



SEPTEMBER 1987

NO 16





# PHARMACIST

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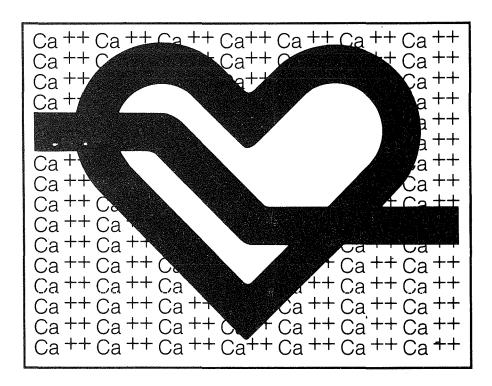
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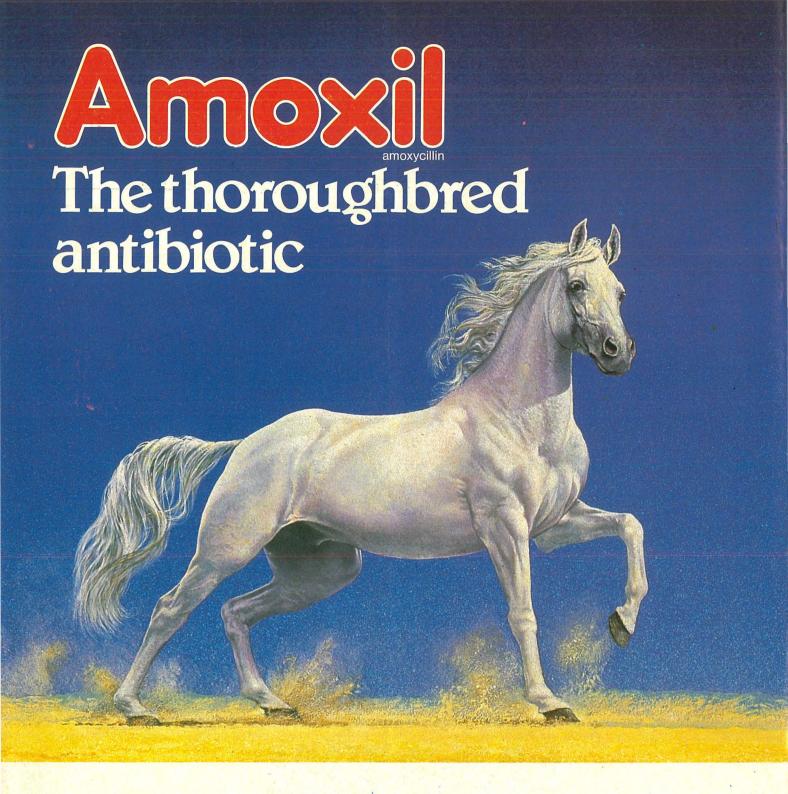
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# Indications

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# **Presentations**

Capsules: maroon and gold capsules, each containing 250mg or 500mg amoxycillin.

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# THE PHARMACIST

# JOURNAL OF THE CHAMBER OF PHARMACISTS — TRADE UNION

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# Cover

Front Cover was created on a Macintosh with Mac Print by Charles Cassar and printed with the Apple Laser Writer. Ink drawing of Ficus carica, a local medicinal plant by Charles Cassar. The article Ficus carica by I. Grima is on page 23.

The opinions expressed in THE PHARMACIST are not necessary those endorsed by the Chamber.



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# References:

- 1. Collins, A.J., Notarianni, L.J., Ring, E.F.J., Seed, M.P. Annals of the Rheumatic Diseases 1984 **43** 411.415.
- 2. The Pharmaceutical Journal (London) 1983, 231 270.

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# **EDITORIAL**

# **Pharmacy Education**

# EDUCATION — A LIFETIME PROCESS

The Chamber's belief in Education as a lifelong process is now firmly established. The first continuing education lectures were organised in 1980 and they have continued to be organised annually ever since. The commitment and interest in pharmacists' education extends also to the undergraduate level. The Chamber has been insisting on the appointment of a pharmacist as head of the Pharmacy Department for quite some time now. The time has perhaps arrived when the Chamber should initiate and participate in a discussion on Pharmacy Education at the undergraduate level. The Chamber's expanded membership in recent years means that it has good contacts with every field of pharmacy practice. This puts it in an excellent position to make recommendations as to educational requirements for pharmacists.

Sixty one students have this year enrolled into the B.Pharm. course, surely a record. It is in a sense only fair to take in all the students who have all the entry requirements. This however, is a large number of students which will stretch the facilities at the department to the limit, if not beyond. It is of the utmost importance that these students get the necessary right standard of education, otherwise we will be doing them and the profession an injustice.

# THE MAKING OF A PHARMACIST

The university is responsible for the academic training as well as the professional formation of the students. In view of this, it is highly questionable whether the current set up of Pharmacy in the faculty of Medicine and Surgery is the right one. The possibility of setting up Pharmacy as a separate faculty must be seriously studied. There certainly is no lack of students. The lack of sufficient number of lecturers must be dealt with by making better use of local talent and the utilization of foreign lecturers as required.

# THE GOVERNMENT PHARMACEUTICAL SERVICES REORGANISATION

The promise of so many pharmacists in a few years' time makes it opportune and imperative to reorganise the Hospital pharmaceutical services now. A properly manned service will require circa forty people. The coming four years can, in the meantime be used to lay the ground for the building of a modern government pharmaceutical service in line with today's needs.

# UNION NEWS

# **Annual General Meeting**

The Annual General Meeting of the Chamber of Pharmacists — Trade Union was held on Monday, 25th May, 1987 at the Federation of Professional Bodies, Paceville.

#### **Annual Activities**

The Administrative report in which were highlighted the various events of the past year was presented by the Honorary Secretary, Miss M.A. Ciappara, B.Pharm.

Throughout 1986 the Chamber of Pharmacists, as always, had been continuously monitoring new legislation affecting the Pharmaceutical profession.

The activities of the Chamber which have now become regular features included, The Extension Studies Series which were held during March 1986 and which focussed on Nutrition;

The Pharmacists Against Drug Abuse (PADA) action programme continued with the organisation of a forum entitled 'How far is Legislation helping us to Fight Drug Abuse';

Three issues of the Chamber's official journal 'The Pharmacist' were published and distributed to all pharmacists amongst others.

On a lighter note, the annual summer event, a Barbeque Night was organised at the Luzzu Restaurant, Qawra, in August, whilst the Christmas Spirit was ushered in at the Dolce Vita Restaurant, St. Julians during the traditional December dinner.

# Record Membership

The Financial Report was then presented by the Treasurer, Mrs M.A. Sant Fournier, B.Pharm., M.Phil., who noted that the number of members has been steadily increasing to record membership by the end of 1986.

# The Memorandum

Mrs. Maria Brincat, B.Pharm., opened her Presidential Address by showing satisfaction at the work done during the preceding year, a year full of activities.

In April, the Chamber finalised a memorandum. This is a synthesis of the policy of the Chamber of Pharmacists that has developed over the years. It has been compiled to bring to the attention of all concerned the problems which

pharmacy in Malta is facing and a recurrent theme is that several laws were not being enforced. Instead of ensuring the enforcement of laws which were being repeatedly broken more legislation was introduced accompanied with the introduction of more paperwork but in no way solving existing problems. It has been published in the form of a supplement in the Chamber's journal 'The Pharmacist' so that all pharmacists will have a copy. It is now the work of the new committee to discuss these policies with the new administration. In fact, the outgoing committee has already taken the initiative and meetings are already being held.

Mrs. Brincat then referred to recent press releases issued by the Chamber regarding damaging amendments to the legislations regarding Licensing regulations of Pharmacies and also called for restoration of the Pharmacy Board to its original composition.

# Tariff System

A significant step forward has been the work done by the Chamber to introduce a tariff system. However, due to unfavourable official reaction, the Chamber has decided not to insist further on the implementation of this tariff system for the time being, but to bring it up with the new administration and see to its approval by the pharmacy board once this is restored to its original composition and able to function as a serious regulatory body of our profession.

#### **Hospital Pharmacists Exodus**

The exodus of pharmacy graduates from Hospital service requires serious study and the Chamber feels the need not only to upgrade pharmacists to professional status, but an overall reorganisation merits consideration.

An organised locum service was also launched during the meeting.

# **Outside Contacts**

Mrs. Brincat also stressed the importance of strengthening already existing ties with other organisations such as the Commonwealth Pharmaceutical Association which during the last conference, attended by the Chamber's representative Mr. Eric Zammit, B.Pharm., issued an im-

portant statement calling for the appointment of a duly registered and suitably qualified Pharmacist as the Head of Department of Pharmacy at the University of Malta. Other relations are with the Caritas Association for Drug Prevention and Action through the PADA subcommittee and CMTU. Several council members have also shown an interest in the Federation Internationale Pharmaceutique (FIP) and such interest should be encouraged.

Finally Mrs. Brincat closed her address by thanking all sponsors and pharmacists for their participation in the Chamber Activities and for new members who contributed to making last year's record membership year and also the council members without whose support little would have been achieved.

#### **Motions**

The following motions were then approved. The general meeting then directed Council to:

- (1) seek authority to rename the Chamber "Malta Chamber of Pharmacists Trade Union";
- (2) start immediate discussions with the relevant authorities on the various matters presented in the memorandum particularly the reversal of amendments to the legislation and regulations re pharmacy board and pharmacy licences and licensees;
- (3) take the necessary steps to ensure that wholesalers of pharmaceutical and parapharmaceutical products do not sell directly to the general public and if this is taking place to get the necessary proof and take all necessary actions.

The new committee is made up as follows:

President: Mrs. M.A. Sant Fournier, B.Pharm., M.Phil.

Vice-President: Mr. R. Fava, B.Pharm., Ph.C., M.P.S., D.B.A., M.R.S.H.

Hon. Secretary: Miss M.A. Ciappara, B.Pharm. Assistant Secretary: Miss M.A. Bonanno, B.Pharm.

Hon. Treasurer: Mrs. E. Lapira, B.Pharm.

Assistant Treasurer: Mrs. M. Parascandolo, B.Pharm.

CPA Representative: Mr. E. Zammit, B.Pharm. Members: Mrs. M. Brincat, B.Pharm.,

Dr. A. Serracino Inglott, B.Pharm., D.Pharm. Student Representatives: Miss D. Ellul, Miss M. Zammit Montebello.

