

AN ANALYSIS OF 1,000 CONSECUTIVE CASES AT MEDICAL OUTPATIENT DEPARTMENT, GROOTE SCHUUR HOSPITAL

B. M. NEL, M.B., CH.B., *Full-time Head, Outpatient Department, Groote Schuur Hospital, Cape Town*

In 1962 Groote Schuur Hospital had a turnover of 419,275 outpatient attendances including casualties. The figures have steadily increased year by year and the problem became so acute eventually, that it was decided to build a huge new block for outpatients.

The Medical Clinic is the biggest individual clinic and this study concerns only patients who attended there. The medical clinic alone dealt with 54,693 attendances last year.

This study deals with 1,000 consecutive *new* patients seen by consultants at MOPD. All of these patients were referred by general practitioners, by other hospitals or clinics, by other departments or by sorting officers at this hospital. The sorting officers are doctors of GP standing, part of whose duties it is to act as a screen for the consultant clinics.

One of the main problems in the past was that consultants found themselves submerged by a deluge of work, a lot of which was unsuitable for a consultant clinic. A serious attempt has been made to remedy this position by more efficient screening by the sorting officers whose numbers have been increased, and by a more equal distribution of work.

We allow 10 minutes for an old case and 20 minutes for a new case and the consultant's session is divided up in this way. Inevitably he may have to be asked to go over his time on occasions but this is avoided wherever possible.

The *Lancet* of 17 November 1962 published a study of 1,000 consecutive outpatients at a non-teaching hospital in Britain.¹ This extremely interesting paper prompted us to undertake a similar study at Groote Schuur, a teaching hospital.

The purpose of the analysis was to find out what type of patient is referred to MOPD; for which conditions they were mainly referred; whether they were still attending after 1 year; where they came from; whether they had derived benefit from their attendances, etc.

It was interesting to hear the opinions of several people who have worked at this clinic for years, when they were asked to take a guess at what the results of some of the investigations would be. A few were fairly close, but most of them were very wide of the mark, showing how misleading impressions can be and illustrating clearly why the Hospitals Department is so insistent on figures when additional staff or equipment is applied for.

TYPE OF PATIENT REFERRED

Roughly one-third of the patients were White and two-thirds non-White; the latter group consisting mainly of Coloured patients, with a small percentage of Indians and Bantu.

The sexes were about equally divided; with a slight predominance of males. The largest number of patients (38%) fell into the 30-50 years age-group. About 30% of cases were under 30 years and about 32% over 50 years of age.

One of the most surprising figures was that 86.6% of cases were referred from within 20 miles of the hospital. This bears out Priest's conclusion,¹ that easy access is of great importance. 8% of cases came from between 20 and 100 miles away and 5½% from beyond 100 miles. This shows clearly, I think, that

if a case really needs to be sent for consultant opinion or treatment, it will not matter whether he lives 40 miles away or 140 miles.

The low figure for country cases is probably because of the fact that not nearly as many medical as surgical cases are referred by country GPs. The proportions for surgical cases would almost surely be much higher.

Of the 1,000 cases, 644 were referred by GPs; the rest by other hospitals and clinics, from other departments in the hospital, etc. Altogether 258 GPs sent these cases, 55 of them being country doctors, i.e. doctors practising in towns situated 20 miles or more from Cape Town. Although this gives a very wide distribution of doctors, I found that 12% of the doctors had referred 40% of the cases.

An interesting but not altogether surprising fact was that the letters of reference from the country GPs were on the whole more to the point than those from their city colleagues. Nevertheless about 90% of the letters could be classified as good on the whole. Some were excellent. Of the 10% of bad letters, some were very bad indeed.

An analysis of the reasons for which these doctors referred their cases revealed that the vast majority, i.e. 77%, were sent for diagnosis. In some cases no diagnosis was attempted, in others confirmation of a suspected diagnosis was sought and in some instances it was clear from the letter that the doctor was sure of the diagnosis and the real reason for sending the patient was to get him admitted or to obtain expensive drugs. A case would be sent, e.g. as 'query pneumonia', where the diagnosis was obvious and the real problem was to obtain antibiotics. This factor has probably unduly increased the figure for those sent for diagnosis.

