

Gynaecological referrals to Baragwanath Hospital

E. BUCHMANN, G. EPHRAIM, S. KATHAWAROO

Abstract Three hundred and fifty-nine consecutive referral letters to Baragwanath Hospital's gynaecological outpatients' department were analysed. Letters from private doctors contained significantly less clinical information than those from clinics. Only 11% of referring private doctors mentioned what treatment they had given patients before sending them to hospital. Soweto clinic nurses tended to include more information in their letters than clinic doctors. There were no significant differences in the number of appropriate referrals and incorrect diagnoses from private doctors, clinic doctors and clinic nurses respectively. The poor communication, especially between general practitioners and the hospital, is probably the result of overwork and lack of time. Hospital doctors should reply to well-written referral letters, and liaison between clinics and the hospital ought to be improved and expanded.

S Afr Med J 1994; 84: 200-203.

Patient referral letters from private doctors to South African government hospitals are notoriously bad.^{1,2} This is true for all medical specialties, particularly in the poorer urban areas, where private practitioners run busy cash practices and hospitals are understaffed and overworked. Communication in many instances is so poor that the referral notes serve only as 'passports' to hospital wards or outpatients' departments.

Well-written referral letters contain very important information which would not always be elicited on questioning of the patients. In those referred to hospital for chronic problems, a description of progression of symp-

toms and signs, as well as of the management already undertaken, can assist hospital clinicians with diagnosis and treatment.

The management of acute emergencies transferred to hospital may be influenced by information on the referral letters: a patient may, for instance, be moribund and unable to give a history on arrival, or clinical signs may change during transfer. Again, it is important in such a situation to know what tests have been done or medications administered before referral, to avoid duplication of investigations or overdosage of drugs. This is most obviously true for obstetric referrals, but applies also in gynaecological septic or bleeding emergencies.

A referral letter may assume medicolegal importance if litigation ensues following complications during transfer or on arrival of a patient at hospital. Clearly, a well-written referral note can then protect the referring doctor or nurse against claims of negligence.

The gynaecological outpatients' department (GOPD) at Baragwanath Hospital receives a large number of referred patients from private doctors and clinics. This study was undertaken to assess the number, nature and quality of referrals and referral letters to the GOPD in order to define more clearly any problems in the referral system and to make recommendations for improvements.

Methods

Baragwanath Hospital provides secondary and tertiary care services to greater Soweto with its population of over 2 million. It also serves much of south-western Johannesburg and is a tertiary referral centre for most of the southern Transvaal. Primary care services are offered by 13 'community health centres' or clinics administered from Baragwanath and staffed by full-time doctors and specially trained primary health care nurses. The great majority of referrals to Baragwanath Hospital come from these clinics and from a large number of private general practitioners (GPs) who work in Soweto.

The clinics refer patients by means of standard forms which have been designed to facilitate referral: a correctly completed form ensures that a patient is properly directed and that all important clinical information is included.

Department of Obstetrics and Gynaecology, Baragwanath Hospital and University of the Witwatersrand, Johannesburg

E. BUCHMANN, M.B. B.CH., M.SC. (MED.), F.C.O.G. (S.A.)

G. EPHRAIM, M.B. B.CH.

S. KATHAWAROO, M.B. B.CH.

The GOPD is run independently of the maternity hospital as a 24-hour service and handles both emergency and 'cold' cases. No appointments are made and all presenting patients are attended on the same day. Patients who arrive at the hospital casualty department with referral notes to the GOPD are sent on immediately to be seen by the specialist staff on duty. Four gynaecological units (A to D) function at Baragwanath, each one handling a 24-hour intake once every 4 days, irrespective of days of the week.

During the months of September and October 1991 all referrals received among Unit B intakes were included in the study. Each referral letter was analysed and the following information collected:

1. Was the referral made by a hospital, clinic or private doctor, from greater Soweto or elsewhere?
2. In the case of a clinic referral, was the letter signed by a doctor or a nurse?
3. The clinical information on each letter was analysed and a maximum of 10 points were awarded, according to the presence of certain items: (i) a basic gynaecological background history: the patient's age (1 point), her parity (1 point), the date of her last menstrual period (1 point), and a history of contraceptive use in the recent past (1 point). Contraceptive use was not relevant in postmenopausal women and in these patients points were given even in the absence of this information; (ii) a statement of the presenting complaint (1 point); (iii) the findings of a general physical examination — at least one vital sign or an abdominal examination (1 point); (iv) the findings of a gynaecological examination — at least a digital vaginal examination, except in virgins or where omitted for a stated reason (1 point); (v) a clinical summary, diagnosis or statement of the problem (1 point); (vi) mention of whether special investigations had or had not been ordered or performed (1 point); (vii) information on what treatment, if any, had been given the patient before hospital referral (1 point). Notes on exact dosage and timing were not necessary.