# F.I.P. ATTENDANCE

Dr. A. Serracino Inglott, senior Lecturer of the Department of Pharmacy, University of Malta has attended the 47th International (Jubilee) Congress of Pharmaceutical Sciences of F.I.P. in Amsterdam. He has presented a research communication of 'A Substitute Organism for the Rideal Walker Coefficient'.

The paper is the result of research work carried out under Dr. A. Serracino Inglott by a Pharmacy student Miss Victoria Naudi with the assistance of the microbiologist, Mr. Vincent Gauci.

# MEETING WITH THE NEW ADMINISTRATION

During the past three months, the Chamber of Pharmacists — Trade Union has had meetings with the Minister of Education, the Hon. Dr. Ugo Mifsud Bonnici, LL.D., the Minister for Social Policy, the Hon. Dr. Louis Galea, LL.D., and with the Parliamentary Secretaries for Health, the Hon. Dr. George Hyzler, M.D., and for the Care of the Elderly, the Hon. Dr. John Rizzo Naudi, M.D., F.R.C.P.

On each occasion, a copy of the memorandum was presented and various aspects of it were discussed.

The problems discussed included, pharmacy education; legislation and regulations concerning pharmacy licences and licensees; Pharmacy Board; Council of Health, and Pharmacy Inspectorate.

The distribution of Free Medicines was also discussed and a report is being prepared. The Chamber has also asked for the reorganisation of the Hospital Pharmaceutical Services, with an upgrading of Pharmacists to professional status as top priority. A report on this will also be presented in the immediate future.

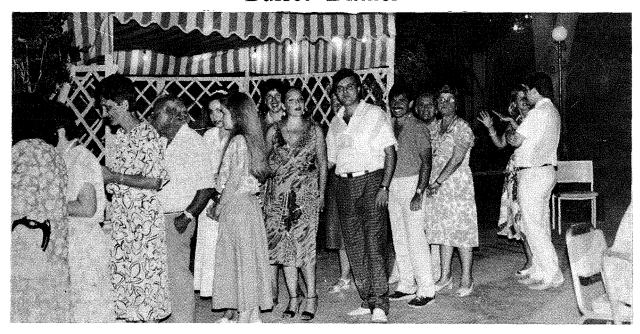
The delegations of the Chamber were led by the Hon. President, Pharmacist Mary Ann Sant Fournier, B.Pharm., M.Phil.

# REMINDER

All suggestions re: Amendments Governing Pharmacy and Pharmacy Practice are to communicated to the Chamber as soon as possible.

# End of Summer 1987

# Buffet Dinner



Looking forward to the delicious food

To bid farewell to this year's 'long hot summer', the Chamber of Pharmacists organised an 'al fresco' buffet dinner on the 19th September 1987, at the fairy lit Rotunda Gardens of the Hotel Phoenicia as the annual summer event.

About 50 pharmacists and their guests took their places at the candle lit tables decorated with flowers, and enjoyed mouth watering dishes amply washed down with local wine. Entertainment was provided throughout the evening by

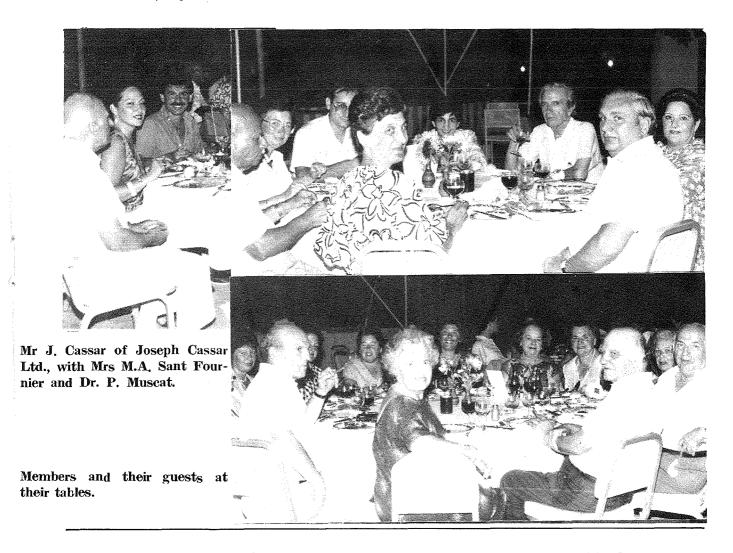
Vinnie Vella on the keyboard who played and sang popular songs. The highlight of the evening was a cabaret act by one of Malta's foremost singers Tony Camilleri, who livened up the atmosphere with a number of catchy tunes from his repertoire.

The President Mrs Mary Ann Sant Fournier delivered the customary short address. She thanked all those who helped to make the evening such a happy and successful event, especially  $M_\Gamma$  Joseph Cassar of Joseph Cassar Ltd., who sponsored the entertainment, and V.J. Salomone Ltd., who donated gifts for the occasion.

Mrs Sant Fournier announced the Chamber's commitment to a revision of the legislation governing pharmacy and pharmacy practice. She urged all pharmacists to send in their proposals to the secretary of the Chamber.

The evening was brought to an end by a raffle in aid of Caritas Rehabilitation Centre. The money from this raffle will be donated to a Caritas representative at the next Pharmacists Against Drug Abuse (PADA) activity.





# INTERNATIONAL INSTITUTE OF CLINICAL PHARMACY

The Director of the Foundation for International Studies Prof. Busuttil has informed Dr A. Serracino Inglott that subject to an agreement of the Board of Trustees he is proposing the creation of a body to be affiliated to the Foundation to be designated — "The International Institute of Clinical Pharmacy".

Clinical Pharmacy began to be developed in the U.S.A. in the sixties and is now fully stabilised there. It is being slowly taken up in Europe on the American Model.

Other ideas developed elsewhere, which are perhaps more appropriate to conditions outside the U.S.A. also exist. However, these tend not to gain currency because of deficient means of transmission.

The institute is intended to seek solutions to remedy this especially in relation to the Mediterranean and Middle East.

The Institute intends to achieve the above by:

1. The organisation of International meetings

and seminars in which the various methods developed in different localities can be examined, compared and the best propagated.

- 2. The development of a model of pharmacy practice in which the pharmacist is not restricted to the dispensing function but takes his place in the health care team. In this connection both new specializations in hospital pharmacy and extensions of community pharmacy (such as home visits) will be studied and evaluated.
- 3. Organising correspondence courses for continuing education on International basis. Dr Johnson of the Faculty of Strathclyde has already visited Malta and discussed the possibility of contributing to such a course. He already organises such a course in the U.K. and in Kuwait.

The C.P.A. has already appointed Prof. A. Beckett to co-ordinate activities with the Commonwealth relating to the Institute. This was done with the help of the Chamber of Pharmacists.

# C.P.A. NEWS

# The 4th Commonwealth Pharmaceutical

# **Association Conference**

# NAIROBI 1987

#### Eric Zammit B.Pharm.

During my stay at Nairobi, Kenya I attended:— The European regional meeting, the Council meeting and the Conference of the C.P.A.

#### EUROPEAN REGIONAL MEETING

The European Regional meeting was held on Saturday 7th March 1987 in the afternoon. The main item on the agenda was the forthcoming election of President of the C.P.A. I took the opportunity to ask the Region to support us in our claim that the head of the Pharmacy Department at the University should be a pharmacist. It was decided that Dr Beckett and Mr Kerr were to write a draft letter which if approved by me was to be put to the consideration of Council. I also raised the question of the Institute of clinical Pharmacy which is to be set up in Malta. Dr. A. Beckett agreed to act as adviser but it was decided to ask the approval of Council for such an appointment.

#### COUNCIL MEETING

The Council of the C.P.A. met at the Kenyatta Conference Centre on the 7th and 8th March 1987. One representative per country attended the meeting. The agenda consisted of sixteen items mostly concerned with the Internal Administration of the Association. I propose to comment slightly on some items that are of particular interest.

- A. Personal Membership The C.P.A. is proposing member countries to urge pharmacists to become personal members of the Association. The fee is Stg.£5 and members receive any publication issued bythe C.P.A. and on request, once a year an issue of the British National formulary. I believe that here we can give a contribution to the C.P.A. by urging our Maltese colleagues to become personal members of the C.P.A.
- B. Malta to host the 1989 Executive Committee The first formal meeting of the C.P.A. is to be the Executive Meeting which involves the officials of the Association and one represen-

# A NEW MAN FOR A NEW ERA

Mr Alfred Scales of Canada who chosen to succeed Dr. J.N. Banerjee as President. Alf Scales is a community pharmacist and a former President of the Canadian Pharmaceutical Association. He demonstrated during the Council meeting that he is a strong personality, with positive ideas and a willingness to lead by example. He left no one in doubt of his own inaugural statement that he will be an "action oriented President".

C.P.A. is into its third presidential era. For the first twelve years under the leadership of Mr. Albert Howells, O.B.E., C.P.A. became firmly established as an important international pharmaceutical organisation, with clear philosophies and policies and a number of initiatives designed to improve the provision of pharmaceutical services in member countries. Since 1982, with Dr. J.N. Banerjee at the helm, the predominant feature of that era was the recognition of C.P.A. by international health organisations such as the Commonwealth Secretariat and the World Health Organisation. The Scales era has the opportunity to build on the successes of the past, and to use C.P.A.'s international reputation to bring about positive and lasting improve-

tative per region. After some lobbying I put my formal proposal that Malta is to host the next Executive in two years' time. The proposal was accepted unanimously.

ments throughout the Commonwealth.

C. Pharmacy in Malta — Each member presented a report on the current situation of Pharmacy in their country.

The report presented by me dealt with

- Pharmacy education
- Pharmacy Board
- Control of Narcotic and Phycotropic drugs
- Repugations reopening of new pharmacies
- The policies which the Malta Chamber of Pharmacists feels are the most urgent and intends to persue in the coming months.
- D. W.H.O. representative During the past years the C.P.A. has developed close strong relationship with the W.H.O. A representative of the World Health Organisation was present in

Nairobi. The idea is that all policies and decisions of the C.P.A. are eventually approved by the W.H.O. which then asks the Ministers of the various countries for ratification. Hence this relationship is of the utmost importance. The W.H.O. representative has asked all C.P.A. members to send a copy of the Drug Legislation Act.

