Improving communication between health professionals and women in maternity care: a structured review

Rowe R E, Garcia J, Macfarlane A J, Davidson L L

Authors' objectives
To review trials of the effectiveness of interventions aimed at improving communication between health professionals and women in maternity care.

Searching
The following sources were searched: MEDLINE from 1966; PsycLIT from 1967; the Cochrane Library; the Science Citation Index and Social Sciences Citation Index, via BIDS: CINAHL from 1982; and EMBASE from 1980. For MEDLINE, the search terms used were the text term 'communicat*' and the MeSH terms: 'communication', 'hospital-patient relations', 'interpersonal relations', 'medical staff', 'hospital', 'patient acceptance of health-care', 'patient compliance', 'patient satisfaction', 'medical history taking', 'informed consent', 'consumer satisfaction', 'medical records', 'forms and records control', 'pregnancy', 'obstetrics', 'antenatal care', 'perinatal care', 'postnatal care', 'neonatal nursing' and 'labour'. Searches ran to April 2000 and no language restrictions were applied. Further references were identified through manual searches of the databases and collections of the National Perinatal Epidemiology Unit, and the reference lists of all studies meeting the inclusion criteria and any relevant reviews. The authors state that no systematic attempt was made to identify unpublished studies.

Study selection
Study designs of evaluations included in the review
Randomised controlled trials (RCTs) and 'quasi' RCTs were eligible for inclusion in the review.

Specific interventions included in the review
Interventions that were aimed at improving communication between health professionals and women in maternity care were eligible for inclusion in the review. Only interventions evaluated in actual clinical practice were eligible for inclusion. These included communication skills training for carers or for women, changes to history taking or consultation style, woman-held maternity records, and information leaflets for pregnant women. Studies where the explicit aim was not to improve communication, (e.g. changes in the organisation of midwifery services such as shared care schemes and one-to-one midwifery), even though improved perceptions of communication may have resulted, were excluded. The control groups usually received 'standard care/information' or occasionally no intervention.

Participants included in the review
The participants were women in maternity care and/or health care professionals such as doctors or midwives who were responsible for providing maternity care.

Outcomes assessed in the review
Women's health outcomes, including clinical and psychological dimensions, were assessed in the review. Other more immediate outcomes that were also assessed included compliance with advice or treatment, knowledge, recall or understanding of advice or treatment, satisfaction with aspects of care, and measures of the process of care. Studies that only measured the effect of an intervention on communication skills were excluded.

How were decisions on the relevance of primary studies made?
The authors state that the abstracts retrieved from the literature searches were checked by one reviewer, and the full articles were retrieved for those papers identified as being eligible for inclusion. Studies classified as uncertain were discussed with a second reviewer. The authors went on to state that studies in which there was no explicit statement concerning relevant communication objectives were included, if two reviewers agreed that the study had relevant objectives for the review.
Assessment of study quality
The validity of the studies was assessed on three dimensions: method of randomisation and allocation concealment, masking of outcome assessment, and the occurrence and handling of participant attrition. Judgements were made independently by two reviewers, and any differences of opinion were resolved by discussion.

Data extraction
The authors state that one of the reviewers summarised the characteristics and results of each study in consultation with a second reviewer. Any differences of opinion were resolved by discussion.

Data were extracted on: study country and design; the number of women; the number of professionals; the problem or behaviour being targeted (e.g. history-taking, access to maternity records, communication of information respecting antenatal screening tests, informed choice in maternity care); the specific study intervention; the control intervention; and the main outcomes and results.

Methods of synthesis
How were the studies combined?
The authors state that the studies were too heterogeneous to pool in a meta-analysis. The information was therefore summarised in a structured tabular format and combined narratively.

How were differences between studies investigated?
The studies were too heterogeneous to pool quantitatively, therefore no formal test of heterogeneity was undertaken.

Results of the review
Eleven studies were included in the review; the total number of participants was at least 10,808. Ten of these studies were parallel-group randomised trials which focused on aspects of antenatal care (insufficient data to calculate the overall total number of participants). The other study was a cluster randomised trial of 13 hospitals grouped into ten clusters, covering information about antenatal and intrapartum care.

Five trials were concerned with the presentation of information in relation to antenatal testing. Three trials compared the use of woman-held maternity records with standard cooperation cards. Two trials compared the use of a computer-based questionnaire for history-taking at the first antenatal (booking) appointment with different types of a manual checklist. In the remaining study, the staff at maternity units were supplied with evidence-based leaflets and given training in their use with women; the women's informed choice at these units was then compared with women receiving standard care at other units.

The authors reported that the trials reviewed rarely provided sufficient detailed information to afford an assessment on all the validity criteria. In addition, several trials were methodologically weak, with only two using an acceptable randomisation method. Further details on the findings of the methodological assessment were reported in the review.

Four trials in which women were provided with additional information about antenatal testing in a variety of formats suggested that this was valued by the women and may reduce anxiety. Communication skills training for midwives and doctors improved their information about giving antenatal tests. Three trials of woman-held maternity records suggested that these increase the women's involvement in and control over their care.

Authors’ conclusions
The review pointed to potentially useful interventions for improving communication between health professionals and women in maternity care, in a limited number of areas. Extra information about antenatal testing provided in detailed leaflets, or in individual advice sessions, may reduce anxiety about testing and may alter the uptake of some specific tests. However, it is unclear whether it prompts a more appropriate uptake. Focused communication skills training for midwives and doctors may also be of benefit. Woman-held maternity records also bring benefits to women in terms of their perceived involvement in and control over their care. The lack of trials of interventions aimed at promoting shared
decision-making, and at increasing the involvement of women in their care in other ways, is disappointing.

**CRD commentary**

The review question and the study selection criteria were stated clearly. The literature search seems to have been reasonably comprehensive, with no date or language restrictions applied, although the authors state that no systematic attempt was made to identify unpublished sources; this may have resulted in some studies being missed. The decision not to pool results from the individual studies for a meta-analysis seemed appropriate given the heterogeneity of the data in the included studies.

The authors’ conclusions seem appropriately cautious given the findings presented and the methodological weaknesses of several of the included studies.

**Implications of the review for practice and research**

**Practice:** The authors did not state any implications for practice.

**Research:** The authors state that research is needed in other aspects of communication between maternity carers and women, in addition to that of the antenatal period where research is currently focused. Research into improving communication between women in labour and their carers, and in hospital postnatal care is required. Trials of appropriate interventions to improve communication in the context of perinatal mortality are warranted, as is further research evaluating linkworker and advocacy services. Research is also needed on other key areas of care.

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