Communication in patient referral in Sri Lanka; The problems and solutions.

Dr. M. P. M Cooray Memorial oration delivered during inauguration of annual academic session of 2010.

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Referral of patients to hospitals, specialists and other institutions is an essential part of primary health care. Patients are referred to specialists when investigation or therapeutic options are exhausted in primary care or when opinion or advice is needed from them. Indication for referral may be routine (cataract), urgent (iritis) or emergency (acute glaucoma).

Idea behind referral is for two physicians with different experience and expertise to communicate with each other in finding a solution for a patient’s problem and providing the best possible care at the correct time at the correct place. Referral has considerable implications for patients, health care system and health care costs\textsuperscript{1}.

Good communication between primary and secondary care is essential for the smooth running of any health care system\textsuperscript{2} and it is also vital for a safe and high quality referral process. Often there is no direct contact between primary care doctors and specialists. Even though methods of communication have significantly changed in the past few decades with the advent of mobile phones, internet, email etc written communication in the form of referral and reply letters are the standard, most common and most of the time sole means of communication between doctors\textsuperscript{3}.

A referral letter reflects the diagnostic skills, communication skills, professionalism and courtesy of a doctor\textsuperscript{4}. It is also important as a medico legal document.

Clarity and easy retrieval of information are also essential features of a good referral letter. Therefore a good command of the language and letter writing skills are vital in order to produce a quality referral letter.
Studies worldwide have demonstrated a paucity of relevant information in referral letters and therefore dissatisfaction among specialists.

On the other hand it has been revealed that primary care doctors are frustrated by the fact that they do not receive replies to their referrals\[5-7\]

The Sri Lankan setting is such that a referral letter from a primary care doctor is not a requirement to consult a specialist neither is it necessary for hospitalization. The frequently encountered scenario is that the patient had been instructed verbally to either get admitted to hospital or consult a specialist. Despite the relatively widespread availability of quality health care and good health care indicators, Sri Lanka lacks a referral/back referral system.

Referral letter writing skills have been included in the undergraduate curricula of most medical schools in Sri Lanka and are a frequently examined skill. Also all postgraduate curricula in family medicine recognize the importance of writing an appropriate referral letter. But in practice, there are no guidelines available as to the standard expected and what items of information to include in the referral letter. Thus the variables included in referral letters vary widely without adherence to any particular format making them operator dependent. Also most of the referral letters are written by hand and there hasn’t been much emphasis on structured referral letters.

In Sri Lanka research on patient referral process have been limited. Leela de A karunarathne and Varnam conducted a few studies on referral communications.

With this background 6 research projects were conducted to study different aspects of referral communications and explore ways and means of enhancing the referral process in 2012 and 2013. Ethical approval was obtained for the research projects from the ethical review committee of the faculty of medicine, university of Kelaniya.

1. Quality of referral letters written by general practitioners
2. Views of general practitioners on referral communications
3. Views of specialists on referral communications – Qualitative study
4. Island wide study among specialists on referral communications
5. Introduction of a structured referral form.

1. Quality of referral letters
This study was planned to assess the quality (information content and legibility) of the referral letters issued by general practitioners to outpatients departments of government hospitals.

This descriptive cross sectional study was conducted in the outpatient departments (OPD) of four hospitals in the western province of Sri Lanka. These hospitals belonged to different levels of care provision, namely the National Hospital of Sri Lanka, a Teaching Hospital, a District General Hospital and a Base Hospital which are the referral destinations in the government sector. Referral letters sent by primary care doctors to the OPDs during a period of two weeks were included in the study.

A check list was developed to extract data from referral letters. To ensure face validity, the content items of the check list were generated from extensive review of literature and guidelines\(^8-12\). Only the items of information essential to ensure high quality patient information transfer were included. Advice was sought from written communication experts also. Legibility of the letters was also included in the check list. Initially each individual item in the check list was assigned a score. The sum of these individual scores represented the overall value of the letter. Next, this scoring method was validated by a multidisciplinary panel of medical experts (comprising of family physicians, a general physician, a paediatrician, a general surgeon and a community physician) by means of Delphi method. They were invited to provide comments and suggestions as how important the each item and an individual score. According to the suggestions of the panel scoring method was finalized. The highest possible score for a letter was 30 (table 1).