- E. Pharmacist as Head of the Department of Pharmacy in Malta On any other business I raised the issue of the Headship of Pharmacy at the University of Malta. The meeting approved a Letter which is to be sent to the Rector of the University and the Minister of Health. These Letters have already been sent. The Council also agreed to nominate Dr Beckett as official advisor to the proposed Institute of the Clinical Pharmacy in Malta.
- F. Commonwealth Pharmacy Day It was agreed that member associations would be encouraged to recognise June 16 as Commonwealth Pharmacy Day. The President will circulate an appropriate message to commemorate the date and every effort should be made in each member country to use the occasion to enhance the awareness of pharmacy by government and other influential bodies.

# THE NAIROBI CONFERENCE

I am delighted to report that the Forth Commonwealth Pharmaceutical Association Conference held between 9th March—12th March 1987 at the Kenyatta Conference Centre, extended all expectations in terms of attendance, organisation, content and outcome.

Well over 400 delegates and accompanying persons travelled to Kenya and with the local participants, brought the total attendance to over 600. This magnificent support transformed the CPA Conference into a major international event.

While everyone was delighted with the varied and colourful social programme, the main interest of the delegates was in the content of the conference. The topics dealt with during the Conference were the following:—

- (a) Policies for the acquisition of essential drugs
- (b) Good manufacturing practice/Quality Assurance
- (c) Product registration in developing countries
- (d) Drug abuse.

The organisation of the Conference was such that a working group of experts was set up for each subject discussed. The conclusions of the working groups were approved at the end of the Conference and it is envisaged that these will be incorporated in the C.P.A.'s policies.

The Pharmaceutical Society of Kenya in parallel with the conference arranged a pharmaceutical exhibiton, which created a great deal of interest locally as well as among the Conference delegates.

# PROFESSIONAL FEES

During my stay in Nairobi I took the liberty of acquiring information about other Commonwealth countries. Table I is a comparative list of the professional fees and profits of these countries. As can be clearly seen, Malta fairs by far the worst in this field. I hope that the Chamber of Pharmacist will tackle the matter with urgency.

AUSTRALIA         Govt. Aus\$2.60         25%           Private Aus\$3.30         Av.50%           BAHAMAS         NIL         25%           BARBADOS         EC\$2.00/item         5%           CYPRUS         —         25%           FIJI         45cents/item         Av.35%           GHANA         —         20.30%           GUYANA         —         25-33½%           INDIA         —         15-30%           JAMAICA         J\$2/item         30%           LESOTHO         —         100%           MALAWI         MK1.00         30-50%           MAURITIUS         —         15-27%           NIGERIA         —         33½%           NORTHERN         IRELAND         NHS£1.15         Av.25%           Then 60p or 70p         some 33½%           SIERRA LEONE         —         33½%           SRI LANKA         —         30%           ST. LUCIA         —         30%           TRINIDAD AND         TOBAGO         YES         33½%           TANZANIA         —         25-30%           UGANDA         —         33½%           ZAMBIA         YES	COUNTRY	PROFESSIONAL FEE	RETAIL
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GUYANA         —         25-33\fmathbb{3}\fmathbb{7}           INDIA         —         15-30\fmathbb{7}           JAMAICA         J\$2\fmathbb{7}item         30\fmathbb{7}           LESOTHO         —         100\fmathbb{7}           MALAWI         MK1.00         30-50\fmathbb{7}           MAURITIUS         —         20\fmathbb{7}           MAURITIUS         —         15-27\fmathbb{7}           NIGERIA         —         33\fmathbb{1}\fmathbb{7}           NORTHERN         IRELAND         NHS£1.15         Av.25\fmathbb{7}           SIERRA LEONE         —         33\fmathbb{1}\fmathbb{7}           SRI LANKA         —         30\fmathbb{7}           ST. LUCIA         —         30\fmathbb{7}           TRINIDAD AND         TOBAGO         YES         33\fmathbb{1}\fmathbb{1}\fmathbb{7}           TANZANIA         —         25-30\fmathbb{7}           UGANDA         —         33\fmathbb{1}\fmathbb{7}           ZAMBIA         YES         Av.30\fmathbb{7}	FIJI	45cents/item	Av.35%
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NIGERIA         —         33\fmathbb{3}\fmathbb{6}           NORTHERN         IRELAND         NHS£1.15         Av.25\fmathbb{6}           Then 60p or 70p         some 33\fmathbb{3}\fmathbb{6}         Some 33\fmathbb{3}\fmathbb{6}           SIERRA LEONE         —         33\fmathbb{3}\fmathbb{6}           SRI LANKA         —         30\fmathbb{6}           ST. LUCIA         —         30\fmathbb{6}           TRINIDAD AND         TOBAGO         YES         33\fmathbb{1}\fmathbb{6}           TANZANIA         —         25-30\fmathbb{6}           UGANDA         —         33\fmathbb{1}\fmathbb{6}           ZAMBIA         YES         Av.30\fmathbb{6}	MALTA		20%
NORTHERN           IRELAND         NHS£1.15         Av.25%           Then 60p or 70p         some 33½%           SIERRA LEONE         —         33½%           SRI LANKA         —         30%           ST. LUCIA         —         30%           TRINIDAD AND         TOBAGO         YES         33½-45%           TANZANIA         —         25-30%           UGANDA         —         33½%           ZAMBIA         YES         Av.30%	MAURITIUS	nervoca.	15-27%
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——————————————————————————————————————	UGANDA	_	331/4
ZIMBARWE VEC 2216	ZAMBIA	YES	Av.30%
TIMIDAD M.E. 1FD 993.//	ZIMBABWE	YES	331/4

I believe that my experience in Nairobi has been a positive and beneficial one. The matters which I was asked to deal with have been concluded positively. I am convinced that the C.P.A. is an organisation which is all out to help the member countries and it can be of great help to us. It is now our duty to work hard to engage as many personal members as possible and to organise impeccably a memorable Executive Committee Meeting.

# **An Outline History Of Pharmacy**

# PART III. THE STORY OF MALTESE PHARMACY

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

\* This is the third and last part of the extended text of a series of three lectures delivered to the Course of Pharmacy 9th to 16th May 1986.

We do not know when the academic study of pharmacy had its beginnings in Malta but it is very probable that it began at the Holy Infirmary at Valletta in 1676 when the School for Anatomy and Surgery was founded in that hospital by Grand Master Nicola Cotoner. It is certain that the Director of the School — the priest and physician Fra Giuseppe Zammit — was also the teacher of botany and that, in order to further the practical study of this discipline, he founded a botanical garden, out of his own purse, in a ditch of Fort St. Elmo in 1690. In this garden he cultivated medicinal plants.

Fra Giuseppe Zammit also introduced the study of chemistry, as understood in his days,



1. Polychrome pharmacy jar decorated with the coats-of-arms of Grand Master Alofius de Wignacourt (1601-22). (Courtesy of National Museum, Valletta).

and used to show his students how to prepare sodium sulphate; indeed this salt was still known in Malta as Zammit's Salt until 1886.

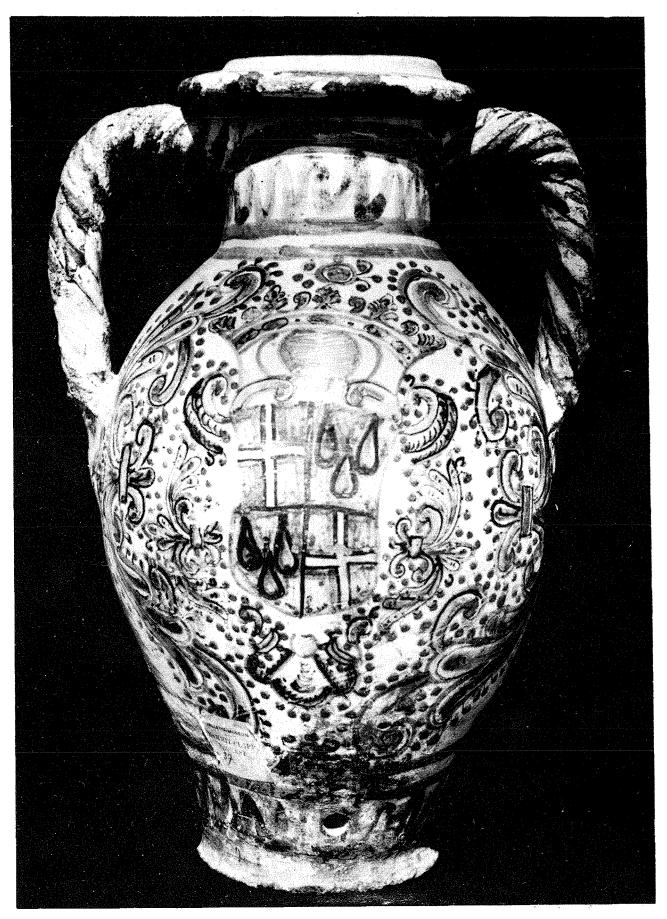
In 1729 we come across the first regulations for the running of the school of pharmacy. The students had to submit to an entrance examination conducted by the Chief Pharmacist of the Holy Infirmary to make sure that they knew how to read and write the Latin language, as in those days books on pharmacy and prescriptions were written mostly in Latin.

Apart from attending lectures, pharmacy students were required to work as apprentices at the pharmacy of the Infirmary. Those who failed to attend regularly and to carry out the work assigned to them were expelled from the course after being reported to the Grand Master.

