

**THE PHARMACIST IN MALTA PROFESSIONAL  
PRACTICE, EDUCATION AND ASPIRATIONS**

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## Introduction

Ever since the establishment of the School of Pharmacy at the Holy Infirmary in 1676 the pharmacy profession in Malta and world wide has mutated in a number of ways. The pharmacy course has evolved from being a 2 year diploma course to a 4 years Honours degree as Bachelor of Pharmacy. The profession has been redirected from a drug oriented to a patient oriented one. These, together with many other changes have made the pharmacist an integral and indispensable member of the Health Care Team (Cassar P.1964) (Mintoff L. 1979).

Throughout the centuries the one factor that has remained constant is that the pharmacist is the **only** expert on drugs whatever his area of practice (Gibson M. R. 1985).

The pharmacist in Malta is well integrated at all strata of society all over the island, thus being in an ideal position to reach out to the community, offering a number of invaluable services whilst also assuming the role of health educator.

The global aim of this project was to evaluate the pharmacists' situation on the island, their input to society and to identify any professional needs they may have to provide a better service, thus enabling them to be better professionals.

Three studies were carried out:

- 1) Updating the Apothecaries Register

The last register published by the Pharmacy Board was in 1983.

- 2) Manpower Survey

This gives a factual view of the manpower situation on the island eliminating misconceptions and aiding to plan for future manpower, considering the aspirations of pharmacy students.

A chapter is concerned with the specific situation of woman pharmacists to enable identification of how woman pharmacists may fully contribute to the profession whilst also accomodating their family needs.

- 3) To identify the professional needs of the Pharmacists

Educational and occupational needs were investigated with special reference to hospital and community pharmacy.

### **Methodology**

The main method of collection of data was by carrying out two surveys.

- 1) to 400 pharmacists in all areas of practice
- 2) to the 157 second and fourth year pharmacy students

The student survey was based on the pharmacist survey. The surveys were divided into 4 sections:

Section I contained personal data needed for updating the register and carrying out the Manpower Survey, whilst sections II-IV were anonymous. Section II dealt with education, relationship with other members of the Health Care Team and sex-discrimination in the practice of pharmacy. Section II and IV dealt specifically with community and hospital pharmacy, respectively.

Additional methods were employed to update the register and carry out the Manpower Survey, these being information from:

- i) the Main Register kept at the Pharmacy Board
- ii) a mailing list obtained from the Health Education Unit
- iii) a mailing list obtained from the Pharmacy Department
- iv) a list of managing apothecaries issued from the Department of Health
- v) the last edition of the electoral register
- vi) the last published register of the Pharmacy Board 1983
- vii) personal communication made by families of pharmacists abroad or deceased
- viii) a list of medical representatives obtained from the Medical Representatives Association
- ix) a list of Hospital pharmacists compiled from attendance sheets
- x) interviews carried out with prominent members of the pharmacy profession

## Analysis

The data regarding the Manpower Survey was analysed using a program written in BASIC specifically for this purpose. The rest of the data was analysed using the BMDP statistical package. The programs BMDP5D and BMDP4F were run giving frequencies and cross-tabulations, respectively.

## Results

### Updated Apothecaries Register

The updated register lists 418 pharmacists showing a discrepancy of 19 Pharmacists with the Main Apothecaries Register kept at the Pharmacy Board which lists 437 pharmacists.

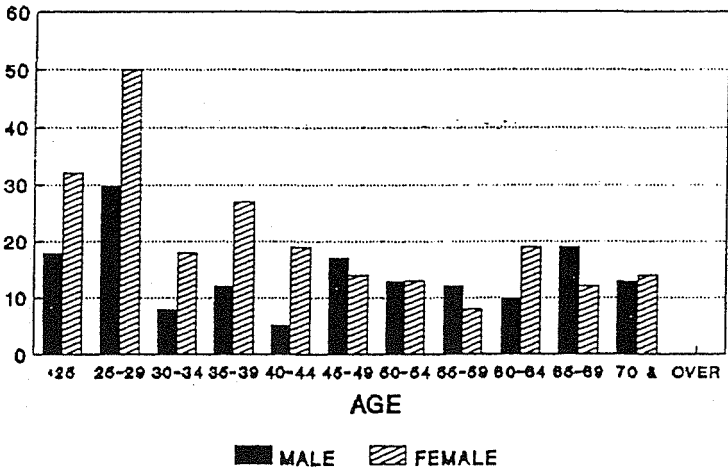
**Table 1:**

	1983 <sup>1</sup>	1992 <sup>2</sup>
Number of pharmacists	312	418
Male to female ratios	136:176	168:250
No. of pharmacists with PhC diploma only	73	45
No. of pharmacists with postgraduate degree only	23	33

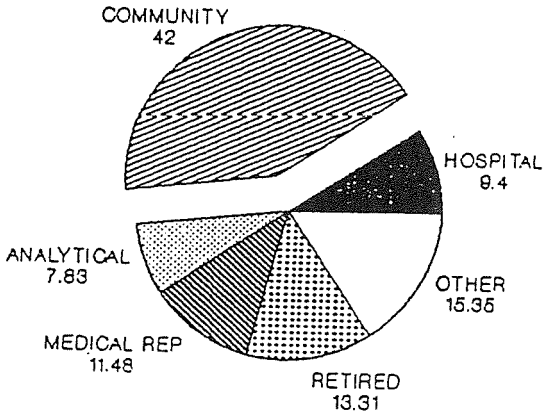
1 Last published Apothecaries Register of the Pharmacy Board, 1983