<table>
<thead>
<tr>
<th>Item of information</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presenting problem/ History</td>
<td>2</td>
</tr>
<tr>
<td>Examination findings</td>
<td>2</td>
</tr>
<tr>
<td>Probable diagnosis</td>
<td>2</td>
</tr>
<tr>
<td>Investigation for current condition</td>
<td>2</td>
</tr>
<tr>
<td>Treatment for current condition</td>
<td>2</td>
</tr>
<tr>
<td>Reason for referral</td>
<td>2</td>
</tr>
<tr>
<td>Patients name</td>
<td>2</td>
</tr>
<tr>
<td>Address of GP</td>
<td>1</td>
</tr>
<tr>
<td>Email/Tel No of GP</td>
<td>1</td>
</tr>
<tr>
<td>Date</td>
<td>1</td>
</tr>
<tr>
<td>To whom Referred</td>
<td>1</td>
</tr>
<tr>
<td>Allergy History</td>
<td>1</td>
</tr>
<tr>
<td>Patient’s age</td>
<td>1</td>
</tr>
<tr>
<td>Co-morbidities/PMH</td>
<td>1</td>
</tr>
<tr>
<td>Treatment for co-morbidities</td>
<td>1</td>
</tr>
<tr>
<td>Social history</td>
<td>1</td>
</tr>
<tr>
<td>Family history</td>
<td>1</td>
</tr>
</tbody>
</table>
The significance of the observed differences was determined using Wilcoxon- signed rank test.

**Results**

Total of 464 letters were systematically assessed in the study. Of these 33 (7.2%) were structured form letters and 52 (11.3%) letters were written by doctors with post graduate qualifications in family medicine.

**Items of information present in referral letters**

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of GP</td>
<td>1</td>
</tr>
<tr>
<td>Signature</td>
<td>1</td>
</tr>
<tr>
<td>Qualifications of GP</td>
<td>1</td>
</tr>
<tr>
<td>Legibility</td>
<td>3</td>
</tr>
<tr>
<td>Total score (maximum)</td>
<td>30</td>
</tr>
</tbody>
</table>

- 3- all words legible
- 2- most words legible
- 1- most words illegible
Legibility of letters

All words were legible only in 11% of the sample and most words were legible in 47%. Most words were illegible in 42% of the letters

Score

The score for each individual item in each referral letter was totaled to provide the total score for each referral letter and this value ranged from 6/30 to 24/30. The mean score of the referral letters was 15.97, whilst the median score was 16. The following graph shows the frequency distribution of the referral letters according to the total score.
Structured letters vs conventional letters

P<0.01 Based on Wilcoxon signed rank test
There was no significant difference (p=0.968) between letters written by doctors with post graduate qualifications in family medicine and those who have the basic degree.

Conclusions

1. This study shows the deficits in communication and information transfer between primary care doctors and hospitals.
2. It demonstrated that referral letters lacked information and clarity
3. Structured form letters were of better quality
4. There was no difference in letters written by doctors with and without a post graduate training in family medicine.

2. Views of General practitioners on referral communications

This was a descriptive cross sectional study. A self administered questionnaire was prepared to obtain their views on referral process. It included the format of a structured referral form to obtain their views regarding introduction of a referral form.

List of the full members and associate members of the college of general practitioners of Sri Lanka was obtained. Associate members are usually part time general practitioners who work in government hospitals as well. Since the list had not been updated recently of their current status and contact details where possible they were contacted over the phone. It was revealed that all the practitioners were not practicing due to age, illnesses, change of residence, migration and change of specialty. List of 300 general practitioners was prepared from the list. Even though there are thousands of part time general practitioners in the country they are not registered anywhere and list is not available.

Questionnaire was posted to all 300 GPs with a stamped envelop to return it.

Results

There were 86 respondents and the response rate was 28.6%. Age of general practitioners ranged from 32 to 82 and mean age was 57.64. 70% of the respondents were male doctors. 59.3% were full time practitioners while 31.4 had Diploma in Family Medicine. Mean years of practice of the study group was 18.11.
How often do GPs write referral letters when referring patients?

Why GPs do not write referral letters always

- No Real indication: 30.2%
- No feedback: 23.3%
- Lack of ownership to pt.: 17.4%
- Not familiar with scenario: 11.6%
- Too many patients: 7%
- Too much of time: 3.5%
- Not competent in letter writing: 1.2%
- Hand writing not good: 1.2%
What are the items of information GPs include in referrals?

