Effective methods of giving information in cancer: a systematic literature review of randomized controlled trials

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Authors' objectives
To systematically review randomised controlled trials (RCTs) that have evaluated methods of information-giving to cancer patients and their families.

Searching
MEDLINE (from 1980 to 1999), PsycINFO (from 1984 to 1999) and CINAHL (from 1982 to 1999) were searched using a strategy suggested by the NHS Centre for Reviews and Dissemination (see Other Publications of Related Interest no.1). The search terms were: 'communication', 'communication barriers', 'truth disclosure', 'nurse-patient-relations', 'physician-patient-relations', 'education', 'palliative', 'terminal', 'hospice', 'information', 'cancer' and 'neoplasm'. BIDS, EMBASE, Social SciSearch and IBSS databases were also searched from 1993 to 1999 using the same search terms. The Internet sites of CancerWEB and OncoLink were also searched, but they did not provide any additional publications.

Study selection
Study designs of evaluations included in the review
The inclusion criteria specified RCTs.

Specific interventions included in the review
Methods of information giving to cancer patients, their families and carers, and in which the intervention was aimed primarily at educating rather than counselling. Studies of medical procedures such as surgery, chemotherapy or radiotherapy were excluded, as were studies of psycho-educational methods and communication skills. The included interventions ranged from written information to audiotapes, audiovisual aids and interactive medium. Individually tailored methods, such as patient care records and patient educational programmes, were also reviewed.

Participants included in the review
Cancer patients with heterogeneous cancer types, their families and carers were eligible. Studies that focused on one type of cancer were excluded. The majority of the studies included newly diagnosed patients.

Outcomes assessed in the review
No inclusion criteria relating to the outcomes were specified. The outcomes included in the review, which were considered to be directly related, were objective measures of knowledge acquisition, recall and understanding, and the use of educational resources. Subjective measures included preferences for information, attitudes toward the intervention, uncertainty and satisfaction. The reported outcomes considered to be indirectly related were affective states, symptom management, expectations, health service utilisation and coping. Instruments of known reliability and validity tended to be used to evaluate these outcomes, e.g. the Hospital Anxiety and Depression Scale, and Profile of Mood States.

How were decisions on the relevance of primary studies made?
The authors do not state how the papers were selected for the review, or how many of the reviewers performed the selection.

Assessment of study quality
The authors graded the included papers based on criteria proposed by the former Cancer Guidance Sub-group of the Clinical Outcomes Group (see Other Publications of Related Interest no.2). Two authors independently graded the papers. The grading was discussed so that a consensus could be reached on the methodological quality of the research.
Data extraction
The authors do not state how the data were extracted for the review, or how many of the reviewers performed the data extraction.

Data were extracted for the following categories: author; year; country; the target population, including possible confounding factors; study design; blinding; follow-up; results in terms of improvement, deterioration and no difference; statistical analyses; sample size; and adjustments made for confounding variables.

Methods of synthesis
How were the studies combined?
The studies were summarised in a table and the information compared across the studies.

How were differences between studies investigated?
The authors do not report a method for investigating differences between the studies.

Results of the review
Ten RCTs (n=1,292) were included in the review.

The methodological quality of the included studies ranged from IA to ID, with a median of IC.

All of the interventions were shown to improve at least one of the outcomes evaluated. Preparatory written information before attending a first clinic appointment was shown to have beneficial effects. Only two interventions appeared to improve measures of psychological states when compared with controls. A comparison of different types of computer information showed that access to general cancer information was a significant predictor of the patients’ levels of anxiety at follow-up.

The dissemination of information and documentation given to patients and relatives may be of value not only to the patient and their family, but also to carers and health professionals. However, no differences were found for mood, pain, satisfaction or health service utilisation.

Authors’ conclusions
The authors state that the review presents valuable information for health care providers involved in the planning and implementation of interventions aimed at improving communication with cancer patients and their families. The interventions reviewed here have been shown to be effective at conveying information, are mostly inexpensive, and are not time-consuming to introduce into practice.

CRD commentary
The authors have stated the review question and a priori inclusion criteria. However, some of the processes of the review were not reported clearly, e.g. who assessed the papers for inclusion and who performed the data extraction. A narrative review was performed, which was appropriate given the differences between the studies. The authors note that this review was limited by the scarcity of papers that met the RCT inclusion criteria, and that the included studies were based on a subjective appraisal of methodological quality. The authors state, however, that set a priori criteria were established to help overcome possible bias in this area. The conclusions of this review follow from the results presented and may be of help for those involved in communicating information to this group of patients.

Implications of the review for practice and research
Practice: The authors state that these interventions are only a supplement to care and are not a substitute for good interpersonal skills on the part of the health provider.

Research: The authors state that more qualitative research is needed in this area.
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