All scores for clinical information were allocated by the same observer (E.B.). Repeat scoring of 20 randomly selected letters at a later date showed no discrepancies; this excluded the possibility of any significant intra-observer variation.

4. The clinical summaries of the referring agents and the GOPD doctors were compared. For each letter, a decision was made on whether the diagnoses agreed or disagreed. These subjective decisions were all made by one observer (E.B.) after tabulation of letter content, so that the origins of letters were unknown during comparison.

5. The GOPD management of each patient was summarised according to whether she was admitted or discharged, given a follow-up date or not, and whether any specialised investigations or treatment were undertaken which could not reasonably have been expected of the referring agent. A clinic or private doctor should be able to do urine 'dipstick' or pregnancy tests, but not blood tests or ultrasound and radiographic examinations.

Patients who were admitted, who underwent specialised tests or treatment or were given follow-up appointments, were considered 'appropriate' referrals.

All clinical assessments and management of patients in the GOPD were done by the specialist or registrar on Unit B intake duty or by the house-surgeons after consultation.

Statistical analyses of relative frequencies of letter attributes were done by means of the chi-square test and, where necessary, Fisher's exact test. Mean letter scores were compared by means of Student's *t*-test. Statistical significance was accepted at $P < 0,05$.

Results

Eight hundred and twelve patients were seen in the 15 intakes during the study period, of whom 359 came with referral letters. Patients without letters were mostly self-referred or follow-up cases. No count was made of patients referred without letters, but this number must have been very small, if not zero. Of the intakes 10 took place on weekdays, 2 on Saturdays, 2 on Sundays and 1 on a public holiday. All letters were legible. The origins and numbers of the referrals are shown in Fig. 1. The GOPD diagnoses of the referred patients were grouped into broad categories, and these are shown in Fig. 2.

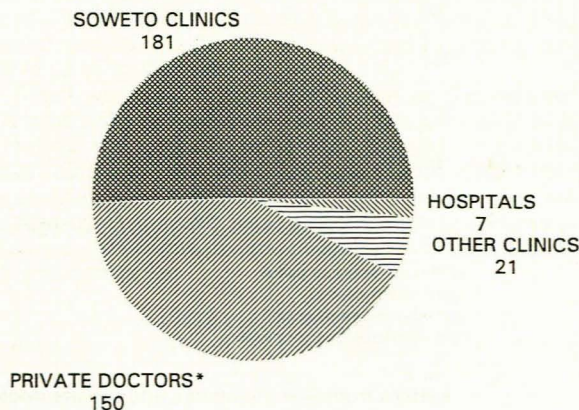


FIG. 1. Numbers of referrals and their origins (*this category includes 3 specialist obstetricians/gynaecologists).

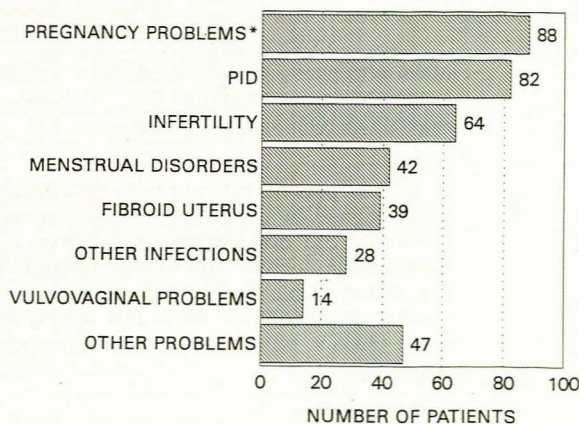


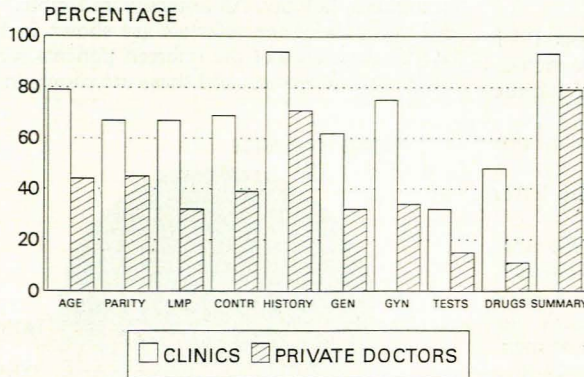
FIG. 2. Main problems of patients presenting to the GOPD (*this category includes 38 incomplete and 17 threatened abortions, 7 ectopic pregnancies and 26 other pregnancy complaints) (PID = pelvic inflammatory disease).

There were 73 patients (20,3%) in whom the diagnoses of the GOPD differed from those of the referring doctors or clinics. These included 22 non-pregnant women who were referred for suspected pregnancy complications and 20 patients sent for management of abdominal or pelvic masses which were not detected by the GOPD staff.

