A systematic review of training in acute obstetric emergencies
Black R S, Brocklehurst P

CRD summary
This well-conducted review provided a good overview of the literature relating to training programmes for the management of acute obstetric emergencies. The review highlighted the lack of evidence-based practice in this important area. It also demonstrated that where programmes have been described and/or evaluated, the quality of the evaluation and reporting is poor.

Authors' objectives
To describe and evaluate training programmes for the management of acute obstetric emergencies.

Searching
MEDLINE (from 1966), CINAHL (from 1982), EMBASE (from 1980), PsycLIT (from 1967), AMED (from 1985), ERIC (from 1976) and the Cochrane Library (from 1950) were searched up until February 2002. The search strategies are available from the authors. The reference lists of retrieved articles were also checked.

Study selection
Study designs of evaluations included in the review
All papers or information, with no restriction on study design, were eligible for inclusion. Only reports classed as editorials or commentaries, or those with no specific description or new evaluation, were excluded at the selection stage. The included studies were all descriptions of a training programme. Four reported some evaluation of the programme.

Specific interventions included in the review
The inclusion criteria for the review specified studies conducted in a labour ward setting, in a developed country, that addressed the training of any person directly responsible for the obstetric care of a woman in labour. The included studies covered training of mixed groups of personnel: consultant and other grade obstetricians, anaesthetists, midwives, general practitioners, auxiliary nurses. In most cases the training addressed the management of obstetric emergencies in general, although one was specific to the management of eclampsia.

Participants included in the review
The inclusion criteria for the participants were not specified, although the intervention clearly applied to health care workers caring for women in labour.

Outcomes assessed in the review
The inclusion criteria for the outcomes were not specified; all outcomes were considered for the review. All of the included studies that evaluated a training programme reported outcomes based on self-assessment by trained personnel. No study reported objective measures of improvement, such as observations from subsequent emergencies or rates of adverse outcomes for women or infants born.

How were decisions on the relevance of primary studies made?
Two reviewers independently reviewed the study title and abstract of all items identified by the search. When necessary, the full document was acquired.

Assessment of study quality
The authors did not state that they assessed validity.
Data extraction
The data were extracted onto predesigned forms. Included papers were classified as those that described a training programme and those that evaluated a training programme. Details of the type of data extracted were given in the review. The authors did not state how many reviewers performed the data extraction, but did state that conflicts were resolved by discussion.

Methods of synthesis
How were the studies combined?
The review employed a narrative synthesis.

How were differences between studies investigated?
The included papers were described and differences between them were discussed in the text.

Results of the review
Nine papers were included, of which five described a training programme, three evaluated a training programme, and one described and evaluated a training programme. No paper compared two or more training programmes.

Many of the papers describing a programme failed to provide sufficient information to enable the programme to be reproduced. The four papers that evaluated a programme all reported a significant increase in the confidence of personnel in handling obstetric emergencies following participation in the course. None reported the effect of the programmes on objective measures of improvement in the management of obstetric emergencies.

Cost information
The current costs of training were reported.

Authors' conclusions
There is a dearth of information on labour ward emergency drills. There is a need to develop scientifically based methods of training labour ward personnel. Locally and nationally run programmes both have advantages and disadvantages.

CRD commentary
The review used suitable inclusion criteria which were very broad for the study design and outcomes; this was appropriate given the review question. The search strategy was also broad, but there might have been some language or unintended cultural bias since only papers from the UK, USA and Canada were included. Some details of the review methodology were described. However, a formal validity assessment was not feasible given the nature of the review question. Details of the original papers were presented and the narrative synthesis was appropriate. The authors' conclusions reflect the primary literature.

Implications of the review for practice and research
Practice: The authors stated that there is a need to develop scientifically based methods of training labour ward personnel.

Research: The authors stated that training programmes for labour ward staff should be developed and evaluated in good-quality studies.

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.