The effect of communication skills training on patient outcomes in cancer care: a systematic review of the literature
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CRD summary
This review found inconclusive evidence that communication interventions designed to improve communication behaviours of healthcare professionals were effective in improving patient outcomes. The review was well conducted and the cautious conclusions of the authors are likely to be reliable.

Authors' objectives
To determine the effect of communication training for healthcare professionals (including doctors and nurses) on patient outcomes in cancer care.

Searching
MEDLINE and PsycINFO (from 1989) and CINAHL (from 1982) were searched to 2007 for relevant studies published between 1990 and 2007; search terms were reported. References of relevant retrieved papers and Science Citation Index were checked for additional studies. Experts were contacted in an attempt to locate unpublished studies.

Study selection
Studies that used controlled or single group pre- and post-test designs of healthcare professionals (doctors and nurses) in oncology care who received communication training were eligible for inclusion in the review. Primary outcomes were those that evaluated the communicative behaviour of healthcare professionals in patient encounters and on patient outcomes.

The healthcare professionals in the interventions were oncologists and oncology nurses, all of whom participated voluntarily. Communication interventions were conducted in both in-patient and outpatient settings with caregivers in groups of four to 15 participants across the studies. Median duration of interventions was 30.5 hours (range 18 to 105 hours). Some studies held consolidation workshops for the intervention groups over the three months post intervention. Control groups received either no training or basic training without consolidation workshops. Training interventions consisted of a computer-based intervention and other in person interventions. Communicative behaviour outcomes were measured in real patient encounters. Various observational instruments were used to analyse interactions between patients and professionals. Patient outcomes were assessed in self-report questionnaires and included the assessment of patient satisfaction, distress and quality of life.

Two reviewers independently performed the study selection. Any disagreements were resolved through discussion.

Assessment of study quality
Two reviewers independently assessed methodological quality using Cochrane Effective Practice and Organisation of Care (EPOC) group criteria. It appeared that study quality was assessed in terms of allocation concealment, similarity of groups at baseline and blinded assessment of outcomes. Any disagreement between reviewers was resolved by discussion.

Data extraction
Two reviewers independently extracted data on communicative behaviours of healthcare professionals and on patient outcomes that included anxiety, satisfaction with communication and quality of life using pilot-tested pre-designed tables. Any disagreements were resolved by discussion.

Methods of synthesis
The results were summarised in a narrative synthesis because of the heterogeneity of the content and design of the training programmes and the outcome measures evaluated. Where possible, trial results were expressed as relative risks (RR) with 95% confidence intervals (CI) for dichotomous outcomes and standardised mean differences (SMD) with
95% CIs for continuous outcomes.

**Results of the review**
Seven studies (3,003 adult cancer patients and 411 healthcare professionals) were included in the review: five randomised controlled trials, a single group pre- and post-test study and a repeated measurement design. Allocation concealment was inadequate for two studies. Protection from contamination was judged inadequate in one study and unclear in four studies. Performance outcomes of healthcare professionals were assessed blindly in six studies. Five studies had a less than 20% dropout rate that was comparable between groups.

Training effect on behavioural outcomes of the healthcare professionals were observed in six studies where the communication behaviour was observed during patient encounters.

None of the interventions had any effects on quality of life of patients in the four studies that assessed this outcome. Training effects on patient satisfaction were observed in three studies. No significant training effects were observed on patient distress.

**Authors' conclusions**
There was inconclusive evidence that communication interventions designed to improve communication behaviours of healthcare professionals were effective in improving patient outcomes. Further well-designed randomised trials should incorporate content that was linked to outcomes that were important to healthcare professionals and patients.

**CRD commentary**
The review addressed a clear (if broad) question. Criteria for the inclusion of studies were defined. Appropriate databases were searched for relevant studies. Attempts were made to identify unpublished studies. It was unclear whether language restrictions were applied and so there was a risk of language bias. The authors took steps to minimise errors and bias during study selection, assessment of methodological quality and data extraction. The reviewers’ decision to summarise the main results narratively because of heterogeneity of training programmes and outcome measures was appropriate.

This review was well conducted. The cautious conclusions of the authors are likely to be reliable.

**Implications of the review for practice and research**
**Practice:** The authors stated that to establish the transfer of acquired communication skills, training programmes should incorporate interventions to accomplish attitude change in ward culture and managerial emphasis so that the contribution of patient-centred communication to quality care was better recognised. Ward managers should be given adequate training to provide supervisory support to employees who attended communication skills training programmes.

**Research:** The authors stated that further research in communication training programmes should be conceptually linked to outcomes that were important to patients and healthcare professionals. A single primary outcome per study should be used.

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**Bibliographic details**

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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.