The 28 referrals from 'other clinics' and hospitals were excluded from further analysis because of their small number and the fact that most of these clinics do not, under normal circumstances, refer patients to Baragwanath Hospital.

The percentage of letters from Soweto clinics and private doctors that contained each of the 10 scored

items of clinical information is shown in Fig. 3. All the differences were highly significant ($P < 0,001$). Table I shows further differences between the two groups with regard to: (i) the mean scores for the referral letters; (ii) the percentage of referrals where the GOPD diagnosis was in agreement with that of the referring clinic or doctor; and (iii) the percentage of appropriate referrals in each group.



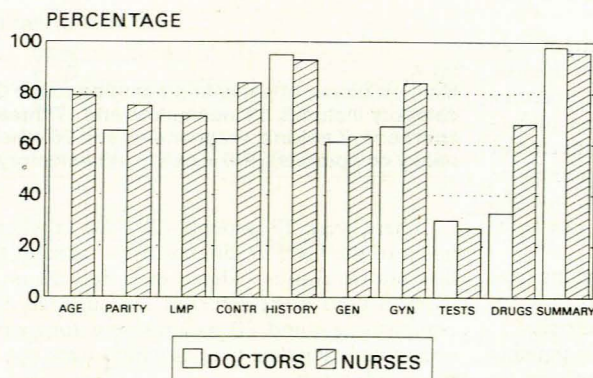
LMP—Last menstrual period
 Contr—Contraception
 Gen—General examination
 Gyn—Gynaecological examination

FIG. 3. Letters from Soweto clinics and private doctors containing each of 10 items of clinical information (%).

TABLE I. Comparison of referrals from Soweto clinics and from private doctors

	Clinics (N = 181)	Doctors (N = 150)	P-value
Mean letter score	6,78	3,98	< 0,001
Diagnostic agreement (%)	70	64	0,36
Appropriate referrals (%)	66	71	0,52

Of 181 patients referred from Soweto clinics, 63 had letters signed by doctors, 56 by nurses and 62 by persons who did not identify themselves. Comparisons between the doctors' and nurses' referrals are shown in Fig. 4 and Table II. The differences in information on contraception (64% v. 82%, $P = 0,013$) and treatment given (33% v. 68%, $P = 0,0003$) were statistically significant.



LMP—Last menstrual period
 Contr—Contraception
 Gen—General examination
 Gyn—Gynaecological examination

FIG. 4. Letters from doctors and nurses at Soweto clinics containing each of 10 items of clinical information (%).

TABLE II. Comparison of referrals from doctors and nurses

	Clinics (N = 63)	Doctors (N = 56)	P-value
Mean letter score	6,63	7,32	0,03
Diagnostic agreement (%)	75	71	0,80
Appropriate referrals (%)	78	65	0,10

The mean letter score of all appropriate referrals in the study (including those from 'other clinics' and hospitals) was 5,39 ($N = 242$), and of all inappropriate referrals 5,49 ($N = 117$); this difference was not significant ($P = 0,7$).

Discussion

The allocation of scores to referral letters has been described in an overseas study by McMullan and Barr,³ and in South Africa by Lachman and Stander² and Meiring and Van den Berg.⁴ The scoring system in this analysis was specifically adapted by the authors for gynaecological referrals and gives particular emphasis to the patient's history. The criteria for appropriate referrals did not take into account difficult problems which could be evaluated by the consultant or registrar on clinical grounds alone, but were at least objective and repeatable, allowing for balanced comparisons between subgroups. The scoring system also offers a more objective measure of letter quality than observers' personal assessments of 'useful' and 'useless' as described by Barnes and Hoile.⁵ This study was concerned mainly with clinical information on referral letters and, for this reason, the 'type of request', whether for an opinion or for further treatment at the hospital, was not taken into account in the scoring system.

The study confirmed that referral letters from private doctors were generally of poor quality, with a mean score of just under 4 points. In only 11% of their letters was any mention made of what treatment had been given to patients before referral.

In a study of consultants' attitudes to referral letters, De Alarcon and Hodson⁶ found that information on treatment given before referral was considered the most important item on a letter, while Van den Berg⁷ describes the failure to provide this information as the most serious shortcoming in doctors' referral letters.

The deficiencies in referral letters can usually be ascribed to an understandable lack of time,⁸ although Hiemstra,¹ in a letter to the *SAMJ*, described doctors who wrote poor referral notes as having little self-respect. This is rather unfair to GPs confronted daily with long queues of sick people, many of whom they have never seen before and will never see again. These doctors can hardly be blamed for writing the shortest of notes to ensure hospital care for those in need of it. The hospitals are in any case overburdened and GPs receive no replies or discharge summaries even if they write comprehensive referral letters. This contributes to the passive mutual disrespect that sometimes exists between private and hospital doctors.

