SCHIZOPHRENIA IN MALTA

Helen Debono

Introduction

There is a public misconception that persons with mental disorders are 'bad' rather than 'ill' in the medical sense of the word. This fosters the apprehension that the mentally ill are dangerous, that they should be locked up and kept away from society. However the advent of psychotropic medications has allowed many persons with psychiatric disorders to spend less time in mental hospitals and more time in the community (Costas, 1990). Among the mental hospital diseases that have been misconceived is schizophrenia.

In the twentieth century there was the introduction of medical treatment for schizophrenia, but it was only after the success achieved by chloropromazine in 1952 that other new drugs, some with similar structures while others with different structures, were introduced.

Action of neuroleptics can be divided into two classes: wanted and unwanted effects (Rosenthal et al, 1975).

1. Wanted effects: sedative effect;
   antidelusional effects; and
   disinhibitory effects.

2. Unwanted effects: sleepiness;
   early hyperkinesia and anxiety or suggestibility;
   parkinsonian syndrome (akinesia, hypertonia, tremor) and depressive tendencies, and later occurrence of hyperkinetic syndrome (akathesia, restlessness) and insomnia or neuroticism.

Social measures are also important therapeutically. These along with other drugs have a protective effect both in schizophrenics who return with their families and also in those patients who are living alone and therefore exposed to stressful life events.

Aims

In Malta, Mount Carmel Hospital, is the principal mental hospital.

The following studies were carried out considering schizophrenia and its treatment having the following aims:

Study 1 - To determine the combination therapies prescribed in Malta to schizophrenic outpatients during 1991 according to sex and age group.

Study 2 - To study use of antipsychotics in all diseases that have been diagnosed at Mount Carmel Hospital between 1987 and 1991 according to sex and age group.

This study has been further subdivided into three further studies with the following aims:-

Study 2.1 - To establish the prevalence of diseases diagnosed at Mount Carmel Hospital between 1987 and 1991.

Study 2.2 - To establish the sex and age group in which schizophrenia has been most commonly diagnosed at Mount Carmel Hospital between 1987 and 1991.

Study 2.3 - To establish the extent of the use of antipsychotics in schizophrenia at Mount Carmel Hospital between 1987 and 1991.

Study 3 - To study the prognosis of schizophrenia in Maltese patients.

Study 4 - To correlate the relapse rate of schizophrenia in Malta according to sex.

Study 5 - A study of the Maltese schizophrenic patients in the community. This study was further subdivided into five further studies with the following aims:-

Study 5.1 - Social details of Maltese schizophrenic patients living in the community.

Study 5.2 - The knowledge that the schizophrenic patients and family members / carers have concerning the disease itself and its treatment.

Study 5.3 - Patient compliance to prescribed treatment.

Study 5.4 - The practice of ECT in Malta.

Study 5.5 - The confidence of Maltese schizophrenic patients and family members / carers in their community pharmacist.

Study 6 - The role of the pharmacist regarding the special needs of patients with mental disorders.

This last study was subdivided into five further studies with the following aims :-

Study 6.1 - The adequacy of the curricular content of the undergraduate B.Pharm (Hons) course on psychotropic medications and the needs of patients on such treatment.

Study 6.2 - The most common psychotropic drugs being prescribed in the community.

Study 6.3 - Number of patients on psychotropic medication in the community.

Study 6.4 - How the pharmacist ensures patient compliance.

Study 6.5 - Response of pharmacists to proposed home visits.

Methodology

Study 1

Therapy as recorded on the treatment yellow cards of schizophrenic outpatients during 1991 was used.

