

The referral letter — a problem of communication

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Summary

This cross-sectional descriptive study assesses the letters sent with referred patients to Red Cross War Memorial Children's Hospital, Cape Town, and makes appropriate recommendations. During the 6-month period 1 July - 31 December 1987, 9 288 letters were photocopied at the admissions offices of the hospital. A sample of the letters collected, systematically stratified to represent the available days during the study, was analysed. Detailed analysis of 1 143 (12,3%) letters was undertaken. The private sector, i.e. general practitioners, was the largest referral agency, followed by community-based day hospitals. The quality of information in referral letters was comparable to that found in other studies. The quality of letters influenced the writing of replies by hospital staff. There is a need to develop ways of improving communication between hospital staff and referral agents.

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The referral of patients to hospital for investigation, specialist opinion or further treatment is a common occurrence. In South Africa the mixed nature of the health system results in a constant flow of patients from private practice and primary health care facilities to public hospital and back. This involves patients who cannot afford prolonged private sector treatment, patients with complex conditions or patients who cannot be treated or investigated in the community due to lack of facilities.

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All referred patients present to hospital with a referral letter and should ideally return to the referral agent with a hospital report. The letter as the instrument of communication is of great importance in aiding in the care of the referred patient in hospital.

At Red Cross War Memorial Children's Hospital a 6-month study on referred patients was conducted in order to define the characteristics of the referred patients and the referral agents, and to determine what happened to the patients at the hospital. This provided the opportunity to examine critically a sample of the letters collected during the study period. The overall results of the study were reported previously.¹

Methodology

Data collection

The study was a cross-sectional descriptive study conducted from 1 July to 31 December 1987. A photocopying machine was installed at each of the two hospital admission offices and photocopies were made of the letters of each patient referred during the study period; these were date stamped, the time of arrival was recorded and the letters were labelled with a standard hospital sticker which indicated demographic details of the patient. Sealed referral letters directed to a particular doctor were recorded in a book and subsequently traced.

Sample

All the letters collected were included in the main study.¹ After consultation at the hospital a sample of folders was recalled in order to record hospital response to the referral. A representative sample of days was selected to represent the different days of the study period systematically stratifying for weekdays, weekends, public holidays and religious holidays. All letters collected on these days were analysed.

Letter assessment

The letters were assessed and graded according to the presence, absence or completeness of five attributes: history; examination; diagnosis; and all appropriate investigations and

TABLE I. OVERALL LETTER ANALYSIS

| | History | | Examination | | Diagnosis | | Investigation | | Treatment | |
|------------|---------|-------|-------------|--------|-----------|--------|---------------|--------|-----------|-------|
| | No. | % | No. | % | No. | % | No. | % | No. | % |
| Present | 596 | 52,14 | 515 | 45,10 | 879 | 76,90 | 135 | 11,80 | 320 | 28,00 |
| Absent | 100 | 8,74 | 182 | 15,90 | 64 | 5,60 | 997 | 87,20 | 788 | 68,90 |
| Incomplete | 447 | 39,11 | 446 | 39,00 | 200 | 17,50 | 11 | 1,00 | 35 | 3,09 |
| Total | 1 143 | 99,99 | 1 143 | 100,00 | 1 143 | 100,00 | 1 143 | 100,00 | 1 143 | 99,99 |

treatment in the primary care situation. This was similar to a grading system used by Forsyth and Logan,² who analysed letter content in terms of the above factors. A letter was only expected to contain details of the history and examination relevant to the patient's condition. Any diagnosis offered was accepted, even if it differed from the hospital diagnosis. If the referral agent asked for specific investigation or for treatment not available in the community, the letter was not 'penalised' for absence of these attributes. If investigations were not indicated then the letter was not 'penalised'.

A complete letter was one that contained all the attributes listed above. An incomplete letter was one in which an attribute was omitted that, when taken in context of the presenting problem as defined in the hospital folder, would have provided important information to the hospital staff. Examples of letters considered to be deficient were: (i) 'Please see and treat' — no attributes present; (ii) no mention of data essential to the patient's condition, e.g. a child referred for treatment of asthma and no mention of past history — such a letter would be penalised; (iii) referral of a child with meningococcal meningitis without any indication of prescription of medication — this would not be given a positive score for treatment; and (iv) referral of a child with a condition in which routine side-room investigations could have been completed, e.g. urine dipstick — this would not be given a positive score for treatment.

The assessment of a letter can be influenced by the layout,³ which can result in an underestimation of content. This was avoided by the use of the scoring system. Only one researcher (P. I. L.) graded the letters in order to reduce observer bias. Ten per cent of the letters were reassessed at a later stage to ensure consistency.

The data were analysed on an IBM mainframe computer.

Results

A total of 9288 letters was collected over the 6-month period of the study. Of these, 1143 were collected on the days selected for detailed analysis. Table I gives an overview of the details contained in the letters with all referral agencies grouped together.

Table II shows the grading of the letters according to the number of attributes present. Only 30,3% of hospital staff replied to the referral agent. The influence of quality of the referral letter on the writing of a reply by hospital staff to the referring agent is shown in Table III.