2 Personally updated results

## Manpower Survey



**SEX AND AGE DISTRIBUTION**



% VALUES

**PRINCIPAL OCCUPATION  
DISTRIBUTION**

**Table 2: Sex and Principal Occupation**

Principal Occupation	Male	Female	Total
Hospital	11	26	37
Community	64	98	162
Analytical	14	16	30
Medical Representative	32	11	43
Wholesale/Distribution	4	1	5
Lecturing/teaching	5	6	11
Non-pharmaceutical	5	3	8
Semi-retired	4	29	33
Retired	20	31	51
Pharmaceutical Industry	4	0	4
<b>Total</b>	<b>163</b>	<b>221</b>	<b>384*</b>

\*34 Pharmacists currently residing abroad

**Table 2: Aspirations of Future Manpower**

	Pharmacy Students		
	2nd Year	4th Year	Total
Hospital setting			
i. Administrative	3	3	6
ii. Clinical	11	25	36
Community	34	11	45
Analytical	7	24	31
Medical Rep.	7	5	12
Wholesale/Distrib.	3	2	5
Teaching	1	1	2

## Sex discrimination

A 'subtle' form of sex discrimination emerged on investigation. The most apparent being the following:

- i) woman pharmacists are preferred to work in pharmacies
- ii) male pharmacists are preferred to work as Medical Representatives
- iii) employers do not 'invest in women pharmacists as they are not visualised in the light of long term employment
- iv) there are not adequate support services such as child care centers, to meet the needs of working mothers, at all levels including academia
- v) only full time workers are entitled to Maternity leave

## Education

### Undergraduate Education

Pharmacists ranked better organised courses (50% n=136) followed by practice (48.5% n=136) as top priorities for a successful pharmacy course, whilst students placed emphasis on practice (49.2% n=139) than on better organised courses (32.5% n=139).

Pharmacology (72.8% n=136) and Pharmacy Practice (69.9% n=136) feature as the subjects of most importance in the preparation for professional practice according to Pharmacists, while once again the reverse was true for students, i.e. Pharmacy practice (73.3% n=139) to Pharmacology (70.4% n=139).

+Pharmacy administration and more training in \*primary Health Care ranked as the priority subjects to be included in the present curriculum by both pharmacists and students.

Pharmacists (69.9% n=136)

2nd Year Students +PA (75.8% n=66)      \*P.H.C. (53.0% n=66)

4th Year Students +PA (59.7% n=73)      \*P.H.C. (73.6% n=73)

## Postgraduate Education

Table 3: Establishing the need to set up postgraduate Education Courses

Would you take up postgraduate Education?

	Pharmacists	2nd yr students	4th yr students
Yes	110	49	46
No	15	1	4
Do not know	10	16	22

If yes, at what level?

	Pharmacists	2nd yr students	4th yr students
Masters	29	39	30
Doctorate's	17	6	4
Diploma	11	1	3
Short Training Courses	39	1	4
Period of Practice and Training			
Overseas	11	6	14
Self education	7	1	0
Full time basis	23	30	31
Part time basis	63	30	30

## Professional Relationship with other Health Care Professionals

Pharmacists classified their relationship with dentists, pharmacy technicians and nurses mainly as being 'good', while that with doctors as being 'very good', although on interview, hospital pharmacists pointed out that their relationship with most consultants should rather be classified as being 'fair'.

## Professional Services offered by the Pharmacist

### Community Services

The traditional urine and pregnancy testing resulted as being the most prevalent services offered (100% and 96% n=66, respectively). Advice on nutrition, vaccination and infant child health care were also offered by



most pharmacists (86%, 71%, 69% n=66, respectively). A markedly lower amount of pharmacists gave advice on family planning, drug addiction and AIDS (33%, 34%, 19% n=66, respectively). Whilst the least service offered was that on terminally ill patients (7% n=66) where 36% of pharmacists (n=66) also identified as the area in which they would most need to supplement their education to provide the service.

## Hospital Services

Hospital pharmacists classified the services they offered mainly as being 'good' to 'fair'. They suggested improvement by having better organised service (85% n=27) and more co-operation from the other members of the Health Care team (74% n=27). Priority should be given to instituting the following service:

Patient counselling	55% (n=27)
Prescription monitoring	22% (n=27)
Therapeutic drug monitoring	18% (n=27)

## Conclusion

Women seemingly dominate the profession in Malta, but a more in depth study shows that they stand at a disadvantage as compared to their male counterparts.

The profession of pharmacy is becoming a more demanding one, ramifying into different areas, this being exhibited in the increased educational and professional needs of the pharmacist.

The profession in Malta anticipates a future of evolution while still keeping at heart the more traditional roles of the pharmacist.

## References

Cassar P. A medical history of Malta Wellcome. Historical Medical Library London pg 497 - 512, U.K.

Register of the Pharmacy Board 1983. Printed at the Government Printing Press 1984, Malta.

Remingtons Pharmaceutical Sciences 17th Edition, Scope Editor Gennaro A.R. Mack Publishing Company, Easton, Pennsylvania 18042 U.S.A. 1990, pg 3.

Mintoff Lilian. An Evaluation of the Role of the Pharmacist in Health Services in Malta. Thesis submitted in fulfillment of the Degree of Master of Philosophy, University of Malta, Msida, Malta. 1979, pg 104 - 105 (unpublished)