For the purpose of this study all drugs were grouped into five classes:

a) Antipsychotics (AP) - including those drugs used in psychosis and related disorders, that is antipsychotic drugs, for example, phenothiazines and depot injections, for example, thioxanthenes and antimanic drugs, for example, lithium.

b) Antidepressants (AD) - including tricyclic and related antidepressants, the mono-amine oxidase inhibitors, the combined antidepressant preparations and any other antidepressant drugs;

c) Antimuscarinics (AM) - including those drugs used in parkinsonism and other related disorders, for example benzhexol hydrochloride, orphenadrine hydrochloride and benztropine mesylate among others;

d) Sedatives (S) - including hypnotics, anxiolytics, barbiturates and methyprylone; and

e) Others (O) - incorporating any other drug(s) taken by the patient which does not fall in any one of the above mentioned classes.

Ages of patients were sub-divided into seven groups:

a) 0-14 years - Age group I;
b) 15-24 years - Age group II;
c) 25-34 years - Age group III;
d) 35-44 years - Age group IV;
e) 45-54 years - Age group V;
f) 55-64 years - Age group VI; and
g) >65 years - Age group VII

A table was set up for each age group and combination therapies according to sex were recorded.

Study 2

Medication as recorded on treatment cards of all patients hospitalised at Mount Carmel between 1987 and 1991 was recorded.

Drugs and ages were subdivided as in Study 1, while diseases were grouped into the following nine classes:

a) anxiety;
b) depression;
c) obsessive compulsive neurosis;
d) organic psychosis;
e) schizophrenia;
f) manic depressive psychosis;
g) personality disorder;
h) mental handicap; and
i) other

Study 3

Modes of discharge from Mount Carmel Hospital for schizophrenic patients were noted from the patients' histories and were grouped under six headings:

a) not requiring hospital treatment;
b) relieved on request;
c) not improved, relieved against medical advice;
d) transferred;
e) recovered;
f) died

Study 4

Admissions as recorded in histories of schizophrenic patients being admitted to Mount Carmel Hospital between 1987 and 1991 were used.

Study 5

For the purpose of this study a questionnaire was set up, whereby 50 schizophrenic patients who attended the Outpatient's Unit at St Luke's Hospital were interviewed.

The questionnaire was subdivided into four main studies:

a) biodata;
b) social details;
c) disease; and
d) medication

Study 6

A questionnaire was sent to 100 community pharmacists in the various towns and villages in Malta.

This questionnaire was subdivided into four sections:

a) biodata;
b) knowledge of pharmacists about psychotropic;
c) choice of psychotropic medication; and
d) pharmacist-patient relationship

Results and Discussion

Prevalence of schizophrenia

In Malta schizophrenia is one of the most commonly diagnosed mental disorder at Mount Carmel Hospital. Indeed between 1987 and 1991, 88 (43.35%) patients out of 203, 114 (41.30%) patients out of 276, 100 (37.18%) patients out of 269, 120 (34.48%) patients out of 348, and 152 (33.85%) patients out of 449 were diagnosed, for each year respectively.

According to this study, it appears that schizophrenia is more common in females than in males since over the five year period studies there were more females (302) than males (272) diagnosed with the disease, out of a total of 574 patients.

Age group

On comparing age groups of outpatients and inpatients, age group IV (35-44), included the largest number of patients in both cases. This does not however mean that the onset of the disease lies in this age group.

Therapy

Most patients were given antipsychotics as part of their treatment, however medication in the schizophrenic inpatients was being continually changed till the patients were stabilised.

In order to be able to establish which combination therapy is most commonly prescribed to Maltese schizophrenics, therapy from treatment cards of the outpatients sector was studied, because such patients are effectively stabilised and have returned to the community on maintenance therapy.

The age groups II to VI, that is between 15-64 years of age were considered. The following trend was observed among 1992 patients out of 2332 patients:

a. Females - AD + S with 40 patients;
AP + AD + S with 132 patients; and
AP + AD + AM with 41 patients

b. Males - AD + S with 19 patients;
AP + AM with 42 patients;
AP + AD + S with 32 patients; and
AP + AD + AM with 39 patients

Patients diagnosed with schizophrenia will never recover, therapy needs to be maintained throughout their life. When modes of discharge were studied it was found that no patients recovered. The most common mode of discharge was:- not requiring hospital treatment with 298 patients. Therapy still had to be taken by these patients once discharged and they were all given appointments to be re-assessed by their psychiatrist at the Outpatient's Unit at St Luke's Hospital.

