

Providing written information for patients: psychological considerations

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Introduction

There have been a growing number of studies highlighting the poor quality of communication in the medical setting^{1,2}. Poor communication has been shown to have adverse effects on many important outcomes such as patients' satisfaction and adherence to treatment or advice. Many strategies have been put forward to remedy or avoid these problems. Some of these have been based on training packages in communication for medical students^{3,4}. Similarly, there has been an increasing trend towards patient education in a wide range of health care settings⁵. An alternative, complementary approach has been to devise ways of providing written and other information for patients in an attempt to improve patients' understanding and recall of medical information and to facilitate adherence to advice or treatment.

In considering the relevance of psychological factors associated with the provision of written information for patients, a number of different issues emerge. Some of these are associated with assessing the quality and visual presentation of the written text and with ways of maximizing the efficacy of this. Experimental psychologists have made important contributions in this area^{6,7} but these will not be included in this overview since the recent guidelines on drafting information leaflets appear to have taken on board the main findings from studies of text design and layout⁸. Similarly, experimental psychologists interested in language processing have provided detailed accounts of how written texts are processed and the nature of underlying cognitive processes⁹. Again this work is beyond the scope of this paper.

This paper will attempt to answer a number of fairly basic, empirical questions which are concerned either with patients' attitudes and reactions to the provision of written information or with the effects of written information on patients' knowledge and behaviour. There are a surprisingly large number of studies in this area and these have investigated a wide range of medications and treatments, quite contrasting groups of patients and a variety of approaches to the task of providing written information. Nevertheless, this paper will attempt to look at the broader basic issues and some important psychological considerations.

Providing written information: some basic questions

(i) Do patients want written information and do they read it?

There is overwhelming evidence that patients want more information about their medical conditions, their treatment and the outcome¹⁰. Moreover, when

patients are provided with oral information only, it is evident that not all of this is properly understood and a great deal is forgotten quite rapidly. Thus it is not surprising to find that patients do want to receive written information about their medication. Morris and Groft¹¹ reviewed data from 12 studies with a variety of samples and types of medication and showed that an average of approximately 75% of patients wanted written information with their medication. Even more important, other studies indicate clearly that this information is read by the vast majority of patients (over 80%). This also seems to be true for other sorts of information for patients such as preparatory booklets given prior to a medical investigation or treatment or hospital admission^{12,13}.

(ii) Does written information produce beneficial changes?

In order to be of value, written information can and should produce changes in knowledge and recall as well as in patients' attitudes and behaviour, such as adherence. Table 1 summarizes some of the findings from these studies and shows that written information produces clear increases in patients' knowledge and reasonably consistent increases in their level of adherence. The effects on therapeutic outcome are less impressive but the number of studies on this is quite small. The latter findings are consistent with the assertion of Kasl¹⁴ that possessing correct information about a disease and its treatment is not strongly related to clinical outcome, particularly in the chronically ill.

Studies investigating the efficacy of patients' booklets about particular medical conditions or treatments also show consistent improvements in patients knowledge together with positive changes in mood and sometimes in health outcome. For example, the provision of written information for patients with Hodgkin's disease has been shown to result in lower levels of anxiety, depression and life disruption¹⁵. Similarly, a number of studies have shown that preparatory written information prior to surgery can result in better post-surgical adjustment and sometimes in faster recovery¹⁶.

In contrast to this positive picture, written information does not appear to result in better recall of medical information. Moreover, the above evidence on the need for and effects of written information fails to take account of important individual differences, such as the reading ability of patients and their coping style in relation to their disease. These individual differences are discussed at greater length later in this paper.

Table 1. Effects of written information on patients' knowledge, adherence and therapeutic outcome

Type of medication	Percentage of studies showing positive effects on:		
	Knowledge	Adherence	Therapeutic outcome
Antibiotics	100% (6)	66% (9)	100% (2)
Long-term drugs	92% (13)	50% (8)	50% (4)
Miscellaneous	100% (13)	63% (8)	0% (1)

Figures in parentheses show number of studies. Adapted from Morris & Halperin (1979)

(iii) Does written information about drug side-effects have adverse effects on patients?

In a fairly old study, Ascione and Raven¹⁷ found that 75% of doctors did not want patients to be told about the potential side effects of their medication, feeling that it may be harmful to do so. The data from studies of written information strongly contradicts this since a review by Morris¹⁸ showed that only one out of eight studies produced evidence of increased side-effects. Also many studies have shown that forewarning patients about side-effects does not result in less adherence and in some cases can actually enhance adherence¹⁹. Thus informed patients can attribute side-effects to expected effects of their medication and are not frightened by unexpected effects which may be attributed to a failure of the medication or to an exacerbation of the disease.

Other possible problems arising from the provision of written information are that it might impair the doctor-patient relationship or might serve to alarm or upset patients. Again there is no strong evidence of this from the available literature and, as has been pointed out above, patients are more likely to show positive changes in mood and attitude after being given appropriate information.

Providing written information: further considerations

The psychological literature in this area also shows that the information which is provided for patients needs to be 'concrete' to be effective. The use of specific examples and visual material is particularly useful and, in this respect, it is interesting to note the recent use of videotapes as a way of supplying patient information. Videotaped information packages about specific diseases or treatments have not been adequately evaluated but the early indications are that this is a highly effective medium for information provision and behaviour change in patients.

A very different issue concerns the use of written information by health professionals. All the foregoing discussion has focused on patients and their use of written information. It is important to note that health professionals do not always make maximal use of written information. Thus a number of studies have shown that doctors and pharmacists either forget or choose not to provide appropriate accompanying information in the form of booklets or package inserts even when these are readily available. Some work may need to be done to convince health professionals of the need to change their own routine behaviour in this respect.

A final consideration concerns the extent to which patients' information sheets or booklets deliberately make use of potentially fear-arousing messages in order to facilitate adherence. The more general psychological literature has demonstrated that fear arousal does have effects on attitude and behaviour change but these are not consistent or predictable²⁰. For example, repeated exposure to fear arousing material related to medication has been shown not to affect attitudes to use of the medication.

Some broader psychological issues

The vast majority of studies on communication in the clinical setting, including those investigating written information, have regarded patients as a homogenous group. In contrast, many studies in health psychology have shown that patients differ considerably in how

they cope with their illnesses and the associated treatments. These differences in coping may be manifested in the amount and type of information which patients need at different stages during a disease. Thus some patients cope by becoming very actively involved with their treatment and are helped by being given relatively detailed information whereas others cope in a more 'avoidant' manner and may find detailed information unhelpful or even distressing. With written information, patients can choose how much they will make use of this and this may change over time as their mode of coping evolves. It may well be that, as the use of written information increases, different versions of information sheets or booklets on the same medication will become available. Thus patients may be able to choose the level and amount of information which best fits in with their coping behaviour and information needs.

The patients' levels of reading ability and ages are equally important sources of individual differences here. Some studies of written information have shown that the directions accompanying prescription and non-prescription medication are beyond the comprehension level of many adult readers. Ley¹⁰ found that approximately two-thirds of the information sheets given out by health professionals are too difficult for two-thirds of their patients. This emphasizes the importance of carefully assessing the readability level of all written information and psychologists have developed a range of techniques and measures for this purpose²¹.

With increasing age, the problems of forgetfulness in medication taking become more frequent. Elderly patients may also be more likely to misunderstand the treatment regimen²² and may respond differently to medication, with different side-effects²³. Thus health professionals need to take particular care in their use of written information for the elderly, both in structuring the information and in ensuring its relevance to the needs of individual patients.

Finally, as was discussed earlier, written information clearly produces changes in the knowledge level of patients. Although this is an important first step in generating more positive attitudinal changes and in increasing adherence, it does not guarantee it. In the last resort, this will depend on the quality of the interaction between the health professional and the patient. If communication has been poor and if the health professional has failed to take account of the patient's own beliefs, concerns and expectations, then the provision of written information may be relatively ineffective in promoting adherence or in producing greater patient satisfaction. In this respect, written information is a supplement but not a substitute for good communication between the health professional and the patient.

Conclusions

Psychological studies provide clear evidence of patients' requests for more information and of the efficacy of written information for increasing their knowledge and adherence with treatment. However, these effects are not uniform and depend on the adequacy of the written information and the extent to which it meets the needs of patients. The latter will inevitably depend on such factors as the age, reading ability and coping style of the individual patient. The rapid development of work in this area is symptomatic of the recognition of the importance

of good communication in the clinical setting and the need to improve on current practice. The future will surely see the development of more sophisticated written materials to cater for individual differences, as well as the more widespread use of audiotaped²⁴ and videotaped information for patient use.

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