Systematic review of the effects of shared decision-making on patient satisfaction, treatment adherence and health status

Joosten E A, DeFuentes-Merillas L, de Weert, G H, Sensky T, van der Staak C P, de Jong C A

CRD summary
The authors concluded that shared decision-making can be used effectively to reach agreement about long-term treatment decisions in patients with chronic conditions, but further research was required. There were limitations to the review, but overall the authors’ conclusion appeared appropriate given the limitations of the evidence.

Authors’ objectives
To evaluate the effectiveness of shared decision making (SDM).

Searching
MEDLINE, PsycINFO (both from inception to July 2006) and The Cochrane Library (issue 2, 2006) were searched for studies published in English. Search terms were reported. In addition, reference lists of studies were screened.

Study selection
Randomised controlled trials (RCTs) that compared the effects of SDM with non-SDM control interventions were eligible for inclusion. Interventions had to involve adults (aged 18 or older) needing to make a decision about treatment. Studies had to assess treatment adherence, patient satisfaction, well-being or quality of life.

In most of the included studies, patients had to take decisions about physical disease (cancer, ulcers, ischaemic heart disease, hormone replacement therapy, dentistry and benign prostatic hypertrophy); other studies involved patients with mental disease (schizophrenia and depression). Interventions varied. Most consisted of a single session. Most involved an interactive videodisc programme followed by discussion between clinician and patient; other interventions involved question/information sheets, card ranking discussion or SDM within a treatment programme. Duration of follow-up ranged from one month to two years.

The authors stated neither how papers were selected for the review nor how many reviewers performed the selection.

Assessment of study quality
Two reviewers independently assessed validity using items modified from criteria described by the Cochrane Back Review: adequacy of randomisation method; concealment of treatment allocation; baseline comparability of treatment groups; blinding of patient, care provider and outcome assessor; cointerventions avoided or equal; compliance; withdrawals and drop-out rate; similar timing of outcome assessment; and intention-to-treat analysis. In addition, SDM interventions were assessed for involvement of two participants (clinician and patient), sharing of information between participants, consensus built by both parties building consensus and agreement reached. Authors were contacted for clarification on unclear criteria.

Data extraction
The authors stated neither how data were extracted for the review nor how many reviewers performed the data extraction. For each study, outcomes that differed significantly between intervention and control groups were reported in tables as text.

Methods of synthesis
The studies were combined in a narrative synthesis. Differences between studies were discussed with respect to outcomes, characteristics of patients and duration of intervention.

Results of the review
Eleven RCTs were included (n=2,364). Sample size ranged from 45 to 747.
Study quality was generally high; all studies scored 6 or more out of 11 for validity. Six studies met all criteria for SDM intervention. None of the studies directly assessed the quality of the SDM intervention.

Five studies reported no statistically significant difference in outcomes between intervention and control groups. All of these studies involved patients with physical health care needs and all involved only one session or measurement after a single consultation. One study reported no short-term effect, but reported a positive long-term effect.

One of seven studies assessing patient satisfaction reported a positive intervention effect. This study involved SDM as part of a treatment programme; other studies involved only one SDM session or measurement after a single consultation.

Two of five studies assessing psychological and physical well being reported a positive intervention effect. These studies involved patients making longer term decisions and/or with chronic conditions and longer durations of interventions.

One study reported significantly increased adherence to antidepressant medication at nine to twelve months follow-up among patients exposed to the SDM intervention.

Two of three studies assessing patient knowledge reported significantly higher levels of knowledge in SDM groups; the third study reported significantly greater knowledge in the control group.

Both studies of patients with mental health problems reported positive outcomes in intervention groups.

**Authors' conclusions**
SDM can be used effectively to reach agreement about long-term treatment decisions in patients with chronic conditions, but further research was required.

**CRD commentary**
The review question and inclusion criteria were stated clearly. Several relevant sources were searched, but no attempts were made to minimise publication or language bias. Only RCTs were included. Study validity was assessed and results were reported in full. However, no comments were made about the validity of methods used to assess outcomes. Appropriate methods were used to reduce reviewer error and bias in the assessment of validity, but it was not reported if similar methods were used for study selection and data extraction. In view of the differences between studies, a narrative synthesis was appropriate. Potential reasons for different results among studies were discussed. However, findings for individual studies were reported without supporting data and this meant that it was not possible to verify the findings reported in the review. There were limitations to the review, but overall the authors’ conclusion appeared appropriate given the limitations of the evidence.

**Implications of the review for practice and research**
Practice: the authors did not state any implications for practice.

Research: the authors stated that further research into SDM was required urgently. Areas that required research included the effect of SDM on knowledge and the process and effects of SDM in people with mental health problems. Studies should assess multiple outcome measures, should probably not evaluate single sessions of SDM and should probably focus on long-term decisions.

**Funding**
The Dutch Ministry of Welfare and Sports and the Dutch Organization for Health Research and Development (grant no. 985-10-018).

**Bibliographic details**
Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.