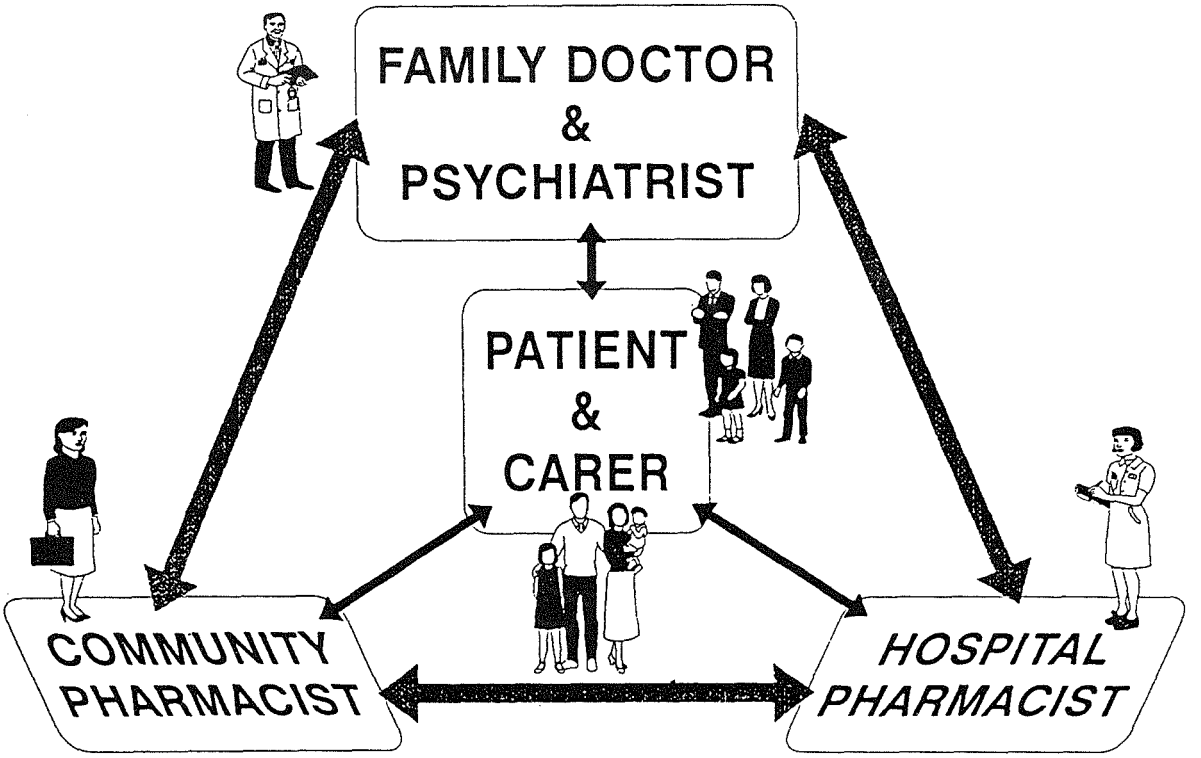
In females the most common combination therapy was AP + AD + S. Age groups of schizophrenic female patients on such a therapy were:- age group III (25-34 years) with 31 patients, age group IV (35-44 years) with 59 patients, and age group VI (55-64 years) with 42 patients.

In males, the most common combination therapy was AP + AM, with 19 patients in age group II (15-24 years) and 23 patients in age group V (45-54 years).

As is expected, antipsychotics are the drugs of choice in the treatment of schizophrenia. Very often patients are prescribed more than one type of antipsychotic, however because of the large sample size involved in this study, the most prevalent antipsychotic and formulation prescribed could not be studied.