<table>
<thead>
<tr>
<th>Information pertaining to the patient</th>
<th>Always (%)</th>
<th>Sometimes (%)</th>
<th>Never (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient’s Age</td>
<td>97.7</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Patient’s Name</td>
<td>96.5</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>symptoms</td>
<td>95.3</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>signs</td>
<td>90.7</td>
<td>9.3</td>
<td></td>
</tr>
<tr>
<td>Reason for referral</td>
<td>82.6</td>
<td>15.1</td>
<td></td>
</tr>
<tr>
<td>Treatment given</td>
<td>80.2</td>
<td>14.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Investigations done for current problem</td>
<td>80.2</td>
<td>15.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Probable diagnosis</td>
<td>58.1</td>
<td>41.9</td>
<td></td>
</tr>
<tr>
<td>Allergy</td>
<td>54.7</td>
<td>30.2</td>
<td>9.3</td>
</tr>
<tr>
<td>Co-morbidities</td>
<td>51.2</td>
<td>31.4</td>
<td>3.5</td>
</tr>
<tr>
<td>Treatment for co-morbidities</td>
<td>37.2</td>
<td>43.0</td>
<td>5.8</td>
</tr>
<tr>
<td>Family history</td>
<td>25.6</td>
<td>53.5</td>
<td>14.0</td>
</tr>
<tr>
<td>Social history</td>
<td>17.4</td>
<td>55.8</td>
<td>18.6</td>
</tr>
</tbody>
</table>

| Other details                         |            |               |           |
| Date                                  | 98.8       | 1.2           |           |
| GP’s Signature                        | 98.8       | 1.2           |           |
| GP’s Name/seal                        | 97.7       | 2.3           |           |
| GP’s address                          | 93.0       | 5.8           | 1.2       |
| Recipient’s name/designation          | 87.2       | 11.6          |           |
| GP’s Email/Tel no                     | 70.9       | 11.6          | 7.0       |

Their suggestions to improve the quality of referral letters;

- Undergraduate education 73.3%
- Postgraduate education 69.8%
- Feedback from specialists 82.6%
- Using a structured referral form 76.7%
### Usefulness of a referral letter according to GPs

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevent delays in diagnosis</td>
<td>93.3</td>
</tr>
<tr>
<td>Prevent repetition of investigations</td>
<td>86.0</td>
</tr>
<tr>
<td>Prevent poly pharmacy</td>
<td>77.4</td>
</tr>
<tr>
<td>Decreases health care costs to patients</td>
<td>84.7</td>
</tr>
<tr>
<td>Decreases health care costs to state</td>
<td>79.1</td>
</tr>
<tr>
<td>Medico legal document</td>
<td>59.3</td>
</tr>
</tbody>
</table>

### How often do GPs receive reply letters

<table>
<thead>
<tr>
<th>Type of referral</th>
<th>Always (%)</th>
<th>Rarely (%)</th>
<th>Never (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>When patients are admitted to government hospitals</td>
<td>0.0</td>
<td>20.9</td>
<td>79.1</td>
</tr>
<tr>
<td>When patients are admitted to private hospitals</td>
<td>3.5</td>
<td>41.2</td>
<td>55.3</td>
</tr>
<tr>
<td>When patients are referred to specialist in government hospitals</td>
<td>1.2</td>
<td>39.5</td>
<td>59.3</td>
</tr>
<tr>
<td>When patients are referred to specialists in private hospitals</td>
<td>9.4</td>
<td>75.3</td>
<td>15.3</td>
</tr>
</tbody>
</table>
Their views on factors which influence reply rates

<table>
<thead>
<tr>
<th>Factor</th>
<th>Yes (%)</th>
<th>No(%)</th>
<th>No idea(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referring to the private sector</td>
<td>54.7</td>
<td>18.6</td>
<td>10.5</td>
</tr>
<tr>
<td>Referring to the government sector</td>
<td>2.3</td>
<td>59.3</td>
<td>11.6</td>
</tr>
<tr>
<td>Referring to a known specialist</td>
<td>83.7</td>
<td>7</td>
<td>3.5</td>
</tr>
<tr>
<td>Clinical condition of the patient</td>
<td>31.4</td>
<td>32.6</td>
<td>12.8</td>
</tr>
<tr>
<td>Social class of the patient</td>
<td>18.6</td>
<td>37.2</td>
<td>18.6</td>
</tr>
</tbody>
</table>

Items of information expected by GPs in reply letters?