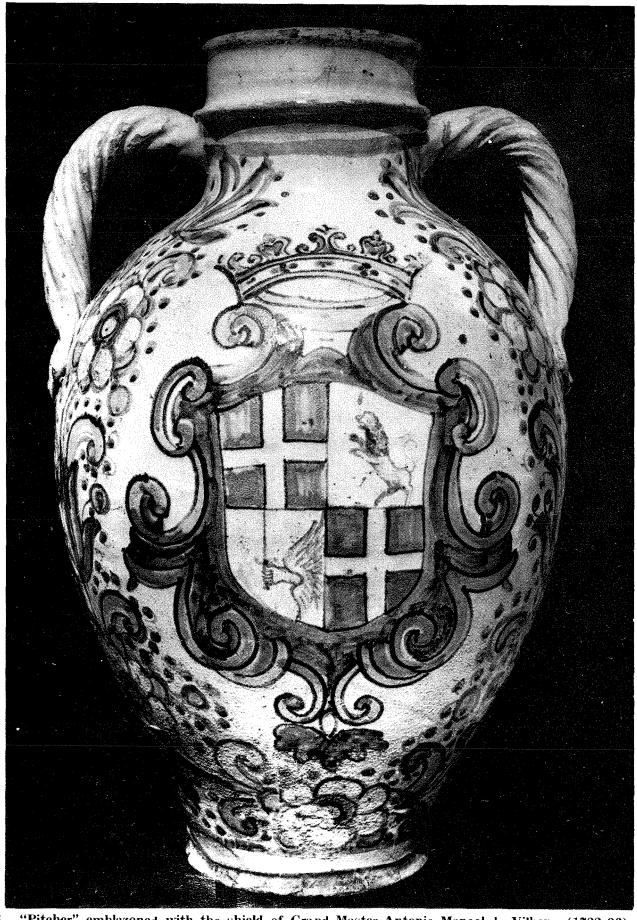
On finishing his studies and passing a qualifying examination, the student was granted a diploma and the licence to practice his profession.

During the 19th century — and precisely in 1838 — the University raised the standard of studies and extended the course to two years. During this period the students had to carry out practical work at the pharmacy of the Civil Hospital which had replaced the Holy Infirmary in 1798. In 1921 the course was extended to three years and in 1948 to four years. In the same year the diploma was replaced by the Baccalaureate in Pharmacy. These changes brought our course in pharmacy to academic levels obtaining abroad. [1]

Up to the last decade of the last century, Maltese pharmacists followed various pharmacopoeias in their preparations of medicines. The Italian one by I. Brugnatelli, published in 1803, was available in Malta and was used by the pharmacist Ignatuis Custo' of Senglea. In 1864, however, when the British Pharmacopoeia was published, Maltese pharmacists were obliged to follow this pharmacopoeia in the preparation of their medicaments. To this day this publication remains the official authority by which we still abide.



2. The "pitcher" jar. A very large container for "waters", bearing the coat-of-arms of Grand Master Ramon Perellos y Roccaful (1697-1720). Note the small round aperture at the base which may have been provided with some sort of tap or plug when in use, (Courtesy of National Museum, Valletta).



3. "Pitcher" emblazoned with the shield of Grand Master Antonio Manoel de Vilhena (1722-36). (Courtesy of National Museum, Valletta).

# Regulations

The earliest regulations for the control of the exercise of the pharmaceutical profession go back to 1530 when the Maltese Islands passed under the rule of the Order of St. John of Jerusalem. According to these regulations, that were previously enforced in Rhodes, anyone wishing to open a pharmacy had to obtain the licence from the Grand Master. The same permit was needed if a pharmacist wanted to buy or sell a pharmacy or if he desired to transfer it from one locality to another. In order to ensure that the needs of the public were adequately met at all times, the pharmacist was exempted from military duties which were then compulsory for other citizens.

He was not allowed to sell medicines without a doctor's prescription and had to keep poisonous substances under lock and key. Opium preparations could only be sold with the written permission of the Chief Government Medical Officer while such poisons as arsenic, sublimate and mercury were to be kept locked so that they would not fall into the hands of young shop assistants. Stock mixtures were to be marked on the lid of their containers with the date on which they were compounded. The selling price of the various remedies was fixed by the Chief Government Medical Officer. Over-charging by apothecaries was made a punishable offence. Poisonous substances were not to be sold to servants, slaves, children and suspicious characters.(2)

# Pharmacy Jars

The Maltese pharmacist of the past kept his herbs and medicinal preparations in drug jars or vases made of majolica. The first evidence of the existence of such jars goes back to 1592. An inventory of a pharmacy at Rabat in that year lists one hundred and eighty-one jars as part of the stock held by its apothecary but no description is given regarding their shapes and decoration. (3) Their whereabouts to-day are not known; indeed the earliest pharmacy jars that have survived time and handling belong to the 17th and 18th centuries. These jars once formed part of the equipment of the pharmacies of Santo Spirito Hospital at Rabat, near Mdina, and of the Holy Infirmary at Valletta.

These jars are made of majolica and present a variety of shapes, sizes, colours and designs. They range from the small 13 cm high ointment pots to large pitchers for "waters" standing 60

cm in height. They comprise the following types:— (a) albarello — a tall cylindrical vase with a narrow waist; (b) the pitcher — a very large jar — for medicinal waters; (c) syrup pot with spout and handle; (d) spherical or ovoid vases for roots of plants; (e) flasks or bottles for aqueous solutions; (f) pot-a-canon — cylindrical jars with straight sides for balms and electuaries; and (g) owl-shaped jars, the head of the bird forming the lid.

Some of these jars bear the coat-of-arms of the Grand Master during whose rule they were acquired for the pharmacies of the two hospitals already mentioned. Some have the fleur-de-lys of Grand Master Alofius de Wignacourt (1601-22); others have the three golden pears on a black field of Grand Master Ramon Perellos y Roccaful (1697-1720); and others the winged right hand grasping a sword and the lion rampant of Grand Master Antonio Manoel de Vilhena (1722-36). (4) (Figures 1, 2 and 3)

Many of these jars are now exhibited at the Museum of Fine Arts at Valletta. They were not manufactured in Malta but were probably produced in Italy and Sicily.

# Importation and Inspection of Drugs

During the rule of the Order of St. John, imported ingredients for pharmaceutical use were examined on arrival in Malta by the Chief Government Medical Officer to ensure their freshness and good quality. One of the registers of two hundred years ago that contains the items bought from abroad for the pharmacy of the Holy Infirmary still exists in the Archives of the Order of St. John at our National Library. It records the names and quantities of the vegetable ingredients purchased from such places as Venice, Leghorn, Agosta (Sicily), Turin, Florence, Marseilles, Madrid and Lisbon. These last three places were well known as centres where one could find the drugs that reached Europe from the Americas and from the East. Out of one hundred and thirty-eight items imported from abroad during the last thirty years of the Order's domination over Malta, one hundred and five were from vegetable sources, fourteen of animal origin and nineteen were chemical substances such as mercury, arsenic, sulphuric acid, antimony, magnesium sulphate and ammonium carbonate. Other ingredients were of a very quaint nature and almost of repulsive character such as powder of dried serpents, fragments of skull of the whale and teeth of the wild boar. (5)

Once a year every pharmacy in the island was inspected by the Chief Government Medical Officer. Deteriorated drugs were destroyed and the apothecary was fined for having kept them for sale. At the Holy Infirmary the pharmacy was inspected every three months by the Grand Hospitaller, who was a high ranking knight and the supreme head responsible for the hospital administration, together with the physicians and the apothecary of the hospital. Worthless and spoilt ingredients were burned.

## **Legal Enactments**

The legal codes of Grand Master Antonio Manoel de Vilhena of 1724, of Grand Master Emanuel de Rohan of 1784 and an edict of the 17th July 1797 incorporated all previous regulations and enactments. Subsequent advances in medical and pharmaceutical knowledge brought about modifications in these old legislative provisions; it is remarkable, however, that in spite of a distance of more than one hundred and eighty years, the laws regarding such administrative matters as the licensing of apothecaries, the sale of medicines, the safe keeping of poisonous substances and the periodical inspection of pharmacies have remained substantially unchanged and in 1900 formed the basis of Chapter IV of the Second Sanitary Ordinance regulating the practice of pharmacy in the Maltese Islands.

Apart from these legal enactments, Maltese pharmacists have felt the need to safeguard the prestige of their profession and to ensure the ethical behaviour of their colleagues by founding the Chamber of Pharmacists in 1900 which is still active to-day. The Pharmacy Board, set up by government in 1968 aims at promoting the same ideals and code of conduct.

# Patent and Proprietary Medicines

The earliest advertisement of a proprietary medicine to be circulated in Malta, that I have come across, belongs to the year 1760. It is by an Italian, Pietro Siveri, who claimed that his Terraca cured epilepsy, hydrophobia, apoplexy, melancholia and many other diseases. In 1765 another handbill advertised a tincture by the dentist Giovanni Ornieri for the treatment of toothache, deafness and defective eyesight. (6)

With the granting of the liberty of the press in Malta in 1839, the newspapers began carrying advertisements of various patent medicines for "cleansing the blood", for the treatment of venereal diseases and of fevers. Some of these preparations were sold by booksellers and other traders.

It appears that the first pharmacist who began importing patent medicines directly from the United Kingdom was Louis Calleja, owner of the English Dispensary in Valletta, in 1843. In the following year Calleja started manufacturing patent medicines himself. In February 1844, for instance, he produced Calleja's Life Pills for liver diseases and constipation. Another pharmacist, W. Kingston, was selling an expectorant under the name of Kingston's Compound Balm of Horehound in 1858 from his pharmacy in Old Theatre Street, Valletta. Foreign patent medicines became a regular item in the stock of the Maltese pharmacy by the mid-19th century.

# Epilogue

Up to fifty-five years ago some of the pharmacies of the Maltese Islands were not merely places of business but also the rendezvous of small circles of cultured and professional people who gathered there in the evening so that it was a common sight to see the apothecary, the doctor, the lawyer, the notary and the priest engaged in a dignified conversation or a discussion of the topics of the day. (7) I can still recall from my adolescent days in Senglea such a distinguished group at the Victoria Dispensary run by the pharmacist Mr. Paolo Farrugia. Since then social, commercial and recreational developments have swept away these rendevous and have destroyed the individuality of the old-time pharmacy establishment with its distinguished interior decoration and have reduced it to the state of a mere shop.

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I feel so unsteady when I move around

# in vertigo whatever the cause:

1. When vertigo is of labyrinthine origin:

Stugeron sedates the labyrinth without sedating the patient.

2. When vertigo is related to cerebral vascular disease:

**Stugeron** safely improves cerebral blood flow, thereby relieving vertigo as well as other typical symptoms such as ear buzzing, vascular headache and impaired mental alertness.

