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[Intervention Review]

Hospital at home for acute exacerbations of chronic obstructive pulmonary disease

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ABSTRACT

Background

Hospital at home schemes are a recently adopted method of service delivery for the management of acute exacerbations of chronic obstructive pulmonary disease aimed at reducing demand for acute hospital in-patient beds and promoting a patient centered approach through admission avoidance. However, evidence in support of such a service is contradictory.

Objectives

To evaluate the efficacy of "hospital at home" compared to hospital inpatient care in acute exacerbations of chronic obstructive pulmonary disease.

Search methods

The Cochrane Central Register of Controlled Trials; electronically available databases e.g. MEDLINE (1966-current), EMBASE (1980-current), PubMed, ClinicalTrials, Science Citation Index and on-line individual respiratory journals; bibliographies of included trials were all searched and contact with authors was made to obtain studies. The most recent searches were carried out in August 2003.

Selection criteria

Only randomised controlled trials were considered where patients presented to the emergency department with an exacerbation of their chronic obstructive pulmonary disease. Studies must not have recruited patients that are usually deemed obligatory admissions.

Data collection and analysis

Two reviewers independently selected articles for inclusion, evaluated methodological quality of the studies and abstracted data.

Main results

Seven studies with 754 patients were included in the review. Studies provided data on hospital readmission and mortality both of which were not significantly different when the two study groups were compared (RR 0.89; 95%CI 0.72 to 1.12 & RR 0.61; 95%CI 0.36 to 1.05, respectively). Both the patients and the carers preferred hospital at home schemes to inpatient care (RR 1.53; 95%CI 1.23 to 1.90). Other reported outcomes included few studies.

Authors' conclusions

This review has shown that one in four carefully selected patients presenting to hospital emergency departments with acute exacerbations of chronic obstructive pulmonary disease can be safely and successfully treated at home with support from respiratory nurses. This

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review found no evidence of significant differences between "hospital at home" patients and hospital inpatients for readmission rates and mortality at two to three months after the initial exacerbation. Both the patients and carers preferred "hospital at home" schemes to inpatient care.

PLAIN LANGUAGE SUMMARY

The effects of early discharge schemes in people who have had COPD exacerbations

This review of "hospital at home" service has shown that patients presenting to hospital emergency departments with acute exacerbations of chronic obstructive pulmonary disease can be successfully treated at home when supported by visiting respiratory nurses at home. This review found no evidence of differences between "hospital at home" patients and hospital inpatients for readmission rates and mortality at two to three months after the initial exacerbation. Both patients and carers preferred "hospital at home" care to inpatient care. However, only one in four patients were suitable for "hospital at home" schemes.