, Immediate Past President, CPA making an intervention from the floor.

## Health Education, Lifestyles and Pharmacy

The afternoon seminar 'Health Education, Lifestyles and Pharmacy' was chaired by Mr Alfred Scales, BPharm, President, Commonwealth Pharmaceutical Association and the rapporteur for this session was Ms Mary Anne Ciappara, BPharm, Secretary, Malta Chamber of Pharmacists.

A general overview of Health, Education, Lifestyle and Pharmacy

with particular reference to lifestyles was presented by Prof. Anthony Serracino Inglott, BPharm, Pharm, Head, Department of Pharmacy, University of Malta.

Mr Josef Grech, BPharm, a young Maltese Pharmacist, spoke on the important role the pharmacist has as a Health Educator in the Community. A broader view of what the pharmacist is doing in different countries in matters relating to Health Education was presented by



*Mr Raymond Dickinson, CPA Secretary, CPA presenting the Statement of principles on Professional Services and control in Community pharmacy (third from left) the Hon. Dr L. Galea, Minister for Social Policy.*

Mr Murtada Sesay, BPharm, Council member, CPA (Sierra Leone), representative of East Africa Region. Dr Gauden Galea, MD, MSc, Head, Health Education Unit, Department of Health (Malta), spoke on the efforts being done by the Health Department and on the ways by which the Pharmacist can give a valuable contribution. The presentations were followed by a short discussion.

### Concluding Session

The statements of Principles on (1) Professional Services and Control in Community Pharmacy, and (2) Health Education, Lifestyles and Pharmacy, based on the discussion at the morning and afternoon sessions respectively, were presented by the rapporteurs, Mr Raymond Dickinson and Ms Mary Anne Ciappara and were approved by the Congress. These are published on pages 39-41.

The Hon. Dr. Louis Galea, Minister for Social Policy brought the congress to a close. He said that the discussions of the congress clearly indicated that Pharmacists strove to identify new roles as well as develop their professional services in order to keep up with the changing times.

The minister said that at that time, his Ministry is evaluating the pharmaceutical services with the objective of ushering in a qualitative reform. The pharmacist-patient relationship is of extreme relevance and centred to the Government's strategy in its implementation of the 'Health for All' programme being promoted by the World Health Organisation.

His Ministry was also examining the Reports on Distribution of Health Service Medicines through Community Pharmacists, submitted by the Chamber in 1988 and the Report of the Free Drugs Scheme Working Committee submitted a few weeks back, so that measures will be worked out to provide new structures and a much better drug acquisition and drug distribution system. He remarked that the present system leaves much to be desired by way of the personalized service which is so appropriate and needed in a welfare society. The Government was considering to establish a list of the medicines which are essential to Maltese Society and gradually make it possible for patients to obtain their free medicines from a private pharmacy of one's choice.

The Minister when referring to the Pharmacy Board, reiterated the

government's policy to give a more meaningful role to professionals in the governance of matters related to their profession whilst ensuring better safeguards for the general public's right and interests. Headed that following the discussions with the Chamber, the Ministry would be in a position to present the necessary amendments to the laws in Parliament.

When referring to the theme of the second seminar Dr Galea said that his Ministry was attaching great importance to the significant of lifestyle of a health society. The Pharmacist in the Community has played a role in this activity in the past and would no doubt continue to do so in accordance with the needs of the present and those of the foreseeable future.

The Minister concluded by stating his belief that this role should be undertaken in the context of an integrated health team where the pharmacist is accorded the due professional status. This role is complementary and linked to the traditional image of the community pharmacist as a dispenser of medicines and to a lifestyle compatible with professional integrity and honesty.

*The main sponsors for the congress who also put up a stand were*  
Joseph Cassar Ltd.  
3M Health Care Ltd  
Stafford Miller Ltd  
Messrs Charles de Giorgio Ltd  
A M Mangion Ltd.

*Others who have also contributed to the successful organisation of this congress are:*  
Air Malta Ltd  
Joseph Cassar Ltd  
Chemimart Group of Companies  
A Gera & Sons Ltd  
Pharmacos Ltd  
V J Salomone Ltd  
A & V von Brockdorff Ltd.





## PROFESSIONAL SERVICE AND CONTROL IN COMMUNITY PHARMACY

*Statement on Principles*

*April 30, 1989*

### Introduction

The first part of this statement summarises the several aspects of the professional service provided by community pharmacists. This is followed by a statement of the principles which should be the basis for the control of the distribution of medicines and of community pharmacies.

### The professional service in community pharmacy

The pharmacist is the pharmaceutical scientist and health professional who is concerned principally with the preparation, control, supply and use of medicines.

The undergraduate education and professional training of the pharmacist deals with the chemical, physical and pharmacological aspects of drugs and medicines, and with the application of these pharmaceutical sciences in the use of medicines in health care, in the potential misuse or abuse of drugs, in the treatment of minor illness and in the provision of advice to the health professionals and the general public.

The modern community pharmacist is the most accessible health professional.

The community pharmacy professional service comprises:

1. the safe and efficient supply of medicines of optimal quality
  - a. on request by the patient and subject to the pharmacist's professional discretion;
  - b. on the advice of the pharmacist in response to the description of one or more symptoms by the patient;
  - c. following, if necessary, clarification of any aspect of the prescription with the prescriber.
2. Advice to the general public associated with the supply of medicines.
3. Advice to other health professions
  - a. on the rational, cost effective use of medicines (of crucial importance in Government Health Services);
  - b. on adverse reactions to medicines (to the medical profession);
  - c. on the storage and administration of medicines (to the nursing profession).
4. Healthcare advice to the public, in the form of
  - a. recommendation to seek medical service – in the case of certain described symptoms;
  - b. advice to change aspects of lifestyle – in relation to other described symptoms;
  - c. advice on general health matters – health promotion and illness prevention.
5. Advice on the use of medicines in residential homes (particularly in homes for the elderly and mentally confused, hospices and children's homes)
  - a. on the storage and stability of medicines;
  - b. on safe methods of administration of medicines.
6. The supply of health related products, including
  - a. surgical materials and appliances;
  - b. infant foods;
  - c. health foods.
7. The provision of health related services, including
  - a. diagnostic testing including blood pressure measurement, urine testing, determination of cholesterol levels;
  - b. pregnancy testing.

### Control of the distribution of medicines

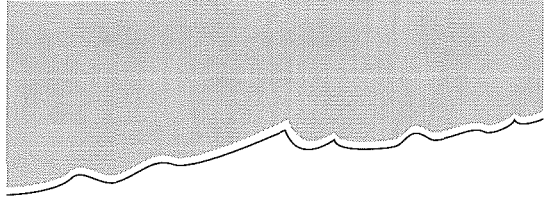
Medicines are not ordinary items of commerce and therefore require special control arrangements for their distribution.

The legislation on the distribution of medicines should require that all medicines should normally be supplied to the general public from registered pharmacies.

This fundamental principle for the distribution of medicines is based on the following main reasons

- a. only pharmacists have the necessary professional expertise to ensure the proper storage and stability of medicines;
- b. only pharmacists are required to maintain high standards of professional conduct, in excess of minimum legal requirements, in the promotion and supply of medicines;
- c. when there is an urgent need to withdraw a particular medicine from distribution channels, community pharmacists are registered (or licensed) and therefore immediately identifiable, and the recipient of any such communication, i.e. the pharmacist, has the professional expertise to appreciate its significance and to take the necessary action immediately – thereby safeguarding the public interest.