# Studeron

The drug of choice of leading vertigo experts: Dix, M.R., Practitioner 221, 295 (1973) Fuller, A.P., Update 4, 615 (1972) Jongkees, L.B.W. and Philipszoon, A.J., British Medical Journal 1, 98 (1970)

Janssen Pharmaceutica the discovery company

# 

(clavulanate-potentiated amoxycillin)

**NEW SYRUP** PRESENTATION

> Augmentin clavulanate-potentiated amoxycillin

> > Each 5 mt cont amoxycitin as trihydrate and clavulanic acid potassium sati

100 ml syrup in powder form

156 mg/5 ml clavulanatepotentiated amoxycillin

# PRESCRIBING INFORMATION

# Indications:

Chest, ear, nose, throat, genito-urinary, skin and soft tissue infections including those caused by ß-lactamase producing

# organisms. Dosage:

Adults and children over 12 years one AUGMENTIN tablet (375mg) three times daily.

Children 7-12 years 10ml AUGMENTIN syrup (312mg) three

times daily. **Children 2-7 years** 5ml AUGMENTIN syrup (156mg) three

Children 9 months – 2 years 2.5ml AUGMENTIN syrup (78mg) three times daily.

In severe infections these dosages may be doubled. Treatment should not be extended beyond 14 days without review.

#### **Contra-indication:**

# Penicillin hypersensitivity. Precautions:

Safety in human pregnancy is yet to be established. Oral dosage need not be reduced in patients with renal impairment unless dialysis is required.
Side-effects:

Uncommon, mainly mild and transitory, eg diarrhoea, indigestion, nausea, vomiting, candidiasis, urticarial and morbilliform rashes.

If gastro-intestinal side-effects do occur they may be reduced by taking AUGMENTIN at the start of meals.

# Presentations:

Presentations:
375mg AUGMENTIN tablets each containing 250mg amoxycillin
(1) and 125mg Clavulanic acid. (2)
156.25mg AUGMENTIN syrup. Powder for preparing fruit
flavoured syrup. When dispensed each 5ml contains 125mg
amoxycillin (1) and 31.25mg clavulanic acid. (2)
(1) as the trihydrate, (2) as the potassium salt.
Not all presentations are available in every country.

# ACHAN

# **Broader in Spectrum**

- A broader spectrum than ampicillin, erythromycin, co-trimoxazole and oral cephalosporins
- Excellent activity against Haemophilus influenzae, Strep. pneumoniae<sup>1,2</sup> and Branhamella catarrhalis <sup>3,4</sup>

# **Outstanding** in Practice

- Rapid relief from symptoms
- Excellent success rates in ear, nose and throat infections<sup>6,7,8,9,10</sup>
- Well tolerated, with a low incidence of side effects 6,11

98%					
	91%	87%			
			79%	700/	
				72%	71%
AUGMENTIN No. of isolates 445	CEPHRADINE No. of isolates 199	ERYTHROMYCIN No. of isolates 405	AMPICILLIN No. of isolates 184	CO-TRIMOXAZOLE No. of isolates 218	PENICILLIN No. of isolates 394

(General Practice isolates from Ear, Nose & Throat infections, collected during 1979-80)<sup>5</sup>

Paediatric infections (and no. of assessable patients)	Favourable Response	% Clinical Success
Otitis Media, 9 (133)	129	97%
Tonsillitis Pharyngitis <sup>9</sup> (109)	106	97%
Bronchitis <sup>9</sup> (91)	85	93%
Urinary Tract <sup>9, 12</sup> Infections (50)	48	96%

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Further information is available from:

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# **Guidelines On Infant Nutrition**

### Maria Gatt, B.Pharm.

Nutrition is one of the most important factors in the maintenance of health. Health means not only a satisfactory nutritional state and lack of disease, but also psychological and social wellbeing.

# Breast is Best

There are several reasons for claiming that breast feeding is better than other methods of feeding. It is worthwhile noting that human evolution was accomplished without universal access to nonhuman milk products. Modern techniques of analysis have shown that in many respects human milk is unique and it has become clear that it is not possible to reproduce its exact composition. The composition of human milk is variable from mother to mother, from day to day, between different times of day, and even during a single feed. Thus it is known that hind milk which is secreted after about 5-10 minutes from start of feed is much richer in fat than fore milk secreted at the beginning of the feed. This is why it is important that the mother keeps the baby suckling at each breast for a period of at least 10-15 minutes. Furthermore, the composition is influenced by the mother's diet — a woman who consumes a large part of her calorie intake in the form of carbohydrate will produce a milk much richer in fat than one who consumes a large proportion of fat.

Human milk differs from cow's milk in that secretory IgA (S-IgA) predominates in it whereas IgG and IgM are the main immunoglobulius in cow's milk. S-IgA, together with macrophages, probably interferes with the absorption of food antigens and aids in their elimination; such mechanisms may explain the lower incidence of reaginic allergies in breast-fed infants from atopic families. Human milk also contains a much higher concentration of lactoferrin. This enzyme has a strong affinity for iron which explains its bacteriostatic effect since bacteria need iron for growth. Similarly the presence of ligands for folic acid and vitamin B : both nutrients essential for the growth of some micro-organisms, offer a bacteriostatic effect comparable to that of lactoferrin. And apart from this immunity conferred upon the breast-fed infant by the mother the hazards of artificial feeding are avoided. These hazards include allergic disorders and occasionally metabolic derangements and obesity.

#### Infant Formulae

However, in spite of all the advantages of breast feeding many mothers still choose not to breast feed, and in such cases the mother's choice should be respected. Nowadays, the infant food industry provides a wide range of carefully formulated products mostly based on cow's milk and since the human infant thrives well when fed at the breast, human milk is used as a reference standard for human nutrition that has not been improved upon.

The starting infant formula — that is, the formula used during the first 4-6 months of life — must satisfy all the nutritional needs of the infant. Such a formula is referred to as an adapted formula, so called because it is prepared by the adaptation of cow's milk to make it as much as possible close in composition to mature human milk which is breast milk that comes about 3-4 weeks after parturition.

After the age of 4-6 months the so-called "follow-Up" formulae are suitable for the infant. These are based on cow's milk that has undergone some modifications to make it suitable for the increasing nutrient needs of the infant, but the milks are not as highly modified as adapted formulae. An ideal follow-up formula would have the following properties.

- High protein content of high biological quality taking into account the relatively higher needs of the older infant.
- Adapted fatty acid composition with a higher content of unsaturated fatty acids especially linoleic acid.
- Blend of carbohydrates free of sucrose to prevent development of a sweet tooth. Consists mainly of lactose easily absorbable

glucose and small amounts of starch.

- Reduced mineral content compared to cow's milk. Fortified with calcium, iron and trace elements.
- Supplemented with vitamins, taking daily requirements into account.

#### Beikost

Round about this same age of 3-4 months breast milk or formula alone does not suffice for the nutritional needs of the infant and it is at this stage that weaning is recommended. The word "Beikost" is used as a general term for all food other than breast milk or formula in the feeding of infants. A very good reason for introducing Beikost is that it teaches the infant to chew and swallow at a time when the skill of chewing is developing and the later acquisition of which may be more difficult. It also habituates the infant to new tastes who is more willing to accept the spoon now than later on when he is teething and his gums are sore. In the second trimester of the first year of life there is an increased need for nutrients particularly for Vit C and iron.

Such higher needs cannot be satisfied by milk alone and although milk will still at this stage provide an important source of nutrients some form of solid food is essential.

It is important to remember that before the age of 4 months the infant can be rather into-lerant to gluten, a protein found in wheat so that the infant should not be given any cereal or biscuit based on wheat flour. Gluten free cereals should be offered at this time and as with all solid food they should be spoon-fed not added to the bottle-feed. Milk is a complete food on its own and addition of any pap to it may render it

dangerously high in osmolarity with possible bad consequences on the infants' still underdeveloped kidneys.

Gluten-free cereals are based on rice and maize and their use is empirical at such a young age because the clinical picture of coeliac disease (intolerance to gluten) is similar to cow's milk protein intolerance so that it could become more difficult to differentiate. And if the infant is exposed so early, besides the increased risk of development of manifestations of disease it becomes much more difficult to treat successfully.

Other potential disadvantages of early introduction of Beikost are interferance with breast feeding and disturbance of appetite regulation with a greater possibility of obesity in later life. There are also potentially harmful constituents namely sucrose which is a major cause of dental caries and its indiscriminate use leads to the development of a sweet tooth. Home-prepared vegetables particularly carrots and spinach are very highly concentrated in nitrates and therefore their use is contraindicated in the first 4 months. Special consideration should also be given to infants with a family history of atopy in whom potentially highly allergenic foods (e.g. eggs, fish, chocolate) should be strictly avoided during the first year.

From what has been said it can be concluded that the health of the infant and the child is related to the health and education of the mother and in industrialised countries problems in the field of maternal and child-health are largely psycho-social in nature and related to the family environment. Infant nutrition is therefore not only a problem of providing essential nutrients in adequate amounts, but also of ensuring an optimal psycho-social milieu in which the quality of interaction between mother and infant is of prime importance.

# PHARMACIST LOCUM SERVICE

The Chamber of Pharmacists is organising a Locum service.

ALL pharmacists who wish to participate in the scheme are asked to write to the Secretary giving details of the dates and times when they are available.

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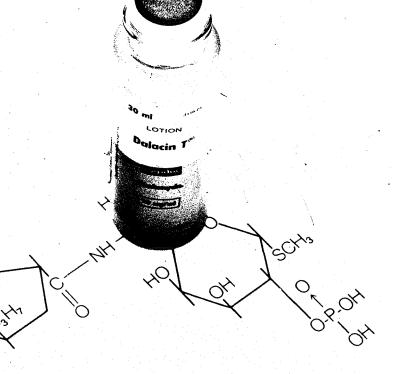
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W.D.H. Schneider (Skin specialist and Allergologist, Kornwestheim, Germany) Zeit. Hautkr., 60, No. 20 (1985) 1599-1608.





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#### MEDICINAL PLANTS

# Ficus carica

# Isabella C. Grima, Pharmacy Student

Ficus carica, a member of the Moraceae family, is the domestic fig, a palatable and nutriticus fruit. The ancient Egyptians called the fig, teb, and the earliest Hebrew writings speak of the fig under the name, teenah, which leaves its trace in the Arabic, tin, the same name for the fig in Maltese<sup>(1)</sup>.