The letters from Soweto clinics had a significantly higher mean score than those from private doctors. Despite this, there were no differences in rates of diagnostic agreement or appropriateness of referral between the two groups, suggesting that private doctors have clinical skills and referral criteria similar to those of their colleagues in the clinics. A limitation of this study is that comparisons between referrals by clinics and private doctors are of two differing groups of referrals. Patients in each of the two groups may have had different clinical or social characteristics. Furthermore, clinic

patients were sent with standard referral forms while GP letters were almost all of the 'clean sheet' type. No attempt was made in this study to control for any such differences.

Analysis of the clinic letters showed that nurses' referral notes had a higher mean score than those of doctors. Their letters gave more information on contraception and on treatment given before referral, and this reflects well on the primary health care nurse training programme at the Soweto clinics. There was, however, a non-significant trend towards less appropriate referrals from nurses, compared with clinic doctors, suggesting that some nurses may lack clinical confidence and thus be more inclined to refer patients to hospital. It was not clear from the letters whether the nurses consulted doctors before sending patients to the GOPD.

There was no difference in mean letter scores between appropriately and inappropriately referred patients. It is therefore false to assume that a poorly written letter implies a poor referral. It implies only an inability to communicate and not a lack of clinical skill. A similar finding was reported by McMullan and Barr.³

Among the diagnostic disagreements between referring agents and the GOPD, the most frequent errors involved wrong diagnoses of pregnancy, perhaps the result of failures to perform urine pregnancy tests. Acquisition of the newer sensitive tests could allow GPs to confirm or exclude pregnancy with confidence.⁸ Other diagnostic errors involved abdominal or pelvic masses which were not palpated by GOPD staff.

While certain patients may be difficult to examine, referring doctors and nurses should consider a full bladder and loaded bowel in their differential diagnosis of pelvic masses.⁹

Conclusions

The standard of referrals from Soweto clinics was fairly high, possibly the result of an academic environment engendered by the presence of primary health care nursing and family practice trainees, as well as the use of the standard clinic referral forms. Three copies of these forms accompany each patient to hospital. One copy is supposed to be returned to the referring clinic with a brief summary written by the attending hospital doctor. Unfortunately this rarely happens and clinics do not find

out how their referred patients were managed. Senior staff of the Department of Gynaecology should ensure that copies of referral forms are returned to the clinics. Communication may be improved further by allowing exchange of doctors and mutual visits between the gynaecology department and the clinics.

Although the letters from private doctors were generally of a poor quality, the referrals were mostly appropriate and diagnostically accurate; this suggested a reasonably good basic knowledge of practical gynaecology, as was the case with the clinics. GPs who write comprehensive referral notes, and especially those to whom patients will return, should receive letters of reply or telephone calls from the GOPD doctors attending their patients. These will encourage doctors to maintain good communication with the hospital, and urge their colleagues to do likewise.

Not a single GP letter was written on the standard referral form recommended by the Academy of Family Practice and marketed by MIMS.⁷ This form is perhaps rather cumbersome and more suited to idealised family practitioners serving affluent communities. A more compact version with small spaces for history, examination, investigations, treatment and a summary, may be more appropriate.

The authors thank the following for assistance with this study: Drs J. McIntyre, V. Govind, A. Sadler, K. Welch, R. Setzen and M. Gülmezoglu.

REFERENCES

1. Hiemstra LA. Onvolledige verwysings (Correspondence). *S Afr Med J* 1989; 75: 504.
2. Lachman PI, Stander IA. The referral letter — a problem of communication. *S Afr Med J* 1991; 79: 98-100.
3. McMullan JJ, Barr A. Outpatient letters. *J R Coll Gen Pract* 1964; 7: 66-75.
4. Meiring JH, Van den Berg ADP. Aan sy briewe sal die dokter geken word. *S Afr Med J* 1989; 75: 26-28.
5. Barnes PK, Hoile RW. Emergency admissions to a general medical unit: a survey of accompanying referral letters, with recommendations. *BMJ* 1969; 4: 424-425.
6. De Alarcon R, Hodson JM. Value of the general practitioner's letter — a further study in medical communication. *BMJ* 1964; 2: 435-438.
7. Van den Berg ADP. The referral letter. *S Afr Fam Pract* 1985; 6: 356-357.
8. Hofmeyr GJ, Rodrigues FA, Koll PC. A sensitive bedside urine test for human chorionic gonadotrophin in suspected ectopic pregnancy. *S Afr Med J* 1989; 75: 49-50.
9. Tindall VR. *Jeffcoate's Principles of Gynaecology*. 5th ed. London: Butterworth, 1987: 5-6.