Any alternative arrangement for the distribution of a limited range of simple medicines should be an exception to this principle and



should involve community pharmacists in the control of such arrangements.

Certain medicines should only be supplied by pharmacists on the prescription of a registered medical or dental practitioner - "prescription only medicines" (POM).

Whenever possible, appropriate medicines in that category should be made available for supply at the professional discretion of the community pharmacist, on condition that each supply is made personally to the client by the pharmacist, and each transaction is appropriately recorded in the pharmacy. To enable the community pharmacist to deal effectively with the treatment of minor ailments the POM category should be continually reviewed.

The regulation of the supply of medicines on prescription should be based on the principle that diagnosis and prescribing should be undertaken by the professions with the relevant expertise, i.e. medical and dental practitioners, and that dispensing should be undertaken by pharmacists because of their special expertise. The patient's best interests are safeguarded when all of the relevant professions are involved in the diagnosis, prescribing and dispensing services.

### **Control of community pharmacies**

The first major principle is that all community pharmacies should be controlled by pharmacists.

The most effective method of implementing this principle is to require each pharmacy to be owned by a pharmacist or a partnership of pharmacists thereby excluding any non-professional commercial influence on the control of the pharmacy.

If the company ownership of pharmacies is permitted it must be under requirements that place

professional decision making in the hands of pharmacists, i.e. for each pharmacy there must be a pharmacist with a legally established position of control. Additionally, the company must be subject to the codes of ethical conduct and practice of the pharmacy profession.

Any arrangement for the ownership of the pharmacy by persons other than pharmacists or by companies, without any legally established position of control by pharmacists, is totally unacceptable. The only way to attain this is to make it compulsory for such companies to place the majority shareholding in the hands of pharmacists.

The second major principle for the control of community pharmacies is that the standards of pharmacy premises should be controlled by law or by effective professional codes of practice.

### **Enforcement of legislation and professional codes**

The enforcement of legal and professional codes must be effective and there must therefore be a commitment to effective enforcement by the Government and by the profession respectively.

The public interest will not be safeguarded by legislation or standards of professional conduct unless steps are taken to ensure compliance by pharmacists and anyone else concerned with the supply of medicines.

The arrangements for enforcement should therefore include:

- a. effective registration procedures for pharmacists and pharmacies;
- b. a strong and effective inspectorate comprising pharmacists with experience of community pharmacy, and responsible to the Government or, by delegated authority, to the appropriate pharmaceutical professional body;

- c. subject to appropriate safeguards for the public interest, a majority of pharmacists on the body responsible for registration and discipline within pharmacy;
- d. the appointment of pharmacists to relevant senior Government positions, and the involvement of such pharmacists in the development of all policies related to medicines.

# HEALTH EDUCATION, LIFESTYLE AND PHARMACY

*Statement of Principles*

*April 30, 1989*

## Introduction

The role of the pharmacist in community health care is of considerable importance particularly in the light of the present concept of 'self-care'. The increasing demands for health education and preventive medicine could be met in some ways by the pharmacist.

Community pharmacists are unique among health professionals in being so readily accessible to the general public. The strategic position in the community and the familiar association of the pharmacy with medical matters enables the pharmacist to render a valuable service to the community in connection with health education.

### 1. Education

The community pharmacist has an increasing role in providing advice and information on health matters to the community.

For the pharmacist to exercise this role, the necessity for effective communication is becoming increasingly important.

Education and training of pharmacists is being restructured and more emphasis given to behavioural sciences.

### 2. Informality

Most of the common causes of ill health are related to lifestyles. The familiar environment of the community pharmacy is conducive to the identification of faulty lifestyles which require improvement.

While the environment of the pharmacy should be suitably professional, the pharmacist has to be careful not to undermine the informal atmosphere of the pharmacy which is his strength.

### 3. Layout of the Pharmacy

The operation of the pharmacy

must not be distracting. The layout of the pharmacy must be such as to allow for better communication between the pharmacist and the patient/client and to include a discreet area for patient/client consultation.

### 4. Distribution of Leaflets

Community pharmacies can serve as distribution centres for health promotion leaflets and material. These should be located in places where they can easily be seen and from where the pharmacist can be able to give added verbal information and encouragement.

The use of a rack for displaying leaflets is beneficial for self selection.

Cooperation between pharmacy and health education authorities in the dissemination of healthcare literature should be encouraged.

### 5. Educational Guides for Pharmacists

A number of Maltese pharmacy students have in recent years carried out research projects in pharmacy practice on various aspects of health education. This is recognised for the development of community pharmacy. Some have designed leaflets as an educational guide for pharmacists on topics such as 'Smoking in Pregnancy' and 'Breast Cancer'. While further educational guides should be prepared it is important that they should be accessible to all pharmacists.

### 6. Continuing Education

Participation in continuing education programmes assures competence and reliability of the services the pharmacist gives. Continuing education pro-

grammes must be relevant to the needs in practice. The preparation for a career and lifelong education must begin while the student is at university. Professional inertia must be avoided, otherwise pharmacists will tend to lose their professional identity, their skills and services, and become obsolete.

### 7. Education Programmes and Campaign

Pharmacists should be involved, wherever and whenever possible, in education programmes designed to improve the quality of life of the public.

Opportunities must be provided by the Health Department for professional involvement of pharmacists in health education campaigns e.g. in immunisation, nutrition, AIDS prevention, and diabetes.

Campaigns in the media directed to 'Ask Your Pharmacist for Advice' have been shown to be successful and have educated and encouraged the public to look to the pharmacist as a source of information and advice.

These campaigns also identify the pharmaceutical sources as a strong and well organised professional organisation.

### 8. Collaboration with other Healthcare Professionals

Other professionals, government and non-government organisations are also interested in health education. It is therefore of equal importance for pharmaceutical associations to collaborate with other healthcare professionals who are themselves engaged in giving health advice.

### 9. Remuneration

In a number of countries this is linked to the volume and turnover of prescriptions rather than to the pharmacist's contribution to healthcare as a whole. Some form of remuneration in this latter area is necessary to allow for this service.



## THE COMMONWEALTH PHARMACEUTICAL ASSOCIATION

The Commonwealth Pharmaceutical Association (CPA) is a body representing the interests of the profession of pharmacy throughout the Commonwealth and in certain dependent territories. It is one of a number of Commonwealth professional associations founded as a result of the Commonwealth Prime Ministers' Meeting in 1965.

The Constitution of the Commonwealth Pharmaceutical Association (CPA) was agreed at a meeting held in London in 1969 and has remained substantially unchanged.

Full membership is open to any society or association which is representative of all pharmacists in a Commonwealth country. Each country nominates a member to the Council of the Association, all members having an equal vote. The Malta Chamber of Pharmacists is a founder member of CPA and is represented by Mr Eric Zammit, B.Pharm.

Countries were grouped into five regions: Africa, Americas, Asia, Europe and Pacific, each with a regional representative elected from Council members. The regional representative, together with the officers, constitute an Executive Committee which meets between full meetings of the Council. The last executive meeting was held in Malta in 1989. In 1980 the Africa Region was divided into two: East Africa and West Africa.

### Objectives

The Association's principal aims are to promote liaison between Commonwealth Pharmacists, to foster high standards of professional conduct, pharmaceutical education and practice, and also a high standard of control of the quality and distribution of drugs and

medicines, both by professional means and appropriate legislation. The Council of the Association works towards fulfilling these objectives through meetings of the Council and the Executive Committee, the five yearly Commonwealth Conferences, Regional Workshops, the most recent one, being on 'Pharmacy in the European Community' held in Malta.