# Varieties(2)

Various horticultural varieties exist in Malta, the most popular being the Parsott, the common White Fig (Tina Bajda), and the St. John's Fig (Tina ta' San Ġwann). Varieties not only differ in physical appearance and taste, but also in the method of fertilisation; in that certain varieties are self-pollinating whereas others depend on 'caprification' for pollination. Caprification involves the pollination of the fig variety by the pollen grains of the wild fig variety — Caprificus, transported by an insect, Blastophaga grossorum.

# Historical and medicinal importance

The fig is one of the oldest fruit known to man, and this fruit originated in the Mediterranean countries, and was subsequently introduced in other countries. The fig has been mentioned in Greek, Roman and Hebrew literature, amongst which the Bible, and was attributed numerous medicinal properties. It was one of the ingredients of the 'universal antidote' compounded for plagues and poisons<sup>(3)</sup>; was thought to prevent piles if carried in one's pocket in a dried form; was effective as a poultice on boils<sup>(4)</sup>; and exerted laxative effects when consumed both fresh or dried.

# Constituents

Fresh figs contain around 20% total carbohydrates, around 2.5% dietary fibre, a number of vitamins, together with a high content of potassium, which helps to maintain the body acid-alkaline balance. The dried figs contain a far higher amount of carbohydrates (around 70%) and dietary fibre (around 17%) as a result of moisture removal, but contain lower amounts of vitamins as a result of industrial processing.



# Laxative property

The laxative value of figs has been recognised far and wide, but attempts to isolate the agent responsible for such an action were far from successful. The recent hypothesis on the benefits of dietary fibre proposed by Burkitt, and the gradual understanding of the mechanism of action of the dietary fibre components on the human gastrointestinal tract, has prompted researchers to agree with L.E. Sayre, who way back in 1906, stated that the laxative action of figs was due to the fibre content and the indigestible seeds. (3)

### Fig preparations

The only official preparation containing figs listed in the British Pharmacopoiea is 'Compound Fig Elixir B.P.', which is indicated for use in constipation. This preparation contains a number of stimulant laxatives besides an aqueous extract of figs, and the efficacy of the preparation is due to the former substances. Other proprietary preparations are designed on this official preparation.

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# APPRECIATION

# Dr T.D. Whittet B.Sc., Ph.D., F.P.S., F.R.I.C., D.B.A.

# A. Serracino Inglott B.Pharm., D.Pharm.

Dr T.D. Whittet was a past Chief Pharmacist of Great Britain. Dr T.D. Whittet will be remembered by pharmacists not only in the U.K. but also all over the world because besides being Chief Pharmacist and a prominent pharmaceutical historian he worked very hard towards the prospects for pharmacy in every country. He was very helpful to pharmacists and had a particular regard towards Maltese pharmacists being a personal friend of pharmacist Mr A. Darmenia, our founder of the Union of Pharmacists.

Locally Dr Whittet was instrumental in convincing the authorities to retain the pharmacy course at the degree level when it was being suggested that the course of pharmacy be transfered to the Polythecnic which at that time awarded diplomas.

Dr Whittet re-visited Malta later as an external examiner. He examined the thesis submitted by Mr Carmel Fenech which dealt with the Bioavailability of Trimethoprim from Co-Trimoxazole tablets.

Dr Whittet had the occasion to welcome many Maltese pharmacists in the U.K. particularly when he was in charge of the Apothecaries Hall. Amongst the visitors there was our past president, pharmacist Mrs Maria Brincat.

On the occasion of his death we are publishing extracts from the paper read to the Malta Union of Pharmacists in April 1968, when the Malta Union of Pharmacists was celebrating Pharmacy Week.



Dr T.D. Whittet and Mrs Whittet during the opening of a pharmaceutical exhibition in 1968 held in the Aula Magna at the University Buildings in St. Paul Street, Valletta, which now houses the Foundation of International Studies. Next to Dr Whittet is Dr A. Serracino Inglott at that time a pharmacy student who represented the Pharmacy students on the Council of the Union of Pharmacists. He is showing an ampoule filling machine to Dr Whittet, which was at that time used by pharmacists at the Medical Stores to prepare sterile distilled water in ampoules.

4th from left is Mr. Francis Formosa, at that time a very active pharmacist, 5th from left is Mr Joseph Mifsud, who at that time was a pharmacy student.

# Professional Ethics in Great Britain

T.D. Whittet, B.Sc., Ph.D., F.P.S., F.R.I.C., D.B.A.

Extracts from the paper read to the Malta Union of Pharmacists, April 1968.

Some form of pharmaceutical ethics has been in force in England since at least 1316, for in that year the Gild Pepperers of Soper Lane made ordinances for the control of drugs and spicery. This gild, of which the earliest record is 1179/80 contained pepperers, spicers and apothecaries. The latter seem to have been an autonomous section, for as early as 1306, there is a mention of wardens of the apothecaries in the City of London records. The titles pepperer, spicer and apothecary were often used for the same person on different occasions.

#### Gharbala — Gharbiel — Garblers

To ensure that these ordinances were carried out, inspectors known as "garblers" were appointed. Filby has called these the first guardians of the public health and food.

The word is derived from the Arabic Gharbala, to sift or select. I was very interested to learn from Mr Darmenia that in Maltese Gharbiel is the word for sieve and that various types used in industry, agriculture and pharmacy are called by that name.

In Great Britain the term garbling was used only for the inspection and removal of impurities and adulterants from spices and similar articles including drugs, whereas on the continent it was also used for the inspection of grain.

The duty of garbling passed to the Grocers' Company and was carried out by the apothecaries section of that gild. When the apothecaries left the Grocers' Company in 1617 to form their own gild, they retained the right to inspect drugs and pharmacies.

In the provinces too, the gilds of which the apothecaries were members, had searchers to control the purity of drugs and the conduct of the trade. The oaths of several of these are still in existence.

# Foundation of the P.S.G.B.

After the apothecaries transferred from pharmacy to medicine as a result of the Apotheca-

ries' Act of 1815, the Chemists and Druggists founded the Pharmaceutical Society of Great Britain in 1841. This included among its objects "the advancement of chemistry and pharmacy and promoting a uniform system of education for those who should practise the same." Jacob Bell, one of the founders of the Society, was aware of the need for a high standard of practice for he wrote in 1841:

"In reviewing the history of Pharmacy in all ages we find that fraud has always prevailed to a remarkable extent in this kind of traffic (i.e. variations in the quality of drugs, and the sophistications to which they are liable), which circumstances may chiefly be attributed to the facilty of eluding detection, but the imperfect acquaintance possessed by the public of the nature and properties of drugs only increases the responsibility of the druggist and demands the utmost vigilance. The detection of adulterations is, therefore, one of the most onerous duties of the pharmaceutical chemist, and it is one, which requires, besides chemical knowledge, a practical acquaintance with the sensible properties of all substances used in medicine."6

The Council of the Pharmaceutical Society apparently discussed ethics in 1856 for in their report of June of that year the following statement appeared:7

"It has been the policy of the Society to abstain from interference with regard to the regulations adopted by individuals in the management of their business. Any advice or suggestion on this head has been of a very general nature, and not in a spirit of dictation. The Council think, however, that some advantage may arise from the voluntary adoption of certain principles which may be recommended for the observance of members so far as they may individually find it practicable.

One object of the Pharmaceutical Society, and one which may be expected to follow as the natural result of improved education, is the acquirement by the members of a professional character. This improvement must be gradual, and will require a considerable time for its develop-

ment, which may be expedited by bringing the subject under the notice of the members whenever a suitable opportunity occurs."

Just how gradual was the development towards a formal code can be seen by the fact that it was to be another 83 years before one was formally adopted by the Pharmaceutical Society.

# Striking Off The Register

In 1894 a committee of Pharmaceutical Society's Council reported on a code of ethics and the President, Mr Michael Carteighe commented sympathetically on the proposals but added "It must be borne in mind, however, that there were objections to nearly all codes when the power of getting one's living was interfered with by it." Mr Hampson, the treasurer, agreeing with the President, said that the very fact that such a discussion taking place was in itself very important, but to carry it out in its entirety it would be necessary for the Society to obtain greater powers and he was quite sure that no Parliament would give the powers which would be necessary in order to strike off the Register anyone who disobeyed the ethical code. Beyond that he doubted whether it would be just to deprive a man of his means of livelihood, even for what might be termed an infamous transaction with regard to his business. In many cases greater harm would be done by depriving a man of his means of living, and the results would be far worse than the continuation of such conduct.8

Such views from Michael Carteighe are surprising as he was a farseeing and progressive pharmacist in many ways. The change in outlook is illustrated by the fact that several pharmacists have been struck off the Register for the illegal sale of habit-forming drugs. Included among these is one of the present members of the Society's Council who has, however appealed against the decision and the removal of his name will not take place until the outcome of the appeal is known.

Commenting on those views of 1894, Mr Adams, until recently Registrar of the Society said:

"Had the Society been active in imposing standards of conduct on its members, in spite of the fact that they would still have been able to practise their calling, there is no doubt that this would have exercised a very strong influence on the practice of pharmacy and might well have resulted in statutory powers having been obtained much earlier."

#### Pharmaceutical Ethics

The subject of pharmaceutical ethics appeared early in the topics discussed at the British Pharmaceutical Conference founded in 1863. At the third full meeting held in 1866, a paper entitled "Pharmaceutical Ethics" was read by Joseph Ince. He began with the following definition of ethics:— "The doctrine of morality, or social manners, the science of moral philosophy, which teaches men their duty and the reasons of it; a system of moral principles and rules regulating the actions and manners of men in society."

He divided pharmaceutical ethics into six sections:

- (1) The ethics of the shop.
- (2) Social ethics. The behaviour of the pharmacist with regard to others in the same line of business as himself.
- (3) Medical ethics. The behaviour of the pharmacist with regard to the medical profession.
- (4) Ethics of public life. The behaviour of the pharmacist as a member of his society.
- (5) Personal ethics. The behaviour of the pharmacist as an individual.
- (6) Ethics of trade extension.

Under the ethics of the shop the author gave as the first ethical rule of the pharmacist "no drug should be admitted into his shop other than that which, in case of dangerous illness, he would not hesitate to supply to the inmates of his own family circle." He summed up by saying that "the rule of every well-regulated establishment is to supply faithfully and implicitly whatever in the whole range of pharmacy a customer may require — to obtain it if not in stock, whether English or foreign, and to spare no pains that it shall be the identical thing desired." He made a pleas for the use of the word "pharmacy' instead of shop.