Side effects (Chart 1) and lack of symptoms motivate patients to stop the medication on their own initiative and as a consequence relapse occurs. In fact re-admission rate over the five year period studied increased for both the female and male sexes.

This is where the role of the pharmacist in responding to the special needs of mental patients becomes significant. It is not enough that patients and family members/carers are informed about the patient's medication. The patient now will be living in the community and thus could find help very easily from a community pharmacist without having to go to hospital to seek advice.


FAMILY DOCTOR
&
PSYCHIATRIST
PATIENT
&
CARER
COMMUNITY
PHARMACIST
HOSPITAL
PHARMACIST

Patient compliance

Only 1 (2%) patient from 50 was aware of his mental condition and knew why he was taking the medication prescribed. There were 2 (4%) patients who were not compliant, while the remaining 47 (94%) were compliant. Out of these latter 47 patients, 37 (78.72%) were compliant because of an experienced relapse while the remaining 10 (21.28%) patients simply obeyed the doctor's orders.

This reinforces the fact that the community pharmacist should be kept informed. That patients do not know the name of the condition from which they are suffering is expected, however family members/carers would be aware of the patient's mental state and the community pharmacist, who is easily reached, could be of beneficial help to both the patients and their family members/ carers.

It seems however, that both patients and family members/carers are unaware of this opportunity since out of the 50 interviewed patients, only 11 (22%) have informed their community pharmacist about the medication that they are taking (Chart 2). Both the psychiatrist and the hospital pharmacist should encourage patients and their family members/carers to confide with a nearby community pharmacist.

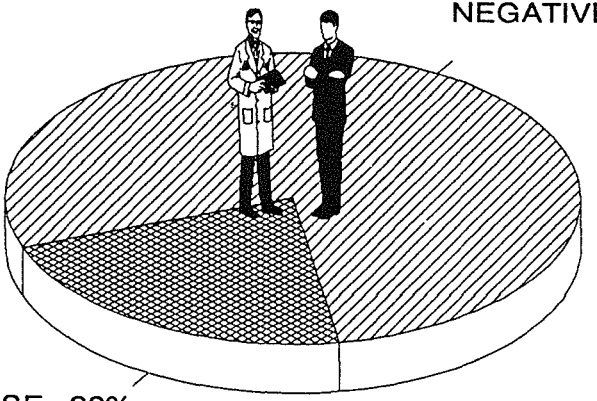
Community pharmacist

Out of the 100 questionnaires sent to community pharmacists in the various towns and villages of Malta, 41 responded.

The Maltese community pharmacist is very much aware of the special needs that mental patients require. On enquiring about their undergraduate curriculum, most (98%) feel that it is sufficient, however all pharmacists have agreed that further information/education would be in order.

Pharmacy schools and continuing education providers should place increased emphasis on the counselling and monitoring of patients with special needs, such as those with mental illness, to better prepare all pharmacists for the real-life demands of their profession (Myers, 1989). One way in which this could be done is by organising ward rounds at Mount Carmel Hospital accompanied by a pharmacist and a psychiatrist.

PATIENTS CONFIDING WITH COMMUNITY PHARMACIST



NEGATIVE RESPONSE 78%
39

POSITIVE RESPONSE 22%
11

A most significant international recognition of the role of pharmacists in the use and misuse of psychoactive substances was entrenched in a United Nations Resolution (The Pharmacist, 1988).

Community pharmacists are very much aware of the need for patients with mental disorders to comply and to take their medication properly. The majority of those pharmacists who have responded the part of the questionnaire concerning home visits, have all agreed that such an act should be encouraged - 56.1% (Chart 3).

Other suggestions given by the community pharmacists themselves concerning the special needs of such patients have been:

a) vigilance for side effects;

b) listening to patients and devoting more time and attention to them;

c) keeping patient medication records, preferably computerised;

d) giving patients more information about their medication;

e) assuring patient that pharmacist is always available and ready to help;

f) keeping in touch with both their general practitioner and psychiatrist; and

g) ensuring that patient is taking doses prescribed by psychiatrist.