The Association works closely with the Commonwealth Secretariat Health Programme, and has 'official' relations with the World Health Organisation.

### Personal Membership

At its meeting in February 1972, the Council decided that the clause in the Constitution which permits the establishment of a class of Personal Members of the Association should be implemented. This means that any pharmacist who is registered

to practise in a Commonwealth country or independent territory can now become associated with CPA and its general objective of promoting pharmaceutical standards and liaison throughout the Commonwealth.

Conditions of Personal Membership are as follows:

1. Applications for Personal Membership shall be made to the Commonwealth Pharmaceutical Association. (Page 43)
2. Personal Members shall receive copies of the CPA newsletter and any other documents that the Council decide to circulate fully.
3. Personal Members may be allowed a small reduction in their application fee for attendance at CPA conferences. The next CPA conference is being held in Hamilton, Ontario, Canada from the 26th - 29th August 1991.



The fifth Commonwealth Pharmaceutical Conference entitled 'Common Health - Common Wealth' is being held in Hamilton, Ontario, Canada between the 25 - 29 August 1992.

It is being hosted by the Canadian Pharmaceutical Association in cooperation with the Hamilton and District Pharmacists' Association.

Themes to be discussed during the Plenary Sessions will be: Expiry Dates, Pharmacy Involvement in Health Care Cost Containment, Pharmacy and Pharmacy Health

Care, and Drug Abuse/Rehabilitation.

The plenary sessions on Pharmacy involvement on Health Care Cost Containment and Pharmacy and Primary Health Care will be followed by workshops during which all conference participants will work together to develop sets of resolutions on the two themes which will be presented during the final session.

Further information can be obtained from: Mr Eric Zammit B.Pharm. Tel. No. 487020

## COMMONWEALTH PHARMACEUTICAL ASSOCIATION

### Personal Membership Application Form

BLOCK CAPITALS THROUGHOUT

FULL NAME .....

(Dr, Mr, Mrs or Miss)

ADDRESS .....

.....

.....

.....

.....

.....

QUALIFICATIONS .....

REGISTERED AS A PHARMACIST TO PRACTICE IN .....

(Name of Country/ies)

PRESENT OCCUPATION .....

(please give date of commencement)

Previous Occupation .....

(please give dates)

I wish to apply for Personal Membership of the Commonwealth Pharmaceutical Association.

I am enclosing £10 for my annual subscription.

(Cheques can be made payable to the Commonwealth Pharmaceutical Association)

I will be prepared to give advice to CPA on matters within my experience in Pharmacy.

Signed .....

Date .....

Please return to:  
The Secretary  
The Commonwealth  
Pharmaceutical Association  
1 Lambeth High Street  
London SE1 7JN  
England

# EUBOS® - solid and liquid

## The facts:

### Skin washing problems

1. All soaps have an alkaline pH; there are no alkaline soaps.
2. Alkali solutions cause dermal swelling; that is water accumulates in the skin.
3. Dermal swelling often obstructs or blocks the openings of the follicles.
4. Dirt, dust, sweat and the residues of cremes cannot be completely washed away.
5. An ideal breeding ground is formed for fungi and bacteria.



## The remedy:

### Instead of soap: EUBOS®

1. EUBOS is a mild soap-substitute that cleanses pore-deep.
2. EUBOS is alkali and soap-free.
3. EUBOS is neutral with a pH of 7.
4. EUBOS has a dermatologically harmless perfume.
5. EUBOS is rich in oil-replenishing creme.

Distributors for Malta

The  
**Chemimart**  
Group of Companies

Chemico Buildings  
Valley Road, Birkirkara. Tel: 492212/3/4

Dr. Hobein & Co. GmbH-Medical products-W. Germany



## The new generation of lipid reducers: **Lipo-Merz® and Lipo-Merz® retard**

The monosubstance Etofibrate (INN), active ingredient of Lipo-Merz® and Lipo-Merz® retard, is a product of Merz research. All pharmacological and clinical criteria have demonstrated the excellent effectiveness and good tolerance of Lipo-Merz® and Lipo-Merz® retard.

### **Etofibrate**

- reduces elevated total cholesterol and triglyceride levels significantly;
- has a favourable influence on the atherogenic index thus reducing the risk of atherosclerosis;
- reduces increased platelet aggregation;
- improves organ perfusion by reducing elevated plasma viscosity.

**Lipo-Merz®** for initial treatment. It is recommended to take 1 capsule 3 times daily.

**Lipo-Merz® retard** for long-term treatment. The administration of 1 capsule daily guarantees optimum patient compliance. Long-term treatment with Lipo-Merz® retard can be carried out with good tolerance and without loss of effectiveness.



Merz + Co. GmbH & Co. D-6000 Frankfurt/Main 1 Federal Republic of Germany  
 Agent: Joseph Cassar Ltd., 54, Melita Street, Valletta/Malta

## 36TH ANNUAL CONGRESS OF IPSF

*Claire Zerafa,  
Secretary*

Malta is hosting the 37th Annual Congress of the International Pharmacy Students' Federation (IPSF).

IPSF is an international students' body managed entirely by students, but is also affiliated to the International Pharmaceutical Federation (FIP).

IPSF, like FIP has its "home" in the Hague, the Netherlands. However, it has members from all over the world – such as Latin America, the United States and Canada, European countries, Russia and Africa.

IPSF has several goals, all of which it achieves admirably:

- a. it promotes a world-wide awareness of the problems that pharmacy as a profession is facing
- b. it promotes student exchanges amongst all countries which are members of the federation
- c. it emphasizes the necessity of patient counselling by community pharmacists, in order to promote the pharmacist as a necessary and vital member of the healthcare team.

All countries who are members of IPSF are in regular contact directly with the members of the Executive of IPSF, throughout the year. IPSF achieves this by the publication of various leaflets at regular 3-monthly intervals. In this way, all student bodies are informed of all that is going on in each individual member country. In order to achieve an even greater contact with its members, IPSF organises an annual congress.

Last year's congress was held in Vienna from the 8th to the 10th August. It was a well attended congress with 180 participating delegates from 37 different countries, among which were eight Maltese participants. The Maltese delegation



*The Maltese Delegation*

consisted of Miss Edith Agius, a new graduate, and co-chairperson of the reception committee that has been set up to supervise the hosting of this year's congress, Miss Claire Copperstone and Miss Claire Zerafa, respectively co-chairperson and secretary of the reception committee, both of whom are currently in their final year of their studies and Miss Angela Catania, Miss Josianne Magri Demajo, Miss Danielle Vassallo, Miss Karen Vella and Mr David Fenech who are in their third year. Miss Edith Agius and Miss Angela Catania were Malta's official delegates.

The Congress in Vienna was an event that involved both pharmacy-oriented and social activities.

*General Assemblies:* Here, an evaluation of the work carried out by IPSF during the past year was made. The official delegates from each country formally discussed problems, specific to their individual countries, as well as those being faced by IPSF. During the final general

assembly, there were general elections that saw the establishment of a New Executive which will remain in office till the coming congress. The new executive will be working very closely with the Reception Committee from Malta throughout this year in order to ensure that plans are being well made for the hosting of the next congress.

