

Impact of a Decision Aid for Hormone Replacement Therapy

Murray E, Davis H, Tai SS, et al. Randomized controlled trial of an interactive multimedia decision aid on hormone replacement therapy in primary care. *BMJ* 2001;323:490–3.

Study Overview

Objective. To determine whether a decision aid on hormone replacement therapy (HRT) influences decision making and health outcomes.

Design. Randomized controlled trial with 3- and 9-month follow-up. Analysis was not by intention-to-treat.

Setting and participants. 26 general practices in the United Kingdom from urban, suburban, and semirural areas enrolled 205 peri- or menopausal women considering whether to start, stop, or continue HRT.

Intervention. The intervention was an interactive multimedia software program with a booklet and printed summary developed by the Foundation for Informed Medical Decision Making. It contained quantified probabilities of the risks and benefits of HRT based on published data up to 1998. The control group received usual clinical care.

Main outcome measures. Patients' and general practitioners' perceptions of who made the decision, decisional conflict scores, treatment preference, adherence to treatment, menopausal symptoms (MenQol), anxiety (STAI), general health status (SF-36 and EQ-5D), and cost (health care system perspective).

Main results. 103 women were randomized into the intervention group (mean age, 50.75 years; 92% white; 61% with post-secondary school education) and 102 to the control group (mean age, 50.11 years; 93% white; 77% with post-secondary school education).

Both patients and general practitioners found the decision aid acceptable. At 3 months, mean scores for decisional conflict were significantly lower in the intervention group than in the control group (2.5 versus 2.8; mean difference = -0.3; 95% confidence interval [CI], 0.5 to -0.2); this difference was maintained during follow-up. A higher proportion of general practitioners perceived that treatment decisions had been made "mainly or only" by the patient in the intervention group as opposed to the control group (55% versus 31%; 95% CI,

8% to 40%). At 3 months, a lower proportion of women in the intervention group were undecided about treatment as compared with the control group (14% versus 26%; 95% CI, -23% to -0.4%), and a higher proportion had decided against HRT (46% versus 32%; 95% CI, 1% to 28%); these differences were no longer apparent by 9 months. No differences were found between the groups for anxiety, use of health service resources, general health status, or utility. The higher costs of the intervention were largely due to the videodisc technology used.

Conclusion. An interactive multimedia decision aid would be popular with patients, reduce decisional conflict, and let patients play a more active part in decision making without increasing anxiety. The use of Web-based technology would reduce the cost of the intervention.

Commentary

Effective communication between patients and their physicians is of paramount importance to assure the full participation of the patient and consideration of the patient's preferences in therapeutic interventions. This basic premise has become difficult to put into practice, in part due to time constraints and, in some areas, to the amount and diversity of information available.

Great need exists for evaluated, standardized media to deliver appropriate information to patients in areas where risk/benefit ratios are highly dependent on patient characteristics and where the clinical interventions should be selected based on a patient's input and understanding of the information available [1]. Murray and colleagues' study, as well as a similar article in the same issue [2], provide evidence of the acceptability and the value of the interactive multimedia decision aid as a tool of communication in primary care. The extra cost reported in the study should decrease considerably in the near future due to decreasing prices of the technology and the repeat use of the same equipment in the clinics.

Clearly, this solution is not applicable to all patients and all problems. It is also not a substitute for a knowledgeable, unbiased physician who can take the time, using visual aids, to help patients understand and weigh the issues in order to make an individualized decision.

Applications for Clinical Practice

Computerized decision aids seem to be welcomed by primary care physicians and patients and could play an important role in the decision making process. The health care system should look forward to the wide implementation of these tools as a way to standardize practices and better understand patient preferences.

—Review by Pedro J. Caraballo, MD

References

1. O'Connor AM, Rostom A, Fiset V, et al. Decision aids for patients facing health treatment or screening decisions: systematic review. *BMJ* 1999;319:731–4.
2. Murray E, Davis H, Tai SS, et al. Randomized controlled trial of an interactive multimedia decision aid on benign prostatic hypertrophy in primary care. *BMJ* 2001;323:493–6.

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