SHORT COMMUNICATION

Influence of written information on patients’ knowledge of their diagnosis

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Introduction

Providing patients with information on their diagnosis is central to good medical care and has recently been highlighted as a 'right' in the Patient's Charter [1]. Written information has been shown to be useful in paediatrics [2] and in emergency departments [3], and the use of prescription information leaflets has led to improved knowledge of medicines and increased patient satisfaction [4].

The recall of diagnosis is likely to be a particular problem in general medical practice where patients often have multiple diagnoses. In older patients, communication difficulties may be common. No published studies have determined what patients remember about their diagnosis after discharge from medical wards. To determine the accuracy of diagnosis recall, and the influence of written information, we have studied patients discharged from one acute medical ward.

Methods

Sequential patients discharged from one acute ward (general medicine with an interest in elderly people) were randomly allocated to receive a handwritten information sheet completed by the ward doctor, or standard care, thereby becoming the control group. All patients due for discharge, including those who were confused, were included in the study.

Information was listed as current and previous medical problems and given in a simple form, e.g. ‘heart attack’ or ‘stroke’. The sheet was given to the patient by the primary nurse. Patients were free to ask further questions about their diagnosis after reading their sheet, although this was not specifically invited in either group. All patients were subsequently contacted two weeks after discharge by postal questionnaire, and were invited to complete details of their recent illness, other medical problems and satisfaction with the information they had received. The data were independently analysed on a blind basis and responses were deemed to be correct if the diagnosis was clear, e.g. in a patient with a myocardial infarction, the response ‘heart attack’ was considered correct whilst ‘heart trouble’ was incorrect. For ‘other problems’ to be correct, all diagnoses had to be present. Results were analysed by chi-square tests.

Results

Sixty-four patients (age 39–93, mean 72) were studied, of whom 50 (78%) were 65 years or over. All returned a completed questionnaire. The results of patient responses are in the Table. Patients receiving an information sheet were twice as likely to be correct with their main diagnosis (59% vs 31%) compared with the control group. There was a tendency for patients receiving a sheet to have increased knowledge of previous medical problems, though this did not reach statistical significance (P < 0.1). Finally, patients receiving a sheet were significantly more satisfied with the information given about their diagnosis in hospital compared with the control group.

Discussion

This is the first study to evaluate patients' knowledge of their diagnosis following discharge from a medical ward and whether this is influenced by written information. Although the study was relatively small (n = 64), the results still reached statistical significance. Only one third of control patients receiving standard care correctly recalled their main diagnosis and other medical problems. We studied medical patients with a bias towards the elderly who, with possible communication and memory difficulties, may
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Table I. Responses to questions asking about diagnosis and satisfaction (total 64 patients)

<table>
<thead>
<tr>
<th></th>
<th>Patients receiving Controls sheet (n = 35)</th>
<th>(n = 29)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct with main illness</td>
<td>11 (31%)</td>
<td>17 (59%)</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Correct with other medical problems</td>
<td>12 (34%)</td>
<td>16 (55%)</td>
<td>&lt; 0.1 (NS)</td>
</tr>
<tr>
<td>Satisfied with information given</td>
<td>26 (74%)</td>
<td>27 (93%)</td>
<td>&lt; 0.05</td>
</tr>
</tbody>
</table>

have particular problems recalling information on their diagnosis. Our classification of responses as 'correct' or 'incorrect' was relatively strict and it is likely that patients' knowledge may sometimes have exceeded their written response. For example, one patient described glyceryl trinitrate-induced syncope as a 'collapse' on her form, though she may possibly have revealed further knowledge had she been questioned directly. The 'other medical problems' section was only rated as 'correct' if it included all clinically significant problems; a patient may not have listed 'osteoarthritis' but have been well aware of its presence. Despite this, we were surprised at the poor level of recall. This highlights the need for effective communication for this patient group. The response rate was 100%; 56/64 (87%) responded to the first mailing of the questionnaire, six out of eight to the second, the final two patients responding to a visit to their home.

Simple written information improved patients' recall and satisfaction. Satisfaction surveys should be viewed with caution, as such questions tend to encourage positive responses [5]. Here the differences between the two groups rather than the absolute values are of interest. We cannot exclude the possibility that patients kept their information sheets and copied their responses. However, only one patient's response was 'totally correct', suggesting that this was not an important influence; excluding this patient does not alter the significance of our results. Even if patients retained information sheets, they may view them as being useful. Two of the responses were definitely completed by carers, but it was not clear in how many other cases carers had completed the questionnaire.

However, the statistically significant differences between controls and those receiving written information remain valid.

Written information may help patients' knowledge of their diagnosis by reinforcement of oral information already given. It may also serve as a reminder for future reference, improve patient satisfaction by serving as a stimulus for questions, and perhaps prevent misunderstanding of diagnoses.

In conclusion, patients discharged from a medical ward had poor recall of information on their diagnosis but this was improved by simple written information. Patient information on drugs on discharge has been shown to be of value [6]. Our study suggests that medical—and particularly elderly—patients should be routinely given a sheet containing their diagnosis; this could easily be completed in a form which also incorporates drug information.

Key points
- Simple written information improved patient recall of information on diagnosis.
- Medical, and particularly elderly, patients should routinely be given a sheet containing their diagnosis.
- Drug information could also be included.

References

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