<table>
<thead>
<tr>
<th>Item of information</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
<td>97.7</td>
</tr>
<tr>
<td>Plan of management</td>
<td>95.3</td>
</tr>
<tr>
<td>Instructions to general practitioners</td>
<td>93.0</td>
</tr>
<tr>
<td>Treatment given in hospital/by the consultant</td>
<td>80.2</td>
</tr>
<tr>
<td>Findings in examination</td>
<td>61.6</td>
</tr>
<tr>
<td>Investigation results</td>
<td>58.1</td>
</tr>
<tr>
<td>Findings in history</td>
<td>27.9</td>
</tr>
</tbody>
</table>
Views of specialists
Two studies were conducted to obtain views of clinical specialists

A qualitative study to explore the views of specialists in depth on the referral process
and an island wide quantitative research to study their views.

3. Qualitative study
20 specialists were purposively selected to represent different specialties. These specialists included clinicians from both the government and the private sector and university academics. Specialists rarely contact by a GP, such as anesthesiologists, pathologists and microbiologists, were not invited to participate.

In depth telephone interviews were conducted based on a semi structured interview schedule. Interviews were recorded and transcribed verbatim. Themes expressed were identified.

On receiving referral letters
Their comments revealed that GPs do not refer patients with a formal referral letter always and patients are just told to consult a specialist or a chit is given where specialists name has been written.

“Not all the patients carry referral letters when they come to us. Twenty to thirty percent of the patients who are referred by GPs carry referral letters.”

“Usually we don’t receive a letter. We get something like a letter but it’s only a note where our name has been written”.

“Then about 50% time GPs do not write a letter, they just ask patients to show”.

On the importance of referral letters
Every specialist interviewed agreed that referral letters were important in the process of referral. They expressed different advantages.

“I think referral letters are very important and some thing we should encourage”

“Because it gives us information about the patient and his problem, if the patient may not be able to come up with when they are shy and worried about, further more also it brings professionalism into the full consultation where it shows that as a group of professionals we provide continuous care and shared care”

“it is easy for us to look at the referral letter and get an idea what he thinks, then we can shorten our differential diagnoses, We can assess the patient with limited time in more depth”

“I think it’s important, because the patient’s disease may have a different picture by the time he comes to me”.
“they have a much better idea of the patient in every sense medical, surgical, social and every background”.

“General practitioner can direct a patient to the proper place thereby providing what is actually needed for the patient”

“It’s always better than self-referral. We get to know important details about the patient and we immediately get a second opinion”

“If the referring physician tells me why he is referring, if he has done some basic investigations then it will be helpful to make an immediate diagnosis”.

“So if you can give a referral letter I can cut down history taking and I can concentrate more on management and other aspects”.

“If the patient have been treated in the past, then I know what the initial condition is and what medication was prescribed”.

“If you have a child with fever you are concerned that child may be having appendicitis or dengue, pneumonia etc. If the GP tells that he is worried about those conditions I can direct my thoughts more on them.”

“get to know about the previous treatment and any serious drug allergies, these things are best known to the GP than the patient”

“one thing it shows that the consultant working under some kind of responsibility. If there is a referring doctor I have to do it in a standard manner. Because there is an other person who will look at it”

Specialists were of the view that referral letter could reduce health care costs.

“Yes, definitely it will save the cost to the patient and cost to the health care system”

“Definitely the knowledge of medicine the patient is already on help the consultant to decide on the best possible treatment that should be offered. Most of the time patients are unaware of the drugs they given. It will also prevent repeated consultation, unnecessary investigations and other unnecessary cost associated with it”

“Referral letter can reduce the delay in diagnosis, it definitely reduces polypharmacy if the referral letter includes that information”

“It will definitely save time and cost may be reduced by avoiding unnecessary Investigations”

**Drawbacks of referral letters**
Specialists identified drawbacks in referral letters received by them.

“most of the time what general practitioners write are not relevant to the patient.”

“Doctors have very poor handwriting, which some times does not say anything other than a vague idea that someone has been referred to us.”

“Most of the times they have written it in a small piece of paper, some people even do not have proper paper to write, you know they write in a chit. Most of the time the biggest problem with referral letter is illegible handwriting. Other problem is not giving adequate information”

“Most of the time why the patient is referred is not mentioned.”

