Decision aids reduced decisional conflict in patients with newly diagnosed hypertension

Montgomery AA, Fahey T, Peters TJ. A factorial randomised controlled trial of decision analysis and an information video plus leaflet for newly diagnosed hypertensive patients. *Br J Gen Pract* 2003;53:446–53.

Clinical impact ratings GP/FP/Primary care ★★★★★☆☆

Q Do simple (video plus leaflet) or complex (decision analysis) decision aids assist patients with newly diagnosed hypertension in deciding whether to start drug treatment?

METHODS

- **Design:** randomised controlled 2 x 2 factorial trial.
 - **Allocation:** concealed.*
 - **Blinding:** unblinded.*
 - **Follow up period:** 2 weeks and 3 months.
 - **Setting:** 21 general practices in Avon, UK.
 - **Patients:** 217 patients (mean age 58 y, 52% men) who had sustained high blood pressure requiring discussion of drug treatment with a general practitioner and were not taking antihypertensive medication. Exclusion criteria included severe hypertension and secondary hypertension.
 - **Interventions:** decision analysis (computerised utility assessment interview with individualised risk assessment and decision analysis) (n = 52); video or leaflet (n = 55); decision analysis and video or leaflet (n = 51); or usual care (n = 59). Interventions lasted 1 hour.
 - **Outcomes:** degree of uncertainty about treatment course of action (total score on the 16 item Decisional Conflict Scale [DCS]); state anxiety; knowledge of hypertension; intention to begin treatment; and actual treatment decision.
 - **Patient follow up:** 98% at primary follow up and 92% at 3 months.
- *See glossary.

MAIN RESULTS

Analysis was by intention to treat. At 3 months, the groups did not differ for the 133 patients (67%) who were prescribed antihypertensives ($p > 0.5$). At 2 weeks, patients who received decision analysis had less decisional conflict than did those who received usual care or video or leaflet (table). The groups did not differ in anxiety levels (mean score 34.8 v 36.8), intention to begin treatment (yes v unsure adjusted risk ratio [RR] 1.19, CI 0.59 to 2.40; no v unsure adjusted RR 3.15, CI 0.91 to 10.98), or actual treatment decision (medication prescribed 67.7% v 66.0%). Similar results were found for patients who received the video plus leaflet compared with those who did not. Patients who received decision analysis and video plus leaflet had less decisional conflict (unadjusted mean score 27.1) than did those who received decision analysis alone (28.2), video plus leaflet alone (33.3), or no intervention (44.2). Decision analysis and the video plus leaflet interacted (interaction coefficient 12.5, 95% CI 5.4 to 19.5 for decisional conflict), suggesting a ceiling to the amounts of information patients can benefit from.

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CONCLUSION

Decision analysis or video plus leaflet decision aids reduced decisional conflict in patients with newly diagnosed hypertension, but did not affect anxiety, intention to start antihypertensive treatment, or the actual treatment decision.

A modified version of the abstract appears in *Evidence-Based Nursing*.

Decision analysis (DA), DA and video plus leaflet (VPL), VPL, or usual care (UC) for decisional conflict in newly diagnosed hypertension at 2 weeks*

Comparison	Mean total score	Adjusted difference (95% CI)†
DA or DA + VPL v VPL or UC	27.6 v 38.9	-9.4 (-13.0 to -5.8)
VPL or VPL + DA v DA or UC	30.3 v 36.8	-4.2 (-7.8 to -0.6)

*CI defined in glossary.

†Adjusted for age, sex, decisional conflict at baseline, factorial design, and general practice.

Commentary

The trial by Montgomery *et al* is an important contribution to our understanding of the decision process and the impact that decision analysis has in the context of hypertension treatment. Decision aids have been developed as adjuncts to counselling to improve the integration of patients' values about anticipated benefits and harms. In a recent Cochrane review of 34 randomized trials, decision aids were superior to usual care for improving such indicators of decision quality as knowledge, perceptions of outcome probabilities, high decisional conflict, and decisiveness.¹ Decision aids that provide information alone were compared with more complex decision aids that address personalised probabilities and values clarification. A marginal difference existed for knowledge outcomes, but the complex decision aids were superior for realistic risk perceptions and the match between values and choices.

Montgomery *et al* confirmed that formal decision analysis improves patient knowledge and reduces decisional conflict without affecting patient anxiety. However, the results are comparable with decision support using an informational strategy alone. In the short term, decision support interventions did not affect treatment decisions. At baseline, about half of the patients intended to take antihypertensive treatment, and about two thirds started treatment within 3 months. Moreover, no correlation existed between patients' values and treatment received in the decision analysis group. Clearly, other factors (eg, physician recommendation) have a more powerful influence on treatment uptake. Whether decision support has an effect on continuance with treatment remains to be seen.

The poor correlation between what informed patients value and the treatment they receive underscores the importance of communicating patient values during the clinical encounter. Physicians need to receive information and acknowledge patient values in treatment decisions. Without shared communication, physicians may make decisions in the office, leaving patients to make their own decisions.

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1 O'Connor AM, Stacey D, Rovner D, *et al*. Decision aids for people facing health treatment or screening decisions. *Cochrane Database Syst Rev* 2003(2):CD001431.