THE PRESCRIBING HABITS OF MEDICAL OFFICERS

R. SCHAFFER, M.D., *Medical Superintendent, Frontier Hospital, Queenstown*

When the young resident medical officer assumes duty at a Provincial hospital he is extremely well informed. There is no doubt that the new generation of South African graduates has been very well trained, and the young doctor of 1963 has a much wider knowledge of academic medicine than was possessed by the graduate of ten, twenty or thirty years ago.

He is also well versed in diagnostic methods, appreciates the need for thorough investigation in all cases, fills the wards with problem cases and blames the laboratory when multiple investigations fail to confirm his diagnosis.

It is surprising how much our junior medical officers have been taught in a few years of study, and it is therefore unreasonable to expect that the teachers of medicine would have found time for the relatively unimportant subject of prescribing.

Once upon a time prescribing was an art. There were special prescriptions for each special case and well-known stock mixtures for the ordinary patient. Most prescriptions were safe, all were cheap, and the majority of patients recovered. If prescribing was once an art it has now become a lost art. It cannot be called a science because it is based on most unscientific principles, namely:

1. *Be up to date.* The latest is always the best, and expensive medicines are better than inexpensive medicines.
2. *Be safe.* For example, aspirin poisoning has frequently been reported in our journals. It has caused gastric haemorrhage in the old and death in the young. Use safer drugs.
3. *Nothing but the best is good enough for the patient,* and failure to use the best is negligence.

It is therefore not surprising that, even though antibiotics have become cheaper and relatively inert, and harmless substitutes cheaper still, the bill for antibiotics continues to rise. Steroids have increased in variety, though they have been reduced in price, yet the hospital drug bill goes higher and higher.

Once upon a time the young were pleased to learn from the old. Today the old have to learn from the young, and even very senior practitioners have acquired young ideas, particularly in their prescribing habits. The old-fashioned prescription has disappeared and the proprietary preparation has taken its place.

I have found that resident medical officers and junior medical practitioners are well versed in the use of digitalis and quinidine and have a sound knowledge of the uses and dangers of steroids. They are anxious to use broad-spectrum antibiotics when these expensive preparations are not essential, but are most cooperative in attempting to keep the drug bill under control.

Figures from the non-European outpatients department indicate that during a 6-month period the percentage of patients receiving broad-spectrum antibiotics has been very considerably reduced.

Treatment given to febrile non-European outpatients

	February	*April*	*July*
Broad-spectrum antibiotics	19%	18%	7%
Penicillin	58%	59%	60%
Streptomycin	6%	7%	13%
Penicillin and streptomycin	11%	10%	12%
Sulphonamides	6%	6%	8%

Stock mixtures are used very infrequently and then as an adjunct to other treatment. There is always a tendency to prescribe proprietary 'ethical' preparations. Mist.Pot.Cit., Mist. Soda Sal. and Mist. Expect. are the only stock mixtures in demand. Very few patients receive one preparation only, and most require two or more at one time.

Medication prescribed for non-European medical inpatients (excluding analgesics, hypnotics and laxatives)

Patients receiving one medicament only	7%
Patients receiving two medicaments	41%
Patients receiving three medicaments	36%
Patients receiving four or more medicaments	16%

The following summary indicates the relative popularity of drugs in the non-European wards for adults (in terms of the percentages of patients receiving them):

Stock mixtures	7·5%
Penicillin	56%
Streptomycin	7·5%
Penicillin and streptomycin	10·5%
Sulphonamides	18%
Broad-spectrum antibiotics	6·5%
Steroids	2·5%
Digoxin	17·5%
Diuretics	14%

European patients are treated by their private medical practitioner or, if indigent, are under the care of visiting members of the hospital staff. Medicines are provided by the hospital at no additional cost to the patient. The medical superintendent has no control over the prescribing habits of private medical practitioners, except that only those preparations authorized by the Hospitals Department are dispensed.

As reported by the Commission of Inquiry into the High Cost of Medical Services (Snyman Commission, 1962) it would appear that the more recently qualified doctors are less conservative in their prescribing habits. The evidence, however, is not conclusive. The 'all or nothing' law seems to apply to some prescribers, and the patient either gets nothing of pharmacological value or he gets 'the lot'.

It is also necessary to remind some practitioners to cancel items previously prescribed when adding to the list. The psychological effect on the patient of swallowing numerous pills and capsules is no doubt very beneficial in certain cases,

and the knowledge that only the latest, the best and, therefore, the most expensive are swallowed must considerably augment the therapeutic result.

On checking the medicine lists I recently found two patients who, in addition to numerous injections, laxatives and hypnotics, were compelled to swallow the following:

Patient A	*Patient B*
Digoxin	Peritrate
Chlotride	Persantin
Potassium chloride	Largactil
Amesec	Phenobarb
Stelazine	Chlotride
Phenobarb	Digoxin
Achromycin (V)	Achromycin (V)
Vit. B. complex capsules (all taken with Mist. Pot. Cit.)	(all taken with Mist. Expect.)

It is of interest to compare the relative popularity of drugs in the European wards with the drugs prescribed for non-European patients:

	European patients	*Non-European patients*
Steroids	4·5%	2·5%
Broad-spectrum antibiotics	21%	6·5%
Proprietary (ethical) remedies	17%	2·5%
Sulphonamides	18%	18%
Stock mixtures	7%	7·5%

The Snyman Commission (Recommendation 20(b)) states: 'With regard to the expenditure indirectly resulting from the actions and advice of the doctor, the Commission is of the opinion that the profession should be more discriminating and judicious. This sense of judgment is cultivated, in the first instance, by the teaching institutions, but should subsequently be stimulated persistently by the influence of healthy general medical opinion, and pursuit of the best form of practice. In view of the rapid progress in the sphere of medicine it is essential that the doctors should constantly educate themselves to fulfil the highest requirements of the profession.'

There must be general agreement with these views, but it is unfortunate that teaching institutions have not always inculcated that sense of judgment which is necessary for rational and economic prescribing. The expert pharmacologist, who has not left the sheltered environment of the laboratory or teaching hospital, is not necessarily able to teach students how to prescribe for those who are not severely ill. Prescribing should be taught by those who have had extensive experience of practice. There is no substitute for experience.

Many articles about new drugs are published in numerous medical journals all over the world, but few, if any, advise doctors not to use them. An occasional newsletter, sent to all hospital medical staff, giving a critical assessment of the newer drugs, might serve a useful purpose. It is also essential that, on hospital prescriptions, drugs be referred to by their generic names.

The figures given might suggest that the use of expensive drugs is restricted in the non-European wards and allowed without restriction for European patients. This is not so; each patient is given the treatment which the practitioner in charge considers in his best interest. As the non-European patients are treated by resident medical officers under the supervision and guidance of members of the visiting medical staff, there is more uniformity as regards routine treatment than is possible when each patient is treated by his own private practitioner. European and non-European patients also differ as regards diseases which are common, age groups, and nutritional and other factors. It is therefore not valid to compare the two groups, but a study of the non-European figures indicates how resident medical officers change prescribing habits as a result of precept and example.