14% were sent for treatment and in the remaining 9% it was not clear for what reason the patient had been referred.

NUMBER OF VISITS

The most surprising figure to come out of this analysis is the small percentage of patients still attending after a year. Priest found that 10.6% of his cases were still attending a year later but I thought our percentage would be very much greater. In fact it turned out to be almost identical, viz. 10.3%. Here the guesses of those who know the clinic well were very wide of the mark. The lowest figure anyone would venture was about 50%. In 18.5% of the cases 1 visit only was made and in 10.5% 2 visits only. About 60% of cases therefore attended more than twice, but were no longer attending after a year.

A diagnosis was made after only 1 visit in 55% of cases. In 14% of cases, 2 visits were required, in about 10% of cases admission was required before a diagnosis could be established, and in the remaining ± 20% of cases, it took several visits to come to some sort of diagnosis, or a definite diagnosis was never made because the patient did not return.

INVESTIGATION

X-ray examination was done in 63% of the cases; laboratory tests in 42% and ECGs in 37.8%. In laboratory tests I have not included urine testing, which is routine, haemoglobin estimations or ESR counts, which are mostly done in the clinic, but have only taken tests actually done in one of the laboratories.

PRINCIPAL DISEASE GROUPS

The principal diseases present in the outpatients referred are summarized in Tables I-IV.

Cardiovascular

This comprised the biggest group, viz. 25.6% of the total, which contrasts sharply with Priest's figure of 7.2%. As in his study, however, by far the commonest condition was hypertension, viz. 30% of the group. The next was coronary artery

disease 18%, and rheumatic heart disease accounted for 15% of the group.

TABLE I. ANALYSIS OF PRINCIPAL DISEASES IN OUTPATIENTS REFERRED

Disease group	Percentage of total
Cardiovascular	25.6%
Respiratory	18.9%
Alimentary	12.9%
No organic disease	12.1%
Miscellaneous	10.3%
Genito-urinary	4.2%
Neurological	4.0%
Endocrine	4.0%
Arthritis	3.3%
Blood	3.0%
Diabetes	1.7%

TABLE II. CARDIOVASCULAR DISEASE—25.6% OF TOTAL

Disease	Percentage of CV group
Hypertension	30%
Coronary artery disease	18%
Rheumatic heart disease	15%
Congestive cardiac failure	13%
Cerebrovascular accident	8%
Miscellaneous	16%

Respiratory Disease

This group accounted for 19% of the total. Much to the surprise of most people, I think, pneumonia heads the list here with no less than 25% of the respiratory group. Next highest is asthma, with 20%, which most people would have expected, but the figure for pulmonary tuberculosis, 17% of the group and third highest, is indeed a revelation.

TABLE III. RESPIRATORY DISEASE—18.9% OF TOTAL

Disease	Percentage of respiratory group
Pneumonia	25%
Asthma	20%
Pulmonary tuberculosis	17%
Bronchitis	12%
Bronchiectasis	6%
Miscellaneous	20%

At least part of the reason for the high pneumonia figure is the fact that most Coloured people cannot afford antibiotics and that it is not easy to obtain these drugs anywhere else. They are therefore often sent here simply to get the necessary treatment, whereas they could have been treated at home, saving an ambulance trip and saving the patient a lot of inconvenience.

Pulmonary tuberculosis is sometimes missed by the best of physicians, but I think the inescapable conclusion is that too many patients in whom the condition should have been suspected, are sent here, instead of to a clinic to be X-rayed first.

Alimentary Diseases

This group made up 13% of the total. By far the commonest condition was peptic ulcer, which made up 38% of the total alimentary figure. The ratio of duodenal to gastric ulcer was

TABLE IV. ALIMENTARY DISEASE—12.9% OF TOTAL

Disease	Percentage of group
Peptic ulcer	38%
Gallbladder disease	8%
Infectious hepatitis	7%
Carcinoma of stomach	5%
Hiatus hernia	4%
Amoebic dysentery	3%
Bacillary dysentery	3%
Abdominal tuberculosis	1.5%

4:1, taking only proved cases into account. The next highest group was only 8% of the total, viz. gallbladder disease. Carcinoma of the stomach accounted for 5%.