“Also handwriting is not clear, some are very very bad. I may not be able to read. It is better if it is structured and printed or write in a nice way. Clarity is also a problem.”

On other forms of communication

“They call when they have an emergency such as subduarl haemorrhage”

“By calling us, Emails; very rarely”

“occasionally some GPs send me emails to get some information. But that is not a useful communication method so far”

How to improve communication

They suggested specialist general practitioner communication should be strengthen

“they should refer patients with referral letters”

“Some of them ring us and tell that they are sending a patient like this. That is I think one of the best ways so that we can have a direct communication”

“So apart from referral letter the direct communication, they can call me and ask, for example post op care of a patient I have operated. That type of telephone communication should be encouraged”

“the specialist should be able to contact the GP over the phone where necessary especially when we need more information regarding the patients. So it is better to have their contact number in the referral letter”

“Replying the referral letters and to communicate with the GPs in order to handover the patient for follow up purposes”.

“I think primary care doctors should be contactable by the secondary/tertiary care doctors. Also to refer back to the primary care doctor after sorting out the problem”.
On replying to referral letters

They explained the reasons for replying and time constrains was the reason which prevented them from replying

“I always reply when I get a referral letter. It does not depend on the individual doctor, I value every doctor’s referral and I always write back to inform what I did”

“If it is not a major thing I also forget, but if it is a major thing that GP also contribute to follow up I reply. But ideally should reply to both. Then only it is educational”.

“If the primary care doctor need I reply. And also it depends on the patient, if nothing serious to write I don’t reply. Time is the main problem in writing reply”.

“Most of the time I reply. In some patients I don’t reply because it is not important. If I ask the patient to get admitted to the hospital then I don’t reply. Time factor is a problem in private sector”

“Yes, most of the time I write to the GP.”

“I always reply when there is a letter irrespective of whom send”

“All depends on the quality of the referral letter and the reason for the referral how much trouble that they have taken and you know whether the referral is useful and reasonable”.

“If the GP asks for the second opinion I always reply. But if they only needs to follow up the patient and when the patient doesn’t want to go back to the GP again I usually don’t reply”

“Yes always, especially when the patient needs continuous care, but not need to come to the specialist for that problem again.”

“Not always. I only reply when I have time and when the patient goes back to the GP again. So I only reply at about 25% cases.”

Referral letter is a source of education for GPs

Everybody agreed that a reply letter is a source of education for GPs

“Definitely yes. it is an educational exercise”

“it is useful and they will get some information about the management or the diagnosis”.

“Yes. It is a way of education and way of a self satisfaction, because you know that your diagnosis is correct. So it will encourage their work”.

“Of course, definitely that’s why I try to give information regarding the condition in the reply letter”.
4. Island wide study among specialists

Total of 1100 questionnaires were posted with an stamped envelop to return the questionnaire. List was prepared by contacting almost all the base, district general, general and national hospital of Sri Lanka and a few private hospitals in the country. Specialists rarely contact by a GP, such as anesthesiologists, pathologists and microbiologists, were not invited to participate. Radiologists were also not included since the communications are different between GPs and these specialists.

Results
Response rate 20.0%

Demographic details of the specialists responded

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age range</td>
<td>34-70</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>Duration of practice</td>
<td>1-40yrs</td>
</tr>
<tr>
<td>Provinces represented</td>
<td>9</td>
</tr>
<tr>
<td>Specialties represented</td>
<td>28</td>
</tr>
<tr>
<td>Medicine</td>
<td>18.2%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>16.8%</td>
</tr>
<tr>
<td>Surgery</td>
<td>12.3%</td>
</tr>
<tr>
<td>Obstetrics &amp; gynecology</td>
<td>6.8%</td>
</tr>
<tr>
<td>Work place</td>
<td>Both Government &amp; private sector</td>
</tr>
<tr>
<td></td>
<td>Only government sector</td>
</tr>
<tr>
<td></td>
<td>Only private sector</td>
</tr>
</tbody>
</table>
Do specialists expect a referral letter

Always

Only when important information to be conveyed

How often do they receive referrals?

Always
Most of the time
occasionally
Never
Are they satisfied with the quality of referral letters

<table>
<thead>
<tr>
<th>Content</th>
<th>Legibility</th>
<th>Format</th>
<th>Paper quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>No comments</td>
<td>Not satisfactory</td>
<td>Satisfactory</td>
<td></td>
</tr>
<tr>
<td>46.4%</td>
<td>48.6%</td>
<td>34.1%</td>
<td>47.3%</td>
</tr>
</tbody>
</table>

- No comments
- Not satisfactory
- Satisfactory
What items of information do they expect in referral letters?

