Vocational rehabilitation in patients with chronic rheumatic diseases: a systematic literature review

de Buck P D, Schoones J W, Allaire S H, Vliet Vlieland T P

Authors' objectives
To determine the effectiveness of vocational rehabilitation programmes in patients with chronic rheumatic disease.

Searching
PubMed and PsycINFO (both from 1980 to 2001), Current Contents (from 1995 to 2001) and the Science Citation Index (from 1988 to 2001) were searched for articles in English, Dutch or German. The search terms were given. In addition, the reference lists of eligible studies were checked.

Study selection

Study designs of evaluations included in the review
There were no explicit inclusion criteria for the study design. One study used a prospective design and five were retrospective; no studies employed a control comparison. The duration of follow-up ranged from 2 to 84 months.

Specific interventions included in the review
Studies of any vocational rehabilitation programmes specifically designed to help patients re-enter or remain in employment were eligible for inclusion. The intervention had to be delivered by at least one health professional (e.g. an occupational therapist) and a specialised vocational rehabilitation counsellor.

The interventions included in the review were delivered in community settings, job centres, hospitals, rehabilitation centres and the workplace. The components of the interventions included education, assistance, developing work-related skills and counselling.

Participants included in the review
Studies of patients with chronic rheumatic disease were eligible for inclusion. Studies were excluded if it were not possible to discriminate the results of the intervention in patients with chronic rheumatic disease from other disorders. The patients included had diagnoses of arthritis, rheumatism, rheumatoid arthritis, juvenile arthritis, osteoarthritis, or systemic lupus erythematosus. The age ranged from 16 to 59 years.

Outcomes assessed in the review
Studies were eligible for inclusion if they reported on the vocational status of participants following the intervention. These included paid occupation, work disability, sick leave, job modification, occupational change or re-training. The main outcome of the included studies was employment or return to work (defined as working at least 60 days prior to case closure) at follow-up.

How were decisions on the relevance of primary studies made?
Two reviewers independently assessed abstracts and articles for inclusion. Any disagreements were resolved through discussion.

Assessment of study quality
The authors did not state that they assessed validity.

Data extraction
Two authors independently extracted the data from the included studies and resolved any disagreements through discussion. Data were extracted on the vocational status after the intervention and, when provided, the vocational status at baseline.
Methods of synthesis
How were the studies combined?
The authors provided a narrative summary and tabulated the characteristics and results of the included studies.

How were differences between studies investigated?
Differences between the studies were discussed according to the study type, characteristics of the population and intervention, and the effectiveness of the vocational programme.

Results of the review
Six studies were included in the analysis. The number of patients with chronic rheumatic disease was 80,119 (range: 52 to 79,080).

Five studies demonstrated that vocational programmes delivered to patients with chronic rheumatic disease result in positive improvements in employment status. In four studies, the rate of successful return to work ranged from 52 to 69%; in one study the number of patients employed increased by 15% following the intervention. Four of these studies evaluated vocational programmes in community settings and one in job centres and hospitals. Two were specifically designed for patients with chronic rheumatic disease. These results were based on short follow-up periods ranging from 2 to 6 months. One study also reported 1-year follow-up results and found that an initial increase in employment from 35 to 62% decreased to 16% at 1 year.

One additional study found a modest employment rate of 15% among patients with chronic rheumatic disease following a vocational programme, which was delivered in a rehabilitation centre/working environment. This study had the longest follow-up period of 4 to 7 years. However, it contained only 26 patients with chronic rheumatic disease and the intervention was not specific to this condition.

Authors' conclusions
The authors concluded that the effectiveness of vocational programmes in patients with chronic rheumatic disease was unclear, owing to the methodological differences and weaknesses of the included studies.

CRD commentary
The review addressed a clear question and the inclusion criteria appear to have been appropriate. Methods were used to limit language bias