ADMISSIONS

The figure for admissions was 16.5% of the total. This figure would of course be much higher if beds were available. Unfortunately a considerable number of patients who should be admitted are sent home. Many patients are conveyed back and forth between the hospital and their homes by ambulance, and the position has been aptly likened to a hospital on wheels. The shortage of beds also throws a heavy burden on the registrars who spend hours of their time trying to find beds at other hospitals before deciding to send patients home.

Cases Referred to Other Departments

Cases referred to other departments comprised 27% of the total. The great majority of these were referred to the surgical outpatient department; then came ophthalmology, gynaecology, neurology, ENT, psychiatry, dermatology, urology, orthopaedics and radiotherapy, in that order.

Benefit

The vast majority, 82% of cases, had derived benefit from their attendance at MOPD. I made a study of the 18% who had not benefited and found that the most important reason was failure to return to MOPD. The next biggest group was an interesting one, in which nothing organic was found after 1 or 2 visits; the patient was left much as he was before and just stopped attending. No organic disease was found in 12% of the total. Many of these do not need psychiatric treatment but rather the help of an unhurried general physician. This group would obviously demand more of the physician's time than it is possible to give at such a busy clinic at present.

Chronic asthmatics present a problem, many of them returning regularly for a while and then staying away to try some other remedy or going to another doctor or clinic.

Deaths and Malignant Disease

There were 30 deaths within the first year, i.e. 3% of the total, and malignant disease was found in 2.3%. It is interesting to note that Priest found exactly the same percentage of malignant disease in his survey in Britain.

DISCUSSION

Priest poses the question: 'Was your journey really necessary?' The answer from this study is clearly, 'Yes', for the vast majority, but there remains the important, 'No'-group whose numbers should be reduced.

The patient with, e.g. pneumonia, should not be sent here by ambulance. It has been pointed out above that often the idea is simply to get antibiotics. This is certainly not in the best interest of the patient and involves an unnecessary journey by ambulance. It can only be concluded that the doctor feels the risk of a trip by ambulance and hours of waiting in draughty passages to be less than that of possibly not getting the drugs in time. Some other solution to the problem of procuring these drugs must therefore be sought.

The patient with hemiplegia who is often sent here because the doctor lacks the facilities for treating him, presents a considerable problem. With beds at a premium, the chances of admitting him are very slight and the registrar is then stuck with the problem of how to dispose of him. This patient would be better served if his doctor could handle the problem from his end—by getting him admitted to a non-teaching hospital or by arranging physiotherapy. The GP is at present in a very difficult position with this type of patient and by merely transferring his problem to an already overcrowded outpatient department does not help the patient much.

I have already mentioned the pulmonary TB cases that come in. Some are cases of genuine mistaken diagnosis,

but many of them have not been thoroughly investigated. Tuberculosis should have been strongly suspected and the patient sent for screening at a suitable clinic. Apart from the unnecessary trip for a patient who will be referred to a TB clinic anyway, there is the hazard to other patients in a waiting room which at peak hours is so overcrowded that there is standing room only for most patients.

The relationship between the hospital and the GPs is on the whole very good indeed. An attempt is made to answer all doctors' letters. When, however, the letter is of the 'chronic cough, please treat' variety, the practitioner can hardly expect a reply.

I am quite convinced that the public will be better served and the relationship between the hospital and the outside doctors will improve still further if all our consultant clinics are put on a strict appointment system. This in turn depends on other matters—an efficient record system being the most important—and we are now working to attain that end.

I wish to thank Prof. J. F. Brock for his constructive criticism and Dr. J. G. Burger, Medical Superintendent, for his encouragement and permission to publish.

REFERENCE

1. Priest, W. M. (1962): *Lancet*, **2**, 1043.