<table>
<thead>
<tr>
<th>Item of information</th>
<th>Always(%)</th>
<th>if relevant(%)</th>
<th>Not required(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>96.4</td>
<td>3.6</td>
<td>0</td>
</tr>
<tr>
<td>Name of the patient</td>
<td>96.4</td>
<td>1.8</td>
<td>1.4</td>
</tr>
<tr>
<td>Age of the patient</td>
<td>95.0</td>
<td>4.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Presenting complain</td>
<td>90.5</td>
<td>8.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Other symptoms</td>
<td>32.3</td>
<td>65.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Examination findings</td>
<td>50.0</td>
<td>48.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Investigation results for the current condition</td>
<td>34.1</td>
<td>42.7</td>
<td>2.7</td>
</tr>
<tr>
<td>Treatment given for the current condition</td>
<td>81.4</td>
<td>17.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Co morbidities</td>
<td>42.7</td>
<td>54.1</td>
<td>2.7</td>
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<tr>
<td>Treatment for co morbidities</td>
<td>36.4</td>
<td>56.8</td>
<td>5.5</td>
</tr>
<tr>
<td>Family history</td>
<td>10.9</td>
<td>76.4</td>
<td>11.8</td>
</tr>
<tr>
<td>Social history</td>
<td>14.1</td>
<td>69.1</td>
<td>16.4</td>
</tr>
<tr>
<td>Drug allergies</td>
<td>64.1</td>
<td>33.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Reason for referral</td>
<td>89.5</td>
<td>9.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Sender(GP)’s signature</td>
<td>79.5</td>
<td>6.4</td>
<td>10</td>
</tr>
<tr>
<td>Sender(GP)’s name</td>
<td>91.4</td>
<td>4.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Sender(GP)’s qualifications</td>
<td>66.8</td>
<td>13.2</td>
<td>16.8</td>
</tr>
<tr>
<td>Sender(GP)’s Contact no</td>
<td>46.8</td>
<td>34.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Recipient’s name/designation</td>
<td>65.9</td>
<td>22.7</td>
<td>10.5</td>
</tr>
<tr>
<td>Recipient’s place of work</td>
<td>37.7</td>
<td>28.2</td>
<td>28.6</td>
</tr>
</tbody>
</table>
How often do specialists reply?

Reasons for not replying

- **Time constrains**: 50%
- **No secretarial support**: 35.5%
- **Reply will not reach sender**: 30.9%
- **No benefit to pt.**: 14.5%
- **No benefit to GP**: 8.2%
- **GP will not follow instructions**: 11.4%

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**Diagram showing the frequency of specialists' replies**:
- **Always**: 22.3%
- **Most of the time**: 47.3%
- **Occasionally**: 29.5%
- **Never**: 0.5%

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**Diagram showing the reasons for not replying**:
- **Time constrains**: 50%
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- **No benefit to pt.**: 14.5%
- **No benefit to GP**: 8.2%
- **GP will not follow instructions**: 11.4%
Factors which influence reply rate

<table>
<thead>
<tr>
<th>Factor</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow up necessary or not</td>
<td>79.5</td>
</tr>
<tr>
<td>Type of condition</td>
<td>60.0</td>
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<tr>
<td>Quality of referral</td>
<td>49.1</td>
</tr>
<tr>
<td>From known doctor</td>
<td>26.4</td>
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</tbody>
</table>

5. Introduction of a structured referral letter

A structured referral form was designed to address the shortcomings of referral letters written by GPs. Items of information included according to guidelines and systematic review of literature. \[^{3,5,8,9,10}\] Only the minimal essential items were included taking into consideration the heavy work load and time constrains of primary care doctors in Sri Lanka. Opinion was sought from general practitioners and specialists regarding the content and the format of the letter. Dimensions of the letter were such that two letters can be printed on an A 4 paper. (figure 1) thus reducing the cost.
Twenty general practitioners were purposively selected to represent full time, part time, male, female, urban and semi urban practitioners. Doctors with and without post graduate qualifications were also included.