Discussion

The referral letter has been the focus of numerous studies.²⁻⁸ Analysis of the quality of referral letters has revealed that they are often of poor quality.² Marinker *et al.*⁴ suggested that a referral letter should include the following details: (i) identification of patient, i.e. age, date of birth, sex, name; (ii) a statement about the patient's present problem; (iii) a summary of relevant past events, e.g. birth, development, past illness and an accurate drug administration history (treatment); (iv) the referral agent's formulation of the problem; (v) the referral agent's expectation of the referral and the patient's (parent's) expectation; and (vi) a statement of what the patient (parent) had been told about the illness and the referral. This is in keeping with the recommendations given in studies by De Alarcon and Hodson⁵ and Forsyth and Logan.²

Analysis of the letters in this study indicated that the overall standard was deficient in terms of some of the above requirements, particularly in the reporting of investigations undertaken and treatment prescribed. The majority of the letters contained a diagnosis. There was little difference between the various referral agents.

Table II indicates that very few letters (4,84%) were totally comprehensive, 19,89% had 4 or more attributes and 40,84% had 3 or more attributes. This does not imply that the letters were necessarily deficient, since not all the referrals required all the attributes.

Possible reasons for the varying quality of referral letters are the workload of referral agents, the lack of understanding of the need for comprehensive details about the patient, and the lack of contact between the hospital and the referral agent. Dowie³ interviewed doctors about their referral letters and noted that letter writing is self-taught — some doctors never learn the art, some dislike the process, and the range of

TABLE II. NO. OF ATTRIBUTES IN REFERRAL LETTERS

| | No. | % |
|----------------------|-------|-------|
| All 5 present | 55 | 4,84 |
| 4 present | 171 | 15,05 |
| 3 present | 238 | 20,95 |
| Fewer than 3 present | 672 | 59,15 |
| Total | 1 136 | 99,99 |

Missing = 7

TABLE III. INFLUENCE OF LETTER QUALITY ON THE WRITING OF REPLIES TO REFERRAL AGENCIES

| | > 4 attributes | | < 4 attributes | | Total |
|------------|----------------|-------|----------------|-------|-------|
| | No. | % | No. | % | |
| Contact | 96 | 42,48 | 235 | 26,67 | 331 |
| No contact | 130 | 57,52 | 646 | 73,33 | 776 |
| Total | 226 | | 881 | | 1 107 |

χ^2 test, $P < 0,0001$; relative risk = 1,6; 95% confidence interval 1,3 - 1,9. Missing = 29.

TABLE IV. COMPARISON OF STUDIES ON REFERRAL LETTERS

| | De Alarcon and Hodson ⁵ (1964) | Dowie ³ (1983) | This study (1987) |
|--------------------------|-------------------------------------------------|------------------------------|----------------------|
| No. of letters | 500 | 358 | 1 143 |
| History present (%) | 44,2 | 53,0 | 52,1 |
| Examination adequate (%) | 22,4 | 48,0 | 45,1 |
| Diagnosis given (%) | 40,6 | 66,0 | 76,9 |
| Investigations (%) | 5,2 | 53,0 | 11,8 |
| Treatment reported (%) | 7,0 - 10,0 | 63,0 | 28,0 |

attitudes to letter writing was wide. However, the present study did not investigate this aspect, since the study was hospital-based.

The number of attributes present, i.e. the quality of letters, influenced the writing of replies, as shown in Table III. Letters that had 4 or more attributes were replied to 1,6 times more often than letters with less attributes. There is a statistically significant association between the number of attributes present and whether contact was made or not ($P < 0,0002$). Thus it would appear that detailed referral letters improved the response of hospital doctors, but that this response is still low. Even if the referral agent did not request a reply, it is in the patient's and hospital's interest that a reply be written. It has also been noted in other studies that illegible handwriting decreases the response rate of hospital personnel to referral letters,⁵ but this was not assessed in this study.

The letters analysed in this study are compared in Table IV to two British studies^{3,5} that analysed referrals to general hospitals.

The referral letters to Red Cross War Memorial Children's Hospital compared favourably with those analysed in other studies. However, the referral letters were deficient in the reporting of treatment given and investigations performed, particularly when compared with Dowie's study.³

Conclusion

Letter writing should be an integral part of the medical student's training. It may be problematic for hospital-based doctors to teach this skill, but the education authorities should introduce a writing-skills course into the curriculum.

An attempt must be made by hospital authorities to improve the reply rate of hospital doctors to referral agents. This would possibly have a filtering effect on referring agents and thereby encourage the writing of better quality referral letters. The workload of doctors in hospitals would continue to have a negative influence on the writing of letters. A hospital letter form could be designed indicating the name of doctor with telephone extension number, hospital sticker (name, sex/race

and date of birth of patient), hospital diagnosis, pertinent features on history and examination, investigation results and when and where to telephone for results, treatment given, and follow-up recommendations.

In order to complete the analysis, further research is required to examine how the referral agents view their own letter-writing skills and how they think improvements could be made. A study of the attitudes of hospital doctors to referral letters would complete the overall picture. The problem is part of the greater problem of the absence of a well-defined referral process. Hospitals have a responsibility to reach out to the community and improve the lines of communication.⁹ The results of this study confirm that the hospital and community health professionals need to communicate with each other in a more appropriate manner. Blame is not placed on either the referral agent or the hospital staff. We need to look for constructive ways of improving communication.

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