*The Symposium:* Last year's theme was "Primary and Preventive Healthcare in Modern Pharmacy". The day was divided into three presentations. After each of which there was time allotted for questions and discussions. Mr. Franz Winkler, the President of the Austrian National Pharmaceutical Association spoke about the organisational work that must be done by the pharmacist; Mr Hans Jakesz, a representative of the Austrian National Pharmacy Owners Association discussed the advisory functions of pharmacists, and finally Dr Christian Muller-Uri, a member of the pharmacy faculty in Vienna



## THE ROLE OF THE PHARMACIST IN THE HEALTH CARE SYSTEM

WHO issues report on  
*'The Role of the Pharmacist in the Health Care System'*

Two years have culminated in the publication by a WHO Consultative Group of a report entitled 'The Role of the Pharmacist in the Health Care System' which is intended to give a global view of the various roles Pharmacists take in the Health Care Services.

The World Health Organisation consultative group met in New Delhi at the WHO regional office for South-East Asia during December 1988

- to delineate the body of knowledge and expertise upon which the contribution of pharmacists to health care is based;
- to review the contributions of pharmacists to the acquisition, control, distribution and rational use of drugs, and other health-related functions of pharmacists;
- to formulate proposals regarding:
  - necessary developments in undergraduate, postgraduate and continuing education of pharmacists, and in the training of supportive staff;
  - action that is necessary to optimize the use of pharmacists in health care systems;
  - arrangements for monitoring the above developments and action.

Among the participants were representatives of organisations. These included Dr J.N. Banerjee and Mr R. Dickinson, past President and secretary respectively of the Commonwealth Pharmaceutical Association, Mr J. Martens, Secretary General, International Pharmaceutical Association (FIP) and Mr Yeap Boon Chye, International Federation of Pharmaceutical Manufacturers Association (IFPMA)

The introduction contained in this report is in essence a synopsis of the contents of the report and is being reproduced.

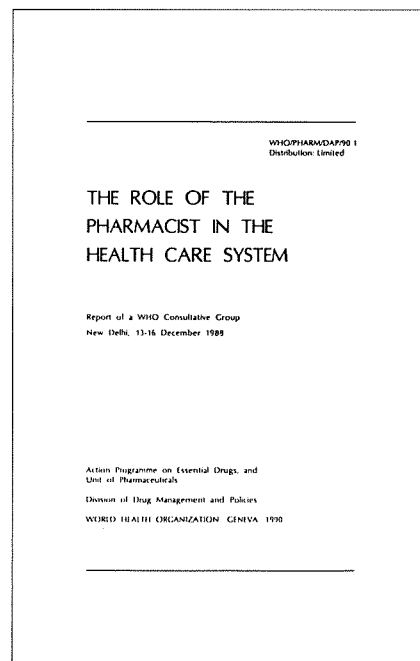
"The meeting was opened on behalf of Dr H. Nakajima, Director-General of the World Health Organization, by Dr U Ko Ko, Regional Director, WHO Regional Office for South-East Asia, who emphasized that efforts to rationalize health care, to establish priorities for allocation of resources and to upgrade the necessary institutional and other facilities, are without consequence wherever the delivery of services is frustrated by lack of an integrated infrastructure.

Nowhere is the need for this infrastructure more evident in the day-to-day management of patients than in the provision of essential drugs. Indeed, effective medicine can be practised only where there is efficient drug management. This is an axiom that applies with equal validity to both developed and developing countries. Yet, time and again, in less affluent settings, inadequacies in the provision of primary health care are attributable to shortcomings within the drug distribution chain. Only when the pharmacist has been accepted as a vital member of the health care team can the necessary supporting services be organized with the professionalism that they demand. In highly industrialized countries, acceptance of the need for professionalism in the supply and dispensing of drugs and health appliances has long since been indispensable because of the complexity of modern health care

technology. Recently, however, a striving for economy engendered by the ever burgeoning costs of health care within the public sector has lent much credence and immediacy to arguments that a redefinition of the role of the pharmacist could serve the interests of both individual patients and the public at large.

The day-to-day activities of the pharmacist in these two starkly different settings may appear, superficially, to be very different. But, everywhere, the call for pharmaceutical expertise is founded upon the same precepts. Pharmacists are uniquely qualified because:

- they understand the principles of quality assurance as they are applied to medicines;
- they appreciate the intricacies of the distribution chain and the principles of efficient stock-keeping and stock turnover;





- they are familiar with the pricing structures applied to medicinal products that obtain within the markets in which they operate;
- they are the custodians of much technical information on the products available on their domestic market;
- they are able to provide informed advice to patients with minor illnesses and often to those with more chronic conditions who are on established maintenance therapy;
- and not least, they provide an interface between the duties of prescribing and selling medicines and, in so doing, they dispose of any perceived or potential conflict of interest between these two functions.

This inventory of activities identifies the dispensing of medicines as the pivotal responsibility of the pharmaceutical services. This is, without question, destined to remain the case in virtually every national setting. However, the distinctive expertise of the pharmacist provides members of the profession with a suitable background to assume diverse responsibilities in both public administration and drug manufacture and supply. The competence of the pharmacist is already proven and evident:

- in the direction and administration of pharmaceutical services;
- in drug regulation and control;
- in the formulation and quality control of pharmaceutical products;
- in the inspection and assessment of drug manufacturing facilities;
- in the assurance of product quality throughout the distribution chain;
- in drug procurement agencies;
- and in national and institutional formulary committees.

In these activities, the pharmacist serves as a member of a multi disciplinary team rather than in an

autonomous capacity; but in any particular country the profession can only be an efficiently organized element of the health care system when it has gained representation within the senior ranks of administration in both government and industry, and when pharmaceutical education has become established at university level.

A voice in national administration is of vital importance from the outset since this not only promotes the potential of the profession and exerts influence upon training curricula and the academic standards required for registration - and for certification of ancillary staff - but also provides the best available assurance that policy considerations, including resource allocation, will be attuned meaningfully to national requirements.

Similarly, the pharmacist has indisputable functions at various levels in national drug registration and regulation. The responsibilities of the regulatory authority are to ensure that all products subject to its control conform to acceptable standards of quality, safety and efficacy; and that all premises and practices employed to manufacture, store and distribute these products comply with requirements to assure the continued conformity of the products to these standards, until such time as they are delivered to the end user. A small regulatory authority will rarely, if ever, undertake independent, comprehensive assessments of the safety and efficacy of individual products. In this case, the administrative and technical responsibilities that fall within its ambit are largely of a pharmaceutical nature and they are directed primarily to quality assurance.

In the last analysis, however, wherever pharmacy establishes its roots as a profession, it is within the health care institutions and in the community itself that pharmacists

will serve in greatest numbers and with the most immediate effect on patient welfare. Pharmacists' specialized knowledge of the management and properties of medicines in an increasingly sophisticated health care environment brings them closer to prescribing doctors as a source of independent information about therapeutic options and about the consequences - both positive and negative - of treatment. It also brings them closer to patients in the community as readily accessible dispensers not only of medicines but also of health-related information. Their basic training should aim to confer upon them competence to offer skilled advice on the treatment of minor illness and the adoption of healthy lifestyles, and it should endow them with the insight necessary to recognize when the best interests of the patient are served by prompt referral to a medical practitioner".

# Genticin Topicals



## FOR SKIN INFECTIONS

- Bactericidal action against a wide range of commonly occurring skin pathogens.
- Low incidence of sensitisation compared to neomycin based preparations.
- High clinical success rates in impetigo.
- Available with hydrocortisone for infected conditions where inflammation is also present.
- Available in both cream and ointment formulations.

