A comparison of outcomes resulting from generalist vs specialist care for a single discrete medical condition: a systematic review and methodologic critique


CRD summary
This review concluded that the literature on generalist versus specialist care for patients with a single discrete condition suffers from important methodological shortcomings and that further research in this area is needed. Though some relevant studies may potentially have been missed, these conclusions appear broadly appropriate given the evidence presented.

Authors' objectives
The review states several objectives around the methodological assessment of studies that compare generalist with specialist care in patients with a single discrete medical condition. Though the review was not primarily aimed at evaluating effectiveness, this structured abstract focuses on those effectiveness findings available in the review.

Searching
MEDLINE and the Cochrane Database of Systematic Reviews were searched from 1 January 1980 to 27 March 2004 for relevant studies; the search terms were reported. The bibliographies of retrieved articles were also checked. Only English language studies written as full papers were included.

Study selection

Study designs of evaluations included in the review
Studies including at least 50 participants were eligible for inclusion. The studies selected for the review included cross-sectional studies, prospective and retrospective cohort studies with controls, and randomised controlled trials (RCTs).

Specific interventions included in the review
Studies comparing generalist with specialist care were eligible for inclusion in the review.

Participants included in the review
Studies including adult patients with a single discrete medical condition were eligible for inclusion. The patients in the included studies were treated for: breast cancer, cholesterol management, cigarette cessation, congestive heart failure, chronic obstructive pulmonary disease, coronary artery disease, depression, diabetes, Helicobacter pylori infection, human immunodeficiency virus infection, hypertension, liver disease, rheumatoid arthritis, tuberculosis and vaccinations.

Outcomes assessed in the review
Studies providing a quantitative measure of care were eligible for inclusion. Only studies with a defined optimal standard of care were included in the review. The outcomes in the selected studies included screening rates, treatment and service provision, compliance with practice guidelines, resource use, hospital costs, health status, quality of care, vaccination rates and mortality.

How were decisions on the relevance of primary studies made?
Two reviewers independently selected studies for inclusion in the review.

Assessment of study quality
The authors assessed the studies for potential selection bias. The authors did not state how the validity assessment was performed.
Data extraction
Two reviewers independently extracted data for the review using a standardised form, and any discrepancies were resolved through consensus.

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

How were differences between studies investigated?
The main differences between the studies were presented in the text and tables of the review.

Results of the review
Forty-nine studies (number of participants unclear) were reported in the review: 28 cohort studies, 19 cross-sectional studies and 2 RCTs.

Of the 49 included studies, 33 adequately addressed selection bias.

Twenty-four studies (14 addressing selection bias) favoured specialist care, 4 studies (three addressing selection bias) favoured generalist care, and 13 studies (nine addressing selection bias) reported no difference in outcomes. One study (addressing selection bias) reported that the results depended on physician experience and 7 studies (six addressing selection bias) varied by individual outcome.

Authors' conclusions
The literature on generalist versus specialist care for patients with a single discrete condition suffers from important methodological shortcomings. Further research in this area is needed.

CRD commentary
The review was based on a very broad question, as reflected by the inclusion criteria. The primary focus of the review was to assess the extent to which the available evidence accounted for potential selection bias, and not to assess the effectiveness of the intervention. Studies might have been missed from the review through the exclusion of studies that were not published as full English language papers. Two reviewers independently selected, assessed, and data extracted the studies, thereby minimising the potential for bias and error in these processes. Some aspects of the study characteristics were presented in the text and tables of the review, though the relative effectiveness of specialist versus generalist care cannot be clearly established from the number of studies favouring one approach over the other, as presented in the synthesis. Based on the absence of effectiveness data, the authors appropriately did not make any recommendations for practice and focused on the need for higher quality research.

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 is urgently needed to inform the policy debate around the role of generalist and specialist physicians in the USA.

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