These are summarised in chart 4.

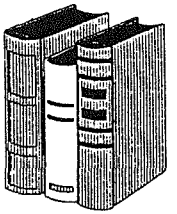
General Discussion

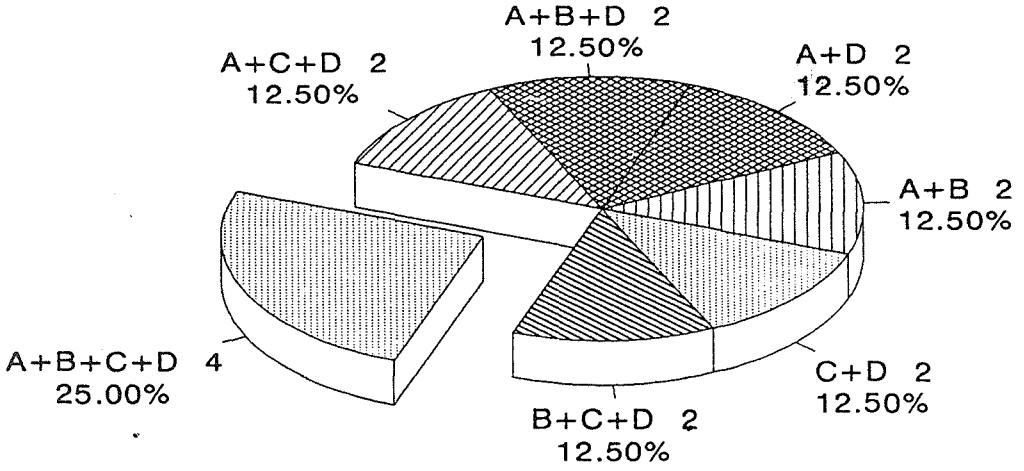
Schizophrenia is the most prevalent mental disorder diagnosed in Malta in the period 1987 to 1991. The most commonly used therapies include a combination of antipsychiatrics, antidepressants and sedatives in 132 females ages ranging from 25 to 44 years and between 55 to 64 years; and antipsychotics and antimuscarinics in 42 male patients ages ranging from 15 to 44 years and from 45 to 54 years.

Neuroleptics are not a cure, and life-long treatment is required (Myers, 1989). Because of the development of side effects, patients may often

INITIATIVE TO KNOW MORE ABOUT MENTAL DISEASES

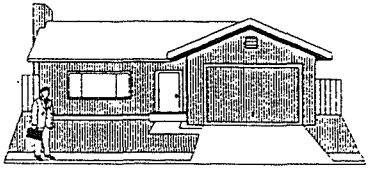
MALE AND FEMALE COMMUNITY PHARMACISTS

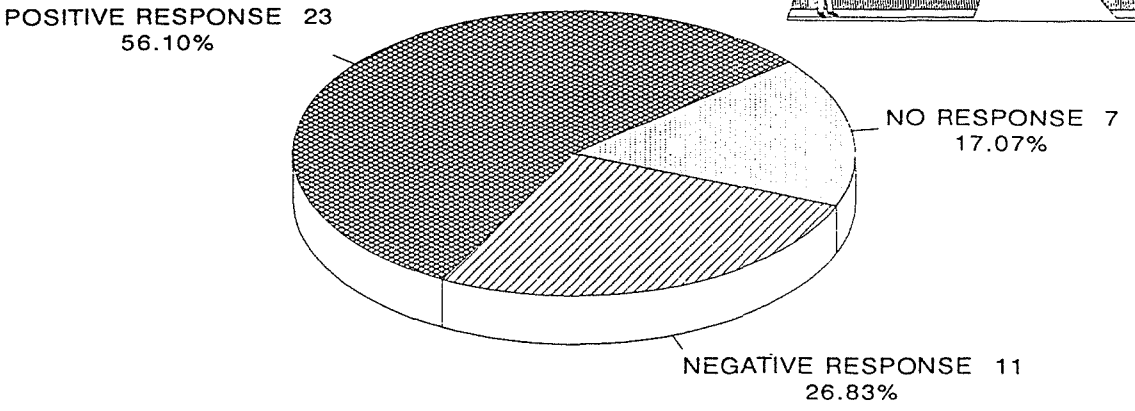




HOME VISITS

MALE AND FEMALE COMMUNITY PHARMACISTS





resort to visiting a nearby pharmacist to ask for further information. Indeed community pharmacists are in a position to make an important contribution to patient care and public knowledge (Mottram, 1989).

