

Educational value of printed information for patients with hypertension

Printed information booklets are widely used to inform patients about their condition. We investigated the educational value of one such booklet among patients with high blood pressure.

Patients, methods, and results

One hundred consecutive patients attending a blood pressure clinic were randomised into two groups, one of which received a booklet about hypertension¹ and the other attended the clinic as before. The booklet explained the reasons for controlling high blood pressure, the need for continuous treatment even in the absence of symptoms, the importance of cardiovascular risk factors, and details of the main groups of antihypertensive drugs. An energy chart was included, as were tables detailing the cholesterol and potassium contents of selected foods and ideal body weights. Finally, there was a section for recording blood pressure values and drug prescriptions. Patients were told only that this was a booklet about high blood pressure and were asked to bring it with them when they visited the clinic or their family doctor so that their blood pressure and drug treatment could be recorded. The clinic doctors were unaware of the group to which each patient had been allocated as the booklet was completed by a nurse during the three months of the study.

After three months all 100 patients were asked to complete a questionnaire containing 40 questions. These included six direct questions about the patients' blood pressure, weight, and drug treatment. The remaining 34 questions allowed the patients to answer "true," "false," or "don't know" to statements about the nature and treatment of hypertension and the dietary information contained in the booklet. The questionnaire was completed immediately before the patient left the hospital to prevent patients discussing it in the waiting area.

Ninety-three patients completed the study, of whom 46 had received the booklet. There was no significant difference between the groups in the duration of attendance at the clinic or age (mean age 51.2 years). The mean number of correct answers given by patients using the booklet was 23.9 (s.d. 0.8) and 18.1 (s.d. 0.8) by the controls ($p < 0.001$), the maximum score possible being 40.

The table shows results for individual questions. More patients from the booklet group could name their drugs and last recorded blood pressure.

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Number of correct answers to questions concerning patients' own state and general questions about hypertension

	Control group	Booklet group	Difference (p)
Knew ideal weight	26	29	NS
Knew actual weight	38	43	NS
Knew blood pressure at last visit	6	18	<0.01
Blood pressure increased or decreased since last visit	13	11	NS
Named type of drug	9	11	NS
Named actual drug	16	30	<0.01
Most people with high blood pressure:			
Have headaches	8	26	<0.001
Feel breathless	9	26	<0.001
Feel perfectly well	17	28	<0.025
Drug treatment for high blood pressure is needed only when you:			
Feel unwell	33	38	NS
Usually last for life	25	35	<0.025
Can be stopped when blood pressure is controlled	20	32	<0.01
People with high blood pressure should:			
Avoid regular exercise	36	42	NS
Stop smoking	44	44	NS
Add less salt to their food	38	40	NS
Take high-energy foods	24	37	<0.01
High blood pressure increases the risk of stroke	45	45	NS
High blood pressure increases the risk of kidney trouble	19	34	<0.01
People taking diuretic drugs:			
Lose potassium	1	7	<0.025
Lose more salt through their kidneys	4	10	NS
Beta-blockers slow the heart rate	4	9	NS
Vasodilators are usually used alone	0	1	NS
It would be advisable to consult your doctor if your blood pressure is:			
160/95 mm Hg	13	16	NS
140/80 mm Hg	12	22	<0.05
190/115 mm Hg	21	29	NS
The following foods are rich in potassium:			
Banana	5	7	NS
Bread	3	4	NS
Potato	8	15	<0.01

They were more often aware of the asymptomatic nature of the condition, the need for life-long treatment, the association between hypertension and kidney trouble, and the cholesterol and energy values of selected foods. There was no significant difference, however, between the groups in knowledge of their weight, whether their blood pressure had increased or decreased since their last visit, and the pharmacological classification of their drugs. Both groups were equally aware of the relations of exercise, smoking, salt, and stroke to hypertension, but few understood the importance of various values of blood pressure and virtually none understood the side effects of drugs.

Comment

Since this study was single-blind and no explanation of the text was given to the patients the increased knowledge of the study group about some important aspects of hypertension may be attributed directly to the booklet. Some of the information provided, however,

particularly that relating to drugs, was not understood. This emphasises the need to keep the text of such booklets simple, in keeping with recent recommendations,² and patients should be encouraged to discuss their reading with their doctor.

The study was not designed to test for differences in compliance or the outcome of treatment, but analysis shows that there was no appreciable difference in blood pressure or weight between the groups. While educating patients does not in itself improve compliance, patients should have at least some basic understanding of their treatment.³ Finally, the booklet also serves as an effective means of communication between the clinic and family doctor and this must ultimately contribute to better patient care.⁴

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¹ O'Hanrahan M, O'Malley K, O'Brien ET. Printed information for the lay public on cardiovascular disease. *Br Med J* 1980;281:597-9.

² Anonymous. Drug information for patients: keep it simple. *Br Med J* 1980;280:1393.

³ Bullen MU. What patients with hypertension should know about their medication. *Drugs* 1980;19:373-9.

⁴ Ezedum S, Kerr DNS. Collaborative care of hypertension using a shared record. *Br Med J* 1977;ii:1402-3.

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