Printed referral forms sufficient for a period of 3 months were provided to each practice. Letter head was designed according to the needs of each practitioner. At the end of 3 months in depth interviews was
conducted over the telephone to get their views. Interviews were recorded and transcribed. Themes expressed were identified.

**Results**

Out of the 20 general practitioners to whom this referral form was provided, we were able to interview 18 practitioners. We could not reach and get an appointment with 2 GPs following several attempts. Their views about the letter were analysed. All the general practitioners have regularly used the referral form provided to them when they referred patients. They have identified the advantages of using this kind of a referral form.

**Usefulness**

“First thing is that it is **good format**, good quality of referral, every thing is printed there. So there is **not an issue of handwriting or spelling mistakes**. Second one is **time saving**. So I could do it very quickly. Thirdly the **completeness**, because all the details are there I didn’t miss any thing.

“It is very useful to manage the limited time and we can write in short form saying what they need”.

“it is **easier for the recipient to read** and it is easier for us to write also.”

“it can be used **irrespective of the patient’s complain.**”

“This format **reminds me to include information** I may miss if I write a letter.

“When the patient goes to the hospital even the hospital doctors may appreciate that type of referral letter and it’s easy for us also. Every thing is there just filling is needed.”

**Saves time of the recipient**

“yes, they don’t want to read everything, at glance they can have the information needed. So it is easy for them.”

“Since it has separate title the consultant can go through necessary things only.”

“**Very clear and easy to organize** the things I want to highlight”

“It is nice for the patient to carry this kind of well organized referral letter”
Drawbacks

“In psychiatric presentations it is not very helpful. Also in emergency situations it is too many information”

“regarding the clinical symptoms, signs and treatment space given was not enough.”

“sometimes I did not have enough time to fill all the things mentioned in your referral letter.”

Did this improve the quality of referral letters

“Yes, definitely, because you have given all the details and the true picture of the patient.”

“Of course, it carries more information than a conventional letter”

“this type of a letter is respectable”

Cost

“Cost is not a problem.”

Reply rate

“because of this I don’t think feedback will improve, they are not used to replying, that is our culture. That is not link to referral letter.”

“I rarely get back referrals from specialists, so there is no specific change with the structured one also.”

“No, I got only one feedback from a surgeon. So the reply rate is 2%.”

Are you going to use this type of a letter in the future? What are the reasons?

“Exactly, with some modifications I will use it. Because it saves my time a lot.”

“Of course, actually it’s easy”

“Yes, but if it is provided with more space for signs and treatment given.”

“Yes, it’s easy to have a format rather than writing myself.”

“Yes, because it is easy for me and very systematic, so I like to use it.”

“Yes, because it is easy for me and very systematic, so I like to use it.”

“Of course yes. There is more recognition to this referral letter as there is a format and as this is well planned”
Specialist’ comments on structured referral form

This structured referral format was given to specialists before the qualitative interview and invited their comments during the interviews. Following are some of the comments.

“In routine use it can be very helpful, because we could gain more information in an organized manner”

“I think a structured or form might be good but my only concern there is sometimes it can become very impersonal the content and the way it is written may denote make the patient just report based on standard form. It’s a slight concern, but perhaps structured letter may be better than not having a structured one.”

“Yes, it is very important, otherwise you may forget to write all the things. So it is a better option.”

“it is not practicable to use structured referral letter for all GPs in the country, I don’t think it will make much difference”

“Yes definitely. Sometimes GPs are lazy to write all the necessary information on the referral letters, but when they have a structured referral letter no information will be missed.”

This referral form was sent to GPs and specialists for their views in respective studies. 76.7% general practitioners and 89.1% specialists were of the opinion that introduction of a structured referral form would improve the quality of referral letters.

Conclusions

This is a useful tool to improve informational continuity. It has several advantages to the patient, referring doctor and the recipient. It is feasible to be used and acceptable to general practitioners.

Both general practitioners and specialists were confident that this referral form would improve the quality of referrals.

6. Referral letter with an attached reply form

This study was planned to assess if attaching a structured reply form would have an impact on reply rate. As far as investigators are aware a reply form had not been tried to enhance replies from specialists to GPs.

In the qualitative study also one specialist suggested using a reply form.