Psychiatric patients may never have an adequate grasp of their illness. Lack in understanding why they have to take medication or why they have to keep taking it when they are no longer symptomatic; lack in understanding the instructions given; and proneness to forgetting the daily required dosage, are all factors that have an impact on patient compliance (Blackwell, 1973).

To compound the matter, outpatient schizophrenic patients have a great unmet need for explanations about the nature of their condition, its causes and therapeutic measures undertaken (Pullar, 1990). Furthermore because of the social schizophrenic patients are entitled to obtain their medication free either from the hospital pharmacy or from a district health centre, this may contribute to lack in confidentiality between patients and community pharmacists.

This brings challenges to the community pharmacists. Pharmacists are professionals and are bound by his or her ethical code to maintain confidentiality. Both doctors and hospital pharmacists should encourage patients to confide with a community pharmacist.

Conclusion

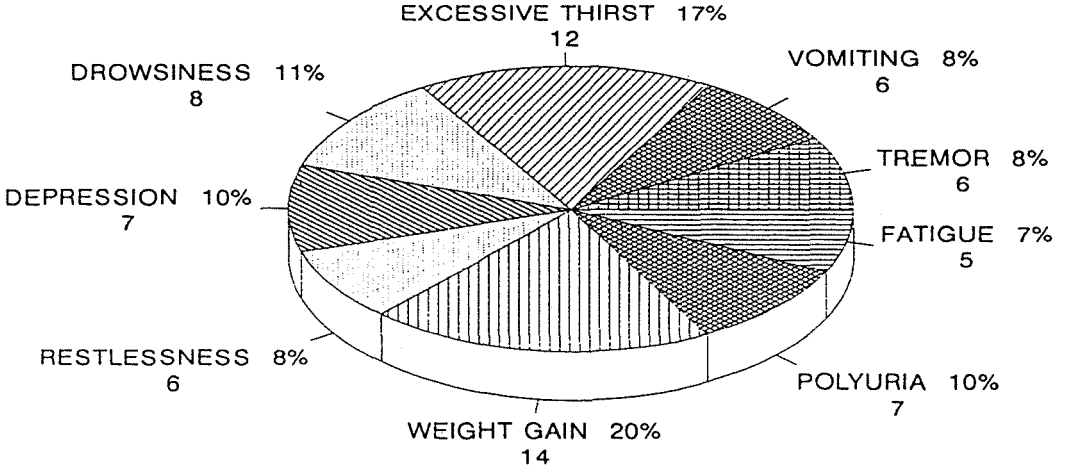
Intercommunication between the hospital pharmacist, doctor and psychiatrist, community pharmacist and patient with family members/carers, creates a liaison between all involved and all having a common concern: the health of the schizophrenic patient (Figure 1).

With the health of the population in mind, the Government votes large sums of money in order to achieve its projects. One suggestion that may be offered here is that the community pharmacist will be entrusted with the welfare of a manageable number of schizophrenic patients, so that the benefits of the above mentioned liaison may be effected.

Amongst other duties the community pharmacist will dispense medications required under a national health service scheme, visits the patients at home, check on regular intake and administration of medicaments received, check also on any arising side effects and have a frank talk with the people around the patient. The community

SIDE EFFECTS EXPERIENCED

(MALE AND FEMALE PATIENTS)



pharmacist will appear to have become a member of the house, an aim that can only be secured by regular visits.

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