Under social ethics Ince made a plea for better and more uniform education and under medical ethics one for mutual respect between pharmacy and medicine with no encroaching on each other's fields.

Under the ethics of public life and personal ethics he recommended the pharmacist to play a part in society outside of the pharmacy and to educate himself as much as possible both professionally and culturally.

In his final section of the ethics of trade extension Ince discussed the advantages and disadvantages of advertising and concluded that the right use of advertisement is not contrary to the true observance of the ethics of pharmacy. He stressed, however, that a working laboratory is a great source of power as regards trade expansion and that money might be better spent on apparatus than on decoration, splendid windows and architectural embellishments.

This paper by Ince was followed by others by Atkins in 1872<sup>10</sup> and 1877.<sup>11</sup>

The first was mainly concerned with improving education and the duty of the apprentice-master to students in training. The second dealt with relations with the medical profession. There was then a dispute about counter-prescribing which was causing trouble, mainly by a minority of extremists on both sides.

Atkins recommended the following code of conduct:— "There must be no back-parlour consultations, no minor acts of surgery, no semi-professional visits; in short, nothing in excess of that ordinary courteous practice, the meaning of which we all recognise, however difficult the exact definition may be."

At the British Pharmaceutical Conference of 1897, Atkinson<sup>12</sup> in a paper entitled "Pharmaceutical Ethics — A Retrospect" commenting on the improved educational reequirements of the pharmacist stated "The pharmacist of the next generation must inevitably have some education and professional training; to such a man some code of ethics might be considered a part of his stock-in trade. Consciously or unconsciously, everyone is guided by some principle in all social and business relations. Whether the moral standard be high or low depends mainly on education, intellectual bias and environment.

# Moral Training

The great aim which ethics may claim to exercise on society is that each individual may so train his mind that the best actions become instinctive, and that which is mean or base repellant; it was this moral training which gave us a race of pharmacists in the past of whom any society might justly be proud. It is this training which has enabled us to retain men in our ranks at the present day who honourably maintain the high reputation of those who well and truly laid the foundation of British pharmacy." Atkinson deplored the sale of quack remedies and the un-

scrupulous advertising of so-called cures for diseases then incurable. He also suggested that the inculcation of loyalty to the parent society should be a foundation of ethics.

### The Adoption of The Code

A code of ethics was finally adopted in 1939 under the name of the "Statement on Matters of Professional Conduct." The background to its adoption has been discussed by Adams. The statement was amended in 1942 and again in 1953 when it was approved by the Annual General Meeting of the Society; a further minor amendment was added in May 1964. As mentioned in my previous paper the Society attempted to introduce rules to ensure that non-pharmaceutical activities should, in future be conducted in premises physically separate from those in which traditional pharmaceutical activities take place but this has been, so far frustrated by legal action.

The Council of the Pharmaceutical Society has, from time to time, issued lists of drugs (usually those acting on the central nervous system) which it has asked pharmacists not to sell except on prescription. With very few exceptions, the profession has responded loyally:

This is a procedure in the general public interest for it allows control of potentially harmful drugs from the time they are introduced until they can be considered for legal control by the Poisons Board. The foresight of the Council has been proved by the fact that all the drugs they have treated in this way have eventually been legally restricted to supply on prescription.

In 1962 the Annual General Meeting adopted a further detailed paragraph (No. 24) on doctor/pharmoist relationships.

#### Hospital Pharmaceutical Ethics

Although many hospitals had rules for the guidance of their apothecaries and later for pharmacists until recently there was no published code of ethics for British Hospital Pharmacists. Several papers on the subject have appeared in recent years. In 1962 Grainger<sup>13</sup> wrote on "My attitude to the Health Service." He stated that the first responsibility of the pharmacist is to the sick and stressed the importance of good relations with the medical and nursing staffs, and especially the provision for them of an information service. Although this calls for wide read-



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



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ing with the sacrifice of leisure it brings prestige to the department and vocational satisfaction to the pharmacist. Grainger also made a plea for more research opportunities in hospital pharmacy.

In the same year Cooper<sup>14</sup> gave some "Reflections on the Moral Responsibilities of a Public Pharmacist." He stated that "the pharmacist's personal approach to the patients, doctors, nurses and administration during his daily round of work has to be above reproach. He may not be overbearing, dogmatic surely, snappy, generally unhelpful, nor may he become abject, servile or apologetic. He has to avoid too, any attitude of jealously or mistrust of a fellow pharmacist."

The following year Cooper<sup>15</sup> discussed the opportunities of a public pharmacist and recommended a more personal and confidential approach to the handing over of medicines to a patient. His article ended with a definition of a profession given by Prof. R.H. Tawney, that might be regarded as the spirit of any professional code — "It is a body of men who carry on their work in accordance with rules designed to enforce certain standards both for the better protection of its members and for the better service of the public."

# Twenty Questions

In 1955 Cooper<sup>15</sup> posed "Twenty questions for the Hospital Pharmacist" and there is so much valuable thought in these that I quote them in full.

- (1) Do you maintain an up-to-date file of current literature on drugs and therapeutic techniques?
- (2) Do you read all accessible medical and pharmaceutical journals week by week if necessary partly or wholly in your spare time?
- (3) Do you go out of your way to obtain fuller information about those drugs which you regard as having promise?
- (4) Do you order samples or initial stocks of potentially valuable new drugs, in anticipation of the demand?
- (5) Do you discuss such drugs with those of your medical colleagues whom you think might be interested in using them?
- (6) Do you issue a periodical bulletin, or take alternative steps to bring information about new drugs to the eyes and ears of your nursing colleagues?
- (7) Do you encourage your colleagues, medi-

- cal and nursing, to come to you with problems or criticisms, or in search of information?
- (8) Do you take every chance to lecture to your hospital staff and interest them in the working of your department?
- (9) When invited by a colleague to undertake special investigation or participate in research, do you resist the temptation to explain that you are too busy?
- (10) Allowing for architectural drawbacks beyond your immediate control, would you be content to let a knowledgable professional colleague inspect every corner of your department and observe your methods of work?
- (11) Are your labels, as they leave the department, and your stock labels within it, clean, neat, legible and adequate?
- (12) Do you ensure, by suitable labelling, that preparations you issue shall not be used after condition or potency have declined?
- (13) Are your preparations sent out in containers calculated to preserve the contents for the expected storage-period?
- (14) Do you believe that, if it is humanly possible, your department should offer a service for 24 hours a day, 7 days a week?
- (15) If it is impracticable to have a pharmacist an the premisess night and day, do you arrange for one to be on emergency call when the department is closed?
- (16) Are you always courteous and cooperative towards the nurse or houseman who intercepts you as you are locking up to go home or disturbs you when you are not officially there at all?
- (17) When you answer the telephone do you always sound cheerful, efficient and eager to help the caller?
- (18) Do you always remember that your patient of the moment is the most important person in the hospital, and behave accordingly?
- (19) Do you play your part in the cultural and social activities of the hospital, using any personal talent to serve or entertain your colleagues?
- (20) If an earnest, promising and newly qualified pharmacist came to you for advice about his career, would you recommend him to follow in your footsteps?

In March 1967 the Council of the Guild of Public Pharmacists published in the Journal of



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Normoglycaemia, with consequent normoinsulinaemia on the other hand, aids (by way of the mechanisms described above carried out in reverse

mechanisms described above carried out in reverse order) catabolism of the triglycerides and frees the adipocytes (LIPOLYSIS) of NEFAs, which are then used by the liver and the muscles to produce energy, ie. tone and efficiency.

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Hospital Pharmacy<sup>18</sup> a long and detailed Code of Practice for Hospital Pharmacists. It gives information on the staff and facilities required and details the responsibility of the Chief Pharmacist giving very comprehensive guidance for the execution of his duties including planning, control of staff, safe systems of work, information vices, training, research and custody of poisons and other dangerous drugs.

The code gives firm guidance on the position of technical assistants:— "The activities of staff handling drugs and pharmaceutical supplies must be supervised by a pharmacist and, to ensure that this is carried out effectively, each technical assistant should be informed of the name of the pharmacist immediately responsible for his activities and to whom reference should be made in any case of difficulty. A pharmacist should not be asked to supervise more technicians than he can properly control; the number will depend upon the competence of these workers and the nature of the work." I strongly support this point of view.

# The Position In Malta

I am interested to read in Dr. Paul Cassar's excellent History of Medicine in Malta that as early as the 16th century those wishing to apply for a licence to set up a pharmacy in Malta had to apply to the Grand Master who only gave his assent after obtaining the advice of the Protomedicus or Physician-in-Chief. All imported drugs were inspected by the Protomedicus at the Customs House before they were permitted to be withdrawn by their owners. Another check was made by the apothecary receiving them who was enjoined by law to ensure the good quality and freshness of his ingredients. In the following century we find a reference to every pharmacy in the island being inspected annually by the Protomedicus and deteriorated drugs and medicines being destroyed.

This early progressive legislation was followed by comprehensive rules for the control of pharmacy and of poison in both the 17th and 18th centuries.

As Dr Cassar has commented "it is remarkable that, in spite of the distance of more than 150 years, the laws regarding such administrative matters as the licencing of apothecaries, the sale of medicines, the safe keeping of poisonous substances and the periodical inspection of pharmacies have remained substantially unchanged and in 1900 formed the basic framework of Chapter

IV of the Second Sanitary Ordinance regulating the practice of pharmacy in Malta. It is a tribute to our pioneer legislators that their enactments are still in force today." I agree entirely with this masterly summary.

Mr. Darmenia has told me that the present Code of Ethics for Pharmacists in Malta is issued by the Medical Council which, up to the present maintains the Register of Apothecaries and controls the exercise of the profession, but that impending legislation will transfer these powers to a Statutory Pharmacy Board.

#### Conclusion

In conclusion I emphasise that the success of any code of ethics depends, not on compulsion, but on the professional and public spirit of the profession concerned.

I am sure that with your long and honourable history of pharmacy and your keen and farseeing leaders that our noble profession will be ensured of a successful future in Malta and will play its full part in the fight against disease and for positive health.

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This paper is based on one read to the American Society of Hospital Pharmacists, New York, Aug. 6th 1964 and published in the West African Pharmacist, 1967, 9, 46.