Nicholas

Local Agents:

Associated Drug Co. Ltd. 168, St. Christopher Street, Valletta, Malta. Tel. No. 232175/6

# BREAST CANCER

*Graziella Sammut B.Pharm.,  
Community Pharmacist*

This is the first of the series of self assessment exercises to be published in 'The Pharmacist'. Each article in the series will cover a different topic of importance to pharmacy practice. The material on Breast Cancer has been prepared by Ms Graziella Sammut, B.Pharm., as a part of her undergraduate thesis.

Read the article and complete the self assessment questions.

If you wish to test your knowledge on the subject matter, you can attempt to answer the questions before you read the article. The answers are on page 55.

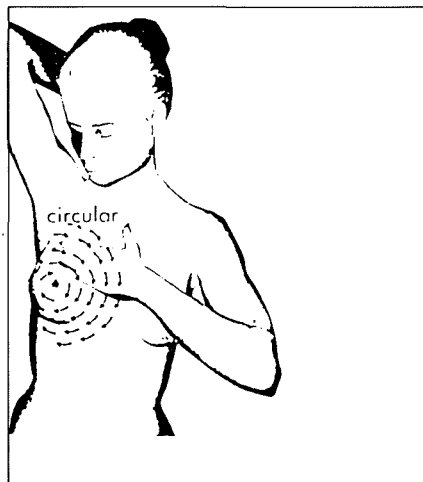
## *Self Assessment*

### **BREAST CANCER**

Which of these statements are true or false:

1. If a woman finds a lump in her breast it is usually too late to successful treatment.
2. Women who are in good health can still get breast cancer.
3. Mammograms can detect breast cancer before any symptoms are noticed.
4. The first symptoms of breast cancer is always a lump in the breast.
5. Women with large breasts are more likely to get breast cancer.
6. Men never get breast cancer.
7. BSE should be performed before menstruation.
8. During BSE, one must press quite hard to be able to feel any lumps in the breast.
9. Older women are more likely to get breast cancer than younger women.
10. Obesity and dietary fat have been associated with risk for breast cancer.

## **The Normal Breast**



The breast is made up of different parts including lobes (glandular milk-secreting tissue), milk ducts and a large amount of fat and supportive tissue. Some parts have a distinct shape and feel. Chest muscles and ribs are found beneath the breast.

Breast, like all body organs, are affected by normal life changes. The breasts are primarily under the influence of ovarian hormones:

during puberty, pregnancy, breast-feeding, each menstrual cycle and at menopause.

As a woman ages, fatty tissue replaces much of the glandular tissue.

Breast texture varies from woman to woman but also in the same woman from week to week and over the years. The size and shape of the breasts depend upon heredity and body weight and do not necessarily match each other.

## **What is Cancer?**

Cancer is a disease characterized by uncontrolled growth and spread of abnormal cells. Normally, the cells that make up all parts of the body reproduce themselves in an orderly manner so that growth occurs, worn out tissues are replaced and injuries repaired.

Occasionally, certain cells grow into a mass of tissue called tumour. Some tumours are benign; others are malignant.

Benign tumours may interfere

with body function and require surgical treatment, but they do not invade neighbouring tissue and seldom threaten life. However, malignant tumours invade and destroy normal tissue. By a process called metastasis, cells break away from a malignant tumour and spread through the blood and lymphatic systems to other parts of the body where they form new colonies of cancer.

Sometimes cancer grows and spreads rapidly; sometimes the process takes years.

## **What increases risk of breast cancer?**

Breast cancer is primarily a disease of women and every woman is at risk as she grows older. There is probably no single cause of the disease. Research has shown that several different factors working together appear to increase the risk of breast cancer. Because of genetic and lifestyle differences, some women are at greater risk than others.

Some of the factors that increase risk are:

- Increasing age.
- History of breast cancer in close family relatives - mother, sister, grandmother, aunt.
- Late age at menopause.
- Onset of menstruation before age 12.
- Older than 30 years at birth of first child.
- Never given birth.
- Obesity - 40% above the normal weight.

Breast cancer does not seem to be associated with hormone use, nor is it related to chemical pollution in the environment.

### What are the signs and symptoms of breast cancer?

A lump or thickening is the most frequent warning signal, but the first sign may be a discharge from the nipple. Other signs include scaliness of the skin, especially around the nipple, or any change of colour or texture of the skin.

A sudden or gradual change of any kind that is not related to the menstrual cycle may be significant.

Most women have some differences in the size or shape of their breasts so that important words to remember are "any change from what has always been the normal pattern".

Any kind of 'dimpling' or "puckering" of the skin may be an indication that something inside is pulling.

It is important that the pharmacist refers the client (complaining of breast symptoms), for immediate medical assessment.

The pharmacist should stress to the patient that:

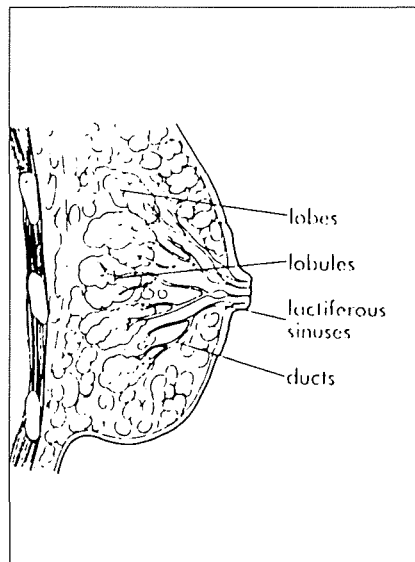
1. An immediate professional examination is of great importance
2. The patient should not continue to push, squeeze or irritate any suspicious area detected during

breast self-examination, until she sees the doctor.

3. 9 of every 10 "symptoms" which suggest a breast abnormality turn out to be harmless, but one should consult the doctor without delay. Most lumps are not cancerous, but only a doctor can tell if there is anything wrong.
4. If it is cancer, then the sooner treatment is started, the greater the possibility of a cure.

### Methods of early detection

1. Mammography. This is a very low dose X-ray of the breast which can show whether the breast is in some way abnormal. The test can sometimes be slightly uncomfortable as the breast needs to be flattened as much as possible against the X-ray plate, but the X-ray only takes a few seconds.
2. Clinical Breast Examination. During regular health check ups, every woman should have a clinical breast exam where the physician examines the breasts for lumps or thickenings, changes in contour or consistency, nipple abnormalities and enlarged lymph nodes in the armpit or neck.



3. Breast Self-Examination (BSE) This is safe and without cost to women who practice it. It has the potential for helping more women to find their breast cancer early, than any other method now available and feasible for widespread use.

The American Cancer Society recommends that all women over the age of 20 examine their breasts once a month. Breast self-examination (BSE) is encouraged because breast cancer symptoms can develop and be noticed between clinical breast exams or mammo-graphy.

BSE includes several important components:

- Regularity – examine at the same time each month.
- Complete coverage – examine all of the breast.
- Use of finger pads – press with top third of fingers.
- Adequate pressure – massage to feel deep breast tissue.

Sometimes the doctor will find a definite lump or other breast problem that needs investigation. If this occurs, the patient is referred to hospital and a biopsy is done. This is a surgical removal, for microscopic examination, of a piece of tissue from the suspected growth or, if small, the entire growth itself. The pathologist will then be able to say definitely whether it is benign or a cancer.

### Treatment of breast cancer

The many forms of treatment include surgery, radiotherapy, chemotherapy and hormone therapy used singly and/or in combination.

The approach to therapy mainly depends on the extent of disease when treatment is first started, that is whether it is local, the tumour being confined to the breast and its lymphatics, or disseminated, where distant metastases are present.