“There should be a way of informing the GP. How can a busy consultant write re-referral. So if there some structured thing like as you mentioned, not a referral, but referral back thing also it is easy.”
Methodology

Study setting

This study was conducted at the university family practice center at the faculty of medicine, university of Kelaniya. Conventional hand written referral letters were used for referral communications with secondary and tertiary care specialists and for admission of patients to hospitals. Our experience with reply rates was frustrating. Not a single reply letter for so many years. In this back ground this study was planned to see the impact of structured referral letter attached with a reply form.

Phase 1: The structured referral form (figure 1) was used to refer patients for six months. A record of the number of letters issued and replies received was maintained.

Phase 2: A reply form was designed following extensive Literature review [13-16]. Taking into account the increased work load and time constraints of specialists only essential information was included. Opinion was sought from specialists as to what information they would like to include in a reply letter and views were obtained from family physicians as to what information they would like to receive and the content and the format were modified. To show the educational significance of a reply to primary care doctors a quote by Pringle [17] was also included in the form (figure 2). Both the referral form and the reply form were printed side by side on an A4 paper (figure 1& 2 together).
This format allowed specialists to keep the referral letter with their records if necessary and detach the reply letter. It facilitated writing their reply directly looking at the referral which helps to address concerns raised by the primary care doctor.

This format was used for the next six months. Patients were requested to bring the reply letter back if the specialists/hospital doctors obliged to reply. Again a record was maintained.

**Results**

Total of 90 referral letters were issued during the phase 1 of the study. Not a single reply was received during this period.
80 letters were issued during the second phase of the study. Letters have been addressed to 8 different specialists including general surgeons, ENT surgeons, neurologists and dermatologists. Number of replies received was 6.

**Discussion**

This was an attempt to improve communication between primary care doctors and specialists/hospital doctors in a country where there is no proper referral system, standard format or guidelines on referral letters and where reply from specialists is scarce. On the other hand there is no registered population for a given primary care practice and no guarantee that patients referred would come back to the same practice for follow up or for other ailments. With the introduction of the structured referral there was not a single reply. Structured referral forms have been used in other countries to improve the quality of referrals. A study conducted in South Africa by Couper and Henbest investigated the effects of a pro forma letter in enhancing referral letters. It revealed that quality of referral letters improved after the introduction of this letter but the quality or the rate of replies from hospitals did not. There was some improvement in communication as we received 6 reply letters during the study period. Since we used patients as couriers of the reply letters some reply letters may not have reached family practice. Another drawback of the system is some of the referral letters may not have reached the expected destination since admission officers in hospitals do not send referral letters from primary care doctors with patients to wards always. Sometimes outpatient department doctors in some hospitals use their own format to refer patients from OPD to clinics of specialists. Under these circumstances we are not sure as how many letters reached the expected destination which is another drawback in the system.

Considering the possible drawbacks and the circumstances even 6 replies is an encouragement. More extensive study involving number of primary care centers should be planned to assess the acceptability of this tool to primary care doctors and specialists and the outcome.

**Opinion of specialists**

In the island wide study the format of the structured referral letter with the reply form was sent and requested their comments.

“I would love to see the implementation of this in the near future.”

“Very good thought.”

“It is nicely done. It might take the personal touch off out of the process”
“Will improve the patient care.”
“excelent format.”
“no need to attach a reply letter. Will not work in Sri Lanka.”
“It will be of immense benefit due to time constraints.”

Specialist response if the referral letter with a reply form will improve reply rate

Specialists suggested modifications to improve the quality of both referral and reply forms. One suggestion was include space to indicate whether the referral is emergency, urgent or routine. We thought this very useful suggestion as it will help in scheduling appointments for patients even by non medical staff.

Another suggestion was to include follow up plans of the specialist in the reply form. This is also a very useful item of information for the patient. These two suggestions were included in the format (Figure 1 & 2 Modified)
Poor communication may result in disruptions in continuity of care, delayed diagnosis, increased costs through duplication of services, iatrogenic complications, erroneous prioritization, erosion of patient confidence and patient dissatisfaction. Communication between doctors of different experience and expertise is also an important means of education for both.

Research projects presented here clearly show the room for improvement in the referral process. Structured referral form is a solution to the drawbacks in referral letters and the reply form will address problems encountered by specialists in replying to referrals. This is the format I would like to present today for improve the quality of communication in referral process. Hopefully this format will strengthen the referral process and communication and coordination between primary care doctors in Sri Lanka.
Acknowledgement

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Dr. Aruni De Silva
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and

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Specialists and general practitioners participated in research projects

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