# Pharmacists - Members Of Parliament/Election Candidates

Chev. Joseph Borg, K.M., Ph.C., L.P.

In this year when we have just had a General Election for the selection of Members of Parliament I think that it is fit and interesting to give hereunder the names of our past and present fellow-Pharmacists who honoured our Profession by serving in past Council of Government, Legislative Assembly or Parliament or who have tried hard to do so.

- Joseph Vassallo, Ph.C. (1879-1953), who was the first elected in the General Election of 1915 as Representative for the 2nd district when he was given 203 popular votes. He again contested the 1924 General Election with the Democratic Nationalist Party for same 2nd district and obtained 43 votes and was not elected.
- 2. Alfred Gera de Petri, Ph.C. (1873-1946) in 1921 was a Candidate for the 1st division or district with the Constitutional Party getting 8 votes and was not elected; he contested the 1924 General Election with same Party in same district when he obtained 23 votes and was again not elected; he again contested the 1927 General Election with same Party in same district obtaining 684 votes and was elected (third in order of time). He again contested the 1932 General Election with same Party in same district when he obtained 673 votes and was elected in a casual election when the Hon. Professor Robert V. Galea, A.&C.E. vacated his post. Pharmacist Gera de Petri again run for election in 1939, same Party same district, when he obtained 1743 votes but with negative result.
- 3. Archangelo Agius, Ph.C. (1880-1964) contested the 1921 General Election with the Constitutional Party in 3rd district and obtained 383 votes but was not elected. He again contested in 1924 in same district with same Party getting 122 votes and was not elected. In 1932, again with the Constitutional Party in the 1st district for the Senate he obtained 102 votes with negative result.
- 4. Francis Bonello, Ph.C., (1873-1942), contested the 1921 General Election in the 5th district with the "Unione Politica Maltese" getting 151 votes but was not elected.
- 5. Leo Portelli, Ph.C. (1894-1942), contested the 1921 General Election also in the 5th district with the Malta Labour Party and obtained 572 votes and was the second

- Pharmacist elected to Parliament. He contested the 1924 election this time as Independent in 5th district when he got 100 votes and was not elected.
- 6. Joseph Muscat, Ph.C. (1893-1950), contested the General Election of 1924 with the Constitutional Party in 3rd district and obtained 176 votes and was not elected. In 1927 with the same Party in same district he obtained 721 votes but was not elected. In 1932 with same Party in same district he obtained 1595 votes and was elected (fourth) in a casual election when the Hon. Colonel A. Sammut, C.B., C.M.G. relinquished his seat.
- Paul Sacco, M.P.S., contested the 1927 General Election with the Constitutional Party in the 5th district, obtaining 60 votes and was not elected.
- 8. John Raimondo, B.Sc., Ph.C. (1917-1963), contested the first post-World War II General Election of 1945 with the Malta Labour Party in 1st dictrict (when Malta and Gozo formed 2 districts) and obtained 2366 votes and was elected (fifth). He again contested in 1947 with same Party in 2nd district (when both Islands formed eight districts) obtaining 2259 votes and was co-opted when the Hon. Dr. Arthur Colombo, M.D., elected from the 4th and 5th districts relinquished one seat. He also contested the General Election of 1950 this time with the Malta Workers Party both in the 1st district were he obtained 27 votes and was not elected and in the 2nd district obtaining 549 votes with similar negative result; in 1951 with the same Party in 3rd district getting 415 votes and was not elected; he also contested in 1955 with the Malta Labour Party in 2nd district getting 587 votes and was not elected.
- George Borg Barthet, Ph.C., contested the 1947 General Election in 1st district with the Democratic Action Party and he obtained 140 votes and was not elected.

- 10. John Gatt, Ph.C., contested the 1947 General Election in the 2nd district with the Nationalist Party and obtained 198 votes and was not elected; in 1950 with same Party in 4th district getting 482 votes but again not elected; again contested in 1962 this time with the Democratic Nationalist Party in 2nd district obtaining 93 votes and was not elected.
- 11. Emmanuel V. Attard Bezzina, Ph.C., contested the General Election in the 3rd district of 1947 with the Malta Labour Party when he obtained 2117 votes and was elected (sixth), that of 1950 obtaining 2026 votes and was elected for the second time, that of 1951 obtaining 2186 votes and was again elected to Parliament, that of 1953 getting2328 votes and was elected, that of 1955 getting 2225 votes and again elected in a casual election when the Hon. John J. Cole, elected from 3rd and 4th districts, relinguished his 3rd district seat, that of 1962 in the 4th district getting 2686 votes and was elected, that of 1966 when the obtained 2325 votes and was again elected, that of 1971 when he obtained 2269 votes but was
- not elected, again in 1976 in 3rd district (when both Islands were divided into thirteen districts) obtaining 2650 votes and was elected for the record number of eight times. During 1971-1976 the Honourable Emmanuel V. Attard Bezzina was Speaker of the Maltese Parliament and subsequently Ambassador to the Federal Democratic Republic of Germany 1976-1984.
- 12. Gaetano Farrugia, Ph.C., contested the 1947 General Election under the auspicies of the Nationalist Party in the 5th district and obtained 418 votes and was not elected, with the same Party and in the same district in 1950 getting 629 votes but again was not elected, and that in 1951 getting 163 votes with the same negative result.
- 13. Robert Tua, Ph.C., contested the General Election of 1950 with the Malta Labour Party in the 1st district and he obtained 164 votes but was not elected.
- 14. Edgar Micallef, Ph.C., B.Pharm., contested the 1950 General Election with the Constitutional Party in the 5th district, obtaining 169 votes with negative result.



Mr. Emmanuel Attard Bezzina Ph.C.



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- 15. Francis-Xavier Muscat, Ph.C. (1889-1960), contested the 1950 General Election with the Constitutional Party in the 6th district and he obtained 131 votes and was not elected.
- 16. Joe Bondi', our fellow-Pharmacist, of Gozo, contested the 1951 General Election when he was still a student, with the Nationalist Party naturally in the 8th Gozo district. He obtained 368 votes but was not elected. Joe graduated B.Pharm. in 1953.
- 17. George Galea, B.Pharm. (1931-1963), contested the 1962 General Election with the Nationalist Party in the 8th district of his birth-place Gozo, when he obtained 2244 votes and was elected (seventh), but died after about one-and-a-half years later when Dr Eddie Fenech Adami, LL.D. (who had contested the 6th district getting 939 votes and was not elected) was co-opted to fill his vacant post.
- Francis (Sur Čikk) Ellul, Ph.C., (1883-1964), contested the 1953 General Election with the Progressive Constitutional Party for the 6th district and obtained 143 votes and was not elected.
- 19. Frances Galea, Ph.C., contested the 1962 General Election with the Democratic Party in the 1st district and she obtained 43 votes but was not elected.
- 20. William Felica, Ph.C., contested the 1962 General Election with the Democratic Nationalist Party in the 2nd district and obtained 329 votes but was not elected.
- 21. Eric C. Mizzi, Ph.C. (1906-1980), contested the 1962 General Election under the auspices of the Malta Labour Party for the 2nd district, obtaining 148 votes but was not elected, again in 1966 when he obtained 531 votes but was not elected, and also in 1971 when he obtained 347 votes and was not elected, and in 1976 in the 3rd district obtaining only 28 votes with again a negative result.
- 22. Dante Bonnici, Ph.C., contested the 1962
  General Election with the Democratic Nationalist Party in the 5th dictrict and obtained 41 votes and was not elected.
  By the way, his son Michael, an Assistant-Apothecary since 28.5.63, a former student of mine, contested this year's General Election with the Nationalist Party in the 6th district getting 2,996 votes and was elected to Parliament: Prosit Michael.

- 23. Sciberras Joe Philip, B.Pharm., contested the 1966 General Election under the auspices of the Malta Labour Party in the 8th district when he obatined 567 votes but was tained 567 votes but was not elected; he again contested with same Party for same district in 1971 when he obtained 712 votes and was not elected; the General Election of 1976 in 7th district obtaining 839 votes and was not elected and in the 9th district obtaining 1,991 votes when he was soon elected (eighth) in a casual election as Dr Patrick Holland, LL.D. vacated his post in this district as he had been also elected from the 10th district; that of 1981 in the 7th district where he obtained 3,221 votes and was elected (and in the 8th district obtainining 1,195 votes but was not elected). In 1985 he was promoted Parliamentary Secretary responsible for the Departments of Water and of Ports.
  - Pharmacist Joseph Philip Sciberras in this year's General Election contested with same Party in the 7th district where he obtained 955 votes and the 9th district getting 1,030 votes but was not elected in the casual election in the 7th district, created when Dr Carmelo Mifsud Bonnici, LL.D., who was successful in the 1st and 7th districts, vacated the latter, even though he obtained 1,364 votes; but was elected from the casual election created in this same 7th district by Hon. Joe Debono Grech, who was successful in the 7th and 8th districts, and this time our friend Joe Sciberras obtained 1,542 votes. Prosit Joe.
- 24. Tony Nicholl, B.Pharm., contested the 1971 General Election with the Malta Labour Party in the 7th district and obtained 395 votes and was not elected.
  - Tony contested this year's General Election with the same Party in the 10th division and obtained 1,733 votes and was elected (ninth) in the casual election created when the Hon. Leo Brincat, who was successful in the 9th and 10th districts, vacated this second Sliema-Gžira district and Tony obtained 1,946 votes which carried him to victory. Prosit Tony.
  - Tony Nicholl was born in Sliema on 23rd March 1947, studied at the Lyceum and at our University whence he graduated B.Pharm. in 1968. He married Greta nee' Micallef Eynaud and they have three children: Patrick, Nicholas and Elisa.

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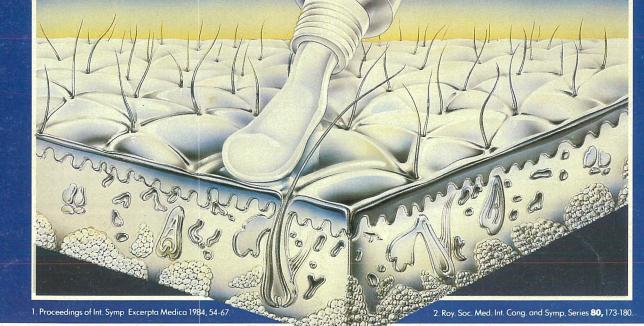
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