## Answers to Questions Patients Might Ask

Q. What are my chances of surviving if I get breast cancer?

A. Survival depends primarily on the stage of the disease at the time it is detected. If a non-palpable lump is found only by mammography before it is large enough to be felt, the cure rate is nearly 100%.

Q. Are women with very large breasts more likely to get breast cancer?

A. No. The size of the breast is not related to the development of breast cancer.

Q. Am I at increased risk for breast cancer if I have breast cysts?

A. Only a very small number of women with fibrocystic breasts have a slightly increased risk of developing breast cancer and

those women can be identified by a pathologist's microscopical examination of the breast tissue.

Q. If a breast lump is painful, is it more likely to be cancer?

A. As a breast cancer is developing in the breast, it usually does not cause pain. In the early stages of breast cancer, a woman usually is unaware of any symptoms.

Q. Is the "pill" carcinogenic?

A. Oral contraceptives have now been widely used for over 15 years. Carcinogenic effects have been looked for in many studies. The evidence so far is that use of the pill is not associated with an increased incidence of carcinoma, but carcinogens in man often have a very long latent period. It is still too early to be sure that no long-term effects of the "pill" will come to light.

Q. Is breast cancer preventable?

A. Due to insufficient knowledge, at present it is impossible to actually prevent breast cancer. It would seem sensible then to detect breast cancer at its earliest by proper detection methods.

## References

1. American Cancer Society. (1987) *Special Touch*.
2. American Cancer Society. (1978) *Facts about breast cancer*.
3. Kushner R. (1987) "If you've thought about breast cancer..." - Women's breast cancer advisory centre. - Maryland, U.S.A.
4. Women's Cancer Control Campaign. London. (1986) *Questions and answers fact sheet*.
5. Drugs and Therapeutic Bulletin, Volume 15, No. 13, (June 24, 1977) *Treatment of Breast carcinoma*.

## 36th Annual Congress of IPSF

cont. from pg. 45

explained the analytical procedures used in pharmacies in Austria.

This year, in Malta, the theme of the symposium shall be "The Cost-Effectiveness of Drug Therapy".

Workshops: Another day was devoted to workshops. Each delegate could attend only two of the six workshops. The topics discussed were:

- i. Nutrition
- ii. Aromatherapy
- iii. Mineral Water
- iv. Computers in the Pharmacy
- v. Patient counselling
- vi. IPSF ten years plan

The different cultures of the participants brought out the versatility of pharmacy as a profession.

*Patient Counselling Event:* This event is very much the baby of IPSF, and it has been held in Vienna last year for the second time. This was an event that was not in any way designed to test the participants' knowledge of pharmacology. On the contrary it evaluated the participants' ability to counsel patients. Each participant was given a prescription, and allowed 10 minutes during which he could consult reference books. Each participant was then video-taped as he, or she gave the patient the appropriate advice. A panel of evaluators later on watched the recordings and awarded each participant marks on department and professionalism in confronting the patient.

The Congress is an event that is by no means made up exclusively of the activities mentioned. It is an

opportunity for many young people of different cultures, backgrounds and nationalities to meet, exchange experiences and form friendships with pharmacy being a common denominator. I was in Vienna, last year, and I have returned to Malta far the richer from the experience. In Vienna, one member of the executive likened IPSF to a ship that must be steered along a specific course - I am sure that during this coming year, Malta will do its share to help it along.

*Appreciation***ODETTE GRECH BELANGER**

On July 4th, 1990 in Ste-Foy, Quebec, Canada the death was announced of Odette Grech Belanger at the tender age of 41 years.

Who was Odette Grech Belanger?

She was a Maltese pharmacist with a brilliant 'track record'. I cannot say that I knew her personally very well but she was one of my role models when as a pharmacy undergraduate (class '70-'73) I planned to emulate her, then an M.Phil. student and research fellow in the Pharmacy Department.

Odette Grech graduated as a pharmacist in the University of Malta in 1971 and registered for the M.Phil. degree with the University of London, England, graduating in 1975. In 1977 she registered for the Doctor of Philosophy degree at the Université Leval, Canada, graduating in 1979.

Between 1979-84 she held the position of Assistant Professor and was Associate Professor since 1984. Both posts were held in the Ecole de Pharmacie, Université Leval, Canada.

Dr Grech-Belanger's main research interests included the effect of physiological and pathological factors on drug metabolism and pharmacokinetics; the analysis of drugs and metabolites in biological media; stereoselective disposition of chiral compounds. Her most recent research projects were on stereoselective metabolism of mexiletine - Implications of multiple forms of cytochrome - P - 450 and metabolic and pharmacokinetic interactions involving propafenone.

Odette Grech-Belanger had varied academic responsibilities in Research, including the supervision of graduate students between 1983-89 in M.Sc. and Ph.D. programmes; undergraduate teaching on Research studies (1981),

Pharmaceutical Analysis (1983) and Memoire en pharmacie (1983) and Postgraduate Studies in Pharmacokinetics (1980). Between 1982-84 she participated in the teaching of cancer chemotherapy.

Odette Grech-Belanger was active both within and outside the University. Within the University, between 1982-1989, she was a member of the Curricular Committee for the Diploma in Hospital Pharmacy. Since 1986, she had been a member of the Admission Committee for the pharmacy degree programme. She was a member of the selection committee for a lecturer in Pharmacy Technology, and since 1988 she was Research consultant to the Department of Infectiology, Le Centre Hospitalier de L'Université Leval, where she was involved in the development of HPLC assays for antibiotics, setting-up and analysis of data from pharmacokinetic studies.

Outside the University, Dr Grech-Belanger was Chairperson of the Organizing Committee of the Association of Faculties of Pharmacy Annual Meeting (1985-86). Since 1986, she was external referee of grants submitted to the Medical Research Council and since 1988, she was a member of the Pharmaceutical Sciences grants committee of the Medical Research Council.

She was a member of the International Society for the Study of Xenobiotics (ISSX) and of the Canadian Society for Clinical Pharmacology.

Dr Grech-Belanger was the co-author of a total of fifty two scientific publications, papers and communications, with such authoritative pharmaceutical scientists as Prof. Arnold Beckett and her husband, Dr P.M. Belanger.

Odette Grech-Belanger was the elder sister of our colleague Mr Michel Grech, a community pharmacist, to whom the sincere deepest condolences of the Council and members of the Chamber are conveyed. These are of course also extended to her husband and children. Odette's untimely demise has left a deep void amongst those who loved and respected her and is also an unfortunate loss to national and international pharmacy circles.

**Mary Ann Sant Fournier**  
B.Pharm., M.Phil.

## SEVENTEEN PHARMACY GRADUANDS

The President and Council of the Malta Chamber of Pharmacists congratulate the seventeen graduands from the Department of Pharmacy on whom the degree of Bachelor of Pharmacy was conferred during the ceremony held at the Sir Temi Zammit Hall on Friday, 17th May 1991.

The seventeen pharmacy graduands are Wilhelmina Abela, Edith Agius, Alexandra Borg, Elaine Busuttill, Edelweiss Calleja, Ruth Camilleri, Tanya Debono, Stephen Falzon, Joseph Farrugia, Simone Farrugia, Nancy Ferrito, Nathalie Grech, Peter Mifsud, Antonella Sammut, Antoine Sciberras, Mark Sciberras and Helen Vella.

The council looks forward to their being granted the warrant to practice the profession and their registration in the Register of the Pharmacy Board without undue delay.

## The Pharmacist's first Editor registered as a pharmacist in Victoria, Australia

Josephine Farrugia nee Cassar has been registered as a pharmacist in Victoria, Australia after successfully passing the exams of the Australia Pharmaceutical Examining Council of the Pharmaceutical Society of Australia.

Mrs Farrugia graduated Bachelor of Pharmacy from the University of Malta in 1977. She is the first Maltese pharmacist who graduated in Malta to be registered in Victoria.

In Malta, she held a managerial post with Pharmamed Pharmaceutical Manufacturers and later practised as a community pharmacist.

Mrs Farrugia was an active member of the executive council of the Malta Chamber of Pharmacist between 1978-81 and the first editor of 'The Pharmacist' in 1981.

In 1987 she emigrated to Australia with her family. She is married to Albert and they have two children, David and Adrian.

## Past President of the Chamber graduates in Maths, Computing and Logic

The degree of Bachelor of Science in Maths, Computing and Logic, has been conferred by the University of Malta on the 17th May 1991 on Mrs Maria Brincat nee Gatt B.Pharm., B.Sc., past President of the Malta Chamber of Pharmacists.

The thesis presented for the B.Sc., was entitled "Expert Systems: PHARMACON". The PHARMACON system is a prototype of a tutoring program aimed at the undergraduate pharmacist who is beginning his preregistration practice. It consists of an adviser and a tutor based on the adviser. The adviser simulates the role of the general practice pharmacist, and the tutor incorporates student querying screens. Mrs Brincat is currently continuing with her research in the field of expert systems.

Mrs Brincat graduated in Pharmacy in 1977 and practised as a community pharmacist until 1987.

She was a very active member of the Executive Council of the Malta Chamber of Pharmacists during the period 1978-89 during which she held the post of secretary (1979-81) and that of President (1981-87). She was a member of the Editorial Board of The Pharmacists (1981-89).

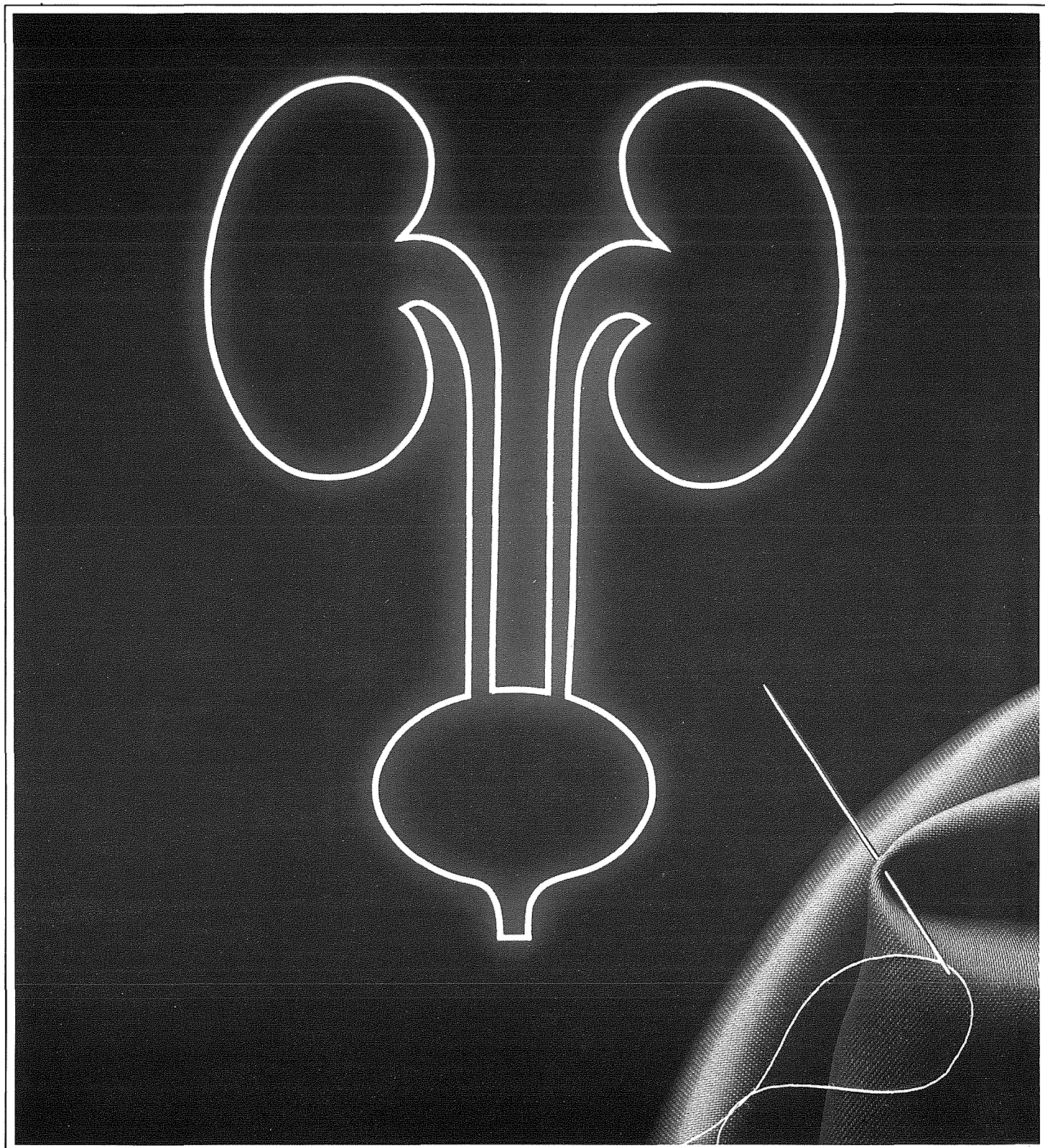
Mrs Brincat is married to Andrew and they have two children, Nicole and Bernard.

**The President and Council of the Malta Chamber of Pharmacists and Editorial Board congratulate both Mrs Farrugia and Mrs Brincat and wish them success in their careers.**

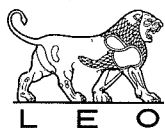
**Irfen®**  
**Quicktabs**  
pain relief

*Distributors for Malta*  
**INTERPHARMA CO. LTD.,**  
7 Haven Lodge,  
St. George's  
Junction,  
St. Julians.  
**Tel: 33 45 82**

# Selexid<sup>®</sup> tailored for treatment pivmecillinam of urinary tract infections



Full information available on request



**Leo Pharmaceutical Products – Denmark**

Regional office: Leo Pharmaceutical Products Sarath Ltd. 224, Syngrou Avenue, GR 176 72 Kallithea, Athens, Greece



## Breast Cancer

cont. from pg. 51

### Self-Assessment Answers

1. FALSE: If a woman has practised self-examination regularly, she will be more likely to feel small tumours at an early stage when breast cancer is most successfully treated.
2. TRUE: Breast cancer can occur in women who have been in very good health.
3. TRUE: The primary function of mammography is the detection of breast cancer at a very early stage before the tumour can be felt. Cancers detected by mammography tend to have highest cure rates.
4. FALSE: A lump or thickening is the most frequent warning signal, but the first sign may be a discharge from the nipple. Other signs include scaliness of the skin especially around the nipple, or any change of colour or texture of the skin.
5. FALSE: The size of the breast is not related to the development of breast cancer.
6. FALSE: Men rarely get breast cancer but it does occur. The ratio is one man diagnosed with breast cancer to every 100 women who will develop the disease.
7. FALSE: Often before a period, the fatty tissue (which is found underneath the skin of the breast) swells. Thus one should perform BSE at the end of the menstrual period when the breast tissue is the softest and lumps are easiest to feel.
8. FALSE: If you press too hard, it will dull your sensations, and if you press too lightly, you will not be able to feel deeply enough. Thus one must use adequate pressure to feel different breast textures.
9. TRUE: Breast cancer is uncommon below the age of 35 years, the incidence increasing rapidly between the ages of 35 and 50.
10. TRUE: Research has shown that women who are obese and those who eat a high fat diet are at a greater risk of developing breast cancer.

## GUIDELINES FOR AUTHORS

The paper should be typed double-spaced with 2cm margins. Pages including page figures and tabulations should be numbered consecutively. Type on one side only and begin each section on a separate page.

Papers should be submitted as follows:-

### Title Page

This should include the title, author's full names with degrees, professional qualifications and address.

### Abstract

This should be up to 250 words. It should be a self-explanatory statement giving an overview and the aims, methods, findings and conclusions of the study.

### Text

The paper should follow the format:

Introduction

Materials and methods, subjects studied and statistical methods if any

Results

Discussion and Conclusion

Acknowledgements

Scientific measurements should be given in SI units with traditional units in parenthesis where necessary.

### References

References should be as a superscript in the text and listed in numerical order (as they appear in the text).

The information should include reference, author's names and initials (all authors), year of publication, title of articles and in the case of journal articles name of journal, volume and first and last page numbers.

Example:

Journals

D'Arcy, P.F. (1987). Treatment and prevention of diarrhoeal diseases; pharmaceutical involvement? *Int. Pharm.J.* 1, 26-30.

Hargie, O.D.W. and Morrow, N. (1987). Introducing Interpersonal Skills training into the Pharmaceutical Curriculum, *Int. Pharm.J.* 1, 5, pp.175-178.

Books

Reynolds J.E.F. (ed.) (1982). *Martindale, The Extra Pharmacopoeia; Monograph on loperamide hydrochloride.* (Pharmaceutical Press, London) pp. 1060-1061.

### Tables

Tables should be typed double spaced, each on a separate sheet. They must supplement not duplicate information in the text and be self-explanatory.

The table number and legend should be typed at the top.

Use only horizontal lines to divide sections.

### Figures

Figures or graphs, etc. should be supplied together with any other illustrations. They should supplement not duplicate information in the text and be self-explanatory.





The figure number and legend should be typed at the top.

## Submission

All papers and other correspondence should be submitted to The Editor, The Pharmacist, Malta Chamber of Pharmacists, 1 Wilga Street, Paceville.



**NEW**  
**SALBULIN**  
**INHALERS**

-  Available in the preferred form - Salbutamol Sulphate.
-  3M Riker renowned for expertise in the development of inhalers.
-  Also available in 400 doses in addition to 200 currently available.
-  In salbutamol dispensing, at last you have a choice!

Full details of these and other products are available from...

**JOSEPH CASSAR LIMITED**  
54 Melita Street  
Valletta, Malta

or direct from...

**3M HEALTHCARE LTD.**  
Loughborough England

**NOW AVAILABLE**  
**FROM**  
**3M RIKER**

All product names; Riker; 3M: trade marks



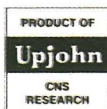


# Xanax

(alprazolam) Tablets

Why have physicians made Xanax Tablets the leading branded anxiolytic worldwide?

- Effectiveness in a broader range of patients than traditional anxiolytics, including those with:
  - anxiety
  - anxiety complicated by depressed mood
  - anxiety associated with depression
- Excellent patient acceptance
- Sustained clinical efficacy without dosage increase once an appropriate dosage is achieved

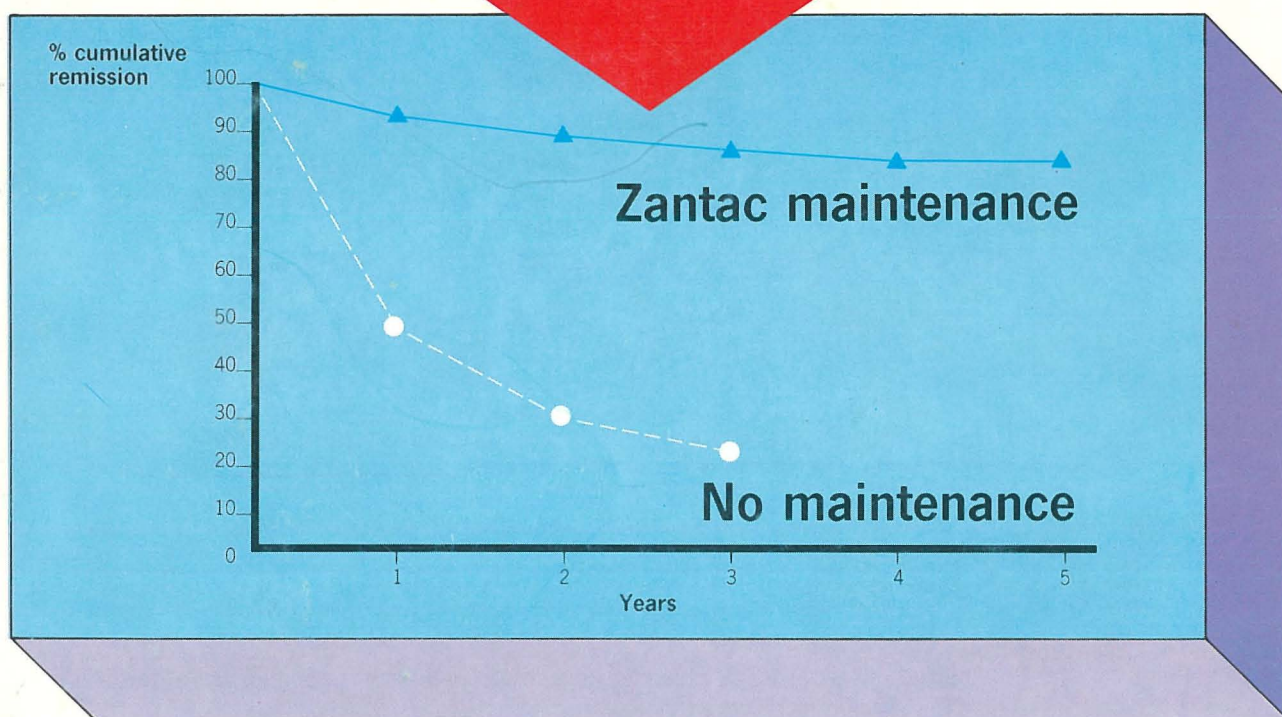


Supplied: Xanax Tablets are available in 0.25 mg (white), 0.5 mg (peach), and 1 mg (lavender) scored, ovoid-shaped tablets

6807 TRADEMARK XANAX PF66931

Local Agents: VJ Salomone Ltd. Upper Cross Rd Marsa  
 Tel: 228026, 234032, 221094 (For more details contact Dr. F. Pace Tel: 433990)

# Why so many doctors prescribe Zantac for maintenance therapy



**Rx Zantac 150mg at night**

“Maintenance treatment with [Zantac] results in 85% of patients remaining free of symptomatic recurrence after 5 years of continuous treatment.”

Penston, J. and Wormsley, K.G. Digestive Diseases Week and the 89th Annual Meeting of the AGA 1988, New Orleans, p.305.

**Glaxo**

**The right answer  
in maintenance**

**Zantac**  
RANITIDINE



For full prescribing information, see data sheet or contact:

**Glaxomed Limited**, International House, 7 High Street,  
Ealing, London W5 5DB. England.