Pictorial Labels as an Aid to Increased Patient Compliance

by

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SUMMARY

A study was conducted at Pumula Clinic in Bulawayo to assess the usefulness of pictorial labelling in increased patient understanding. The results of the study indicate that compliance was significantly improved by the use of pictograms as opposed to written instructions. Such a scheme, if implemented on a national scale, should improve health care in Zimbabwe.

INTRODUCTION

The basic written label that accompanies a drug supplied on prescription has been found to be both misunderstood and misinterpreted. This potential lack of understanding by patients of the correct way in which to take prescribed medication could have serious consequences in that under or over dosing may occur and the therapeutic goals desired by prescribers may not be achieved. A number of studies have evaluated the use of pictorial labelling to overcome such problems and increase patient understanding in the correct usage of the medication. The present study evaluated the use of pictorial labels as an aid to patient compliance in Zimbabwe.

METHODS

The study was conducted at Pumula Clinic in Bulawayo. All participants consented to involvement in the study and were randomly assigned to two groups—control group (39 patients) and test group (37 patients). The control group were given the normal typed and verbal instructions while the test group were given pictorial labels and verbal instructions. Both groups were given the prescribed medication and asked to explain how the drugs were to be used to ensure understanding at the time of dispensing. Each volunteer was advised that at some stage they would be visited at home to check on compliance. When visited the amount of medication remaining was noted and compared to the instructions to ascertain whether more or less had been used. The pictorial labels used were designed by Ngarama (Fig. 1).

RESULTS AND DISCUSSION

Of the patients interviewed 88% claimed to take their medication according to the instructions while 12% admitted to non-compliance. This apparently high compliance rate is understandable as few patients would admit to not using prescribed medication as instructed. When the study participants were questioned to ascertain their level of understanding of the two categories of labels, 78% claimed to understand the written labels while 92% understood the pictograms. Those patients who did not understand the written labels were generally older with a limited educational background and in such cases pictograms were definitely superior to written instructions in conveying the desired message.

On analysis of the level of compliance using the Null hypothesis it was found that the test population were statistically more compliant than those given written instructions (Table I). In both study groups the non-compliant components generally had more medication on hand than expected. The most likely explanation would be the fact that most diseases are self-limiting and on feeling better the patients no longer feel the necessity for continued medication.

In conclusion it is apparent that pictograms increased patient understanding of medication instructions and improved patient compliance. Pictorial representations of instructions, however, cannot completely replace interaction between dispenser and patient and verbal instruction should be used to reinforce the labelled instructions. It is also important to note that the patient must understand the pictogram used to achieve full benefit.

<table>
<thead>
<tr>
<th>TABLE I</th>
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<td>Analysis of compliance between control and test populations.</td>
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<table>
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<tr>
<th></th>
<th>Control (written label)</th>
<th>Test (pictorial label)</th>
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<tbody>
<tr>
<td>compliant patients</td>
<td>44%</td>
<td>65%</td>
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<tr>
<td>non-compliant patients</td>
<td>56%</td>
<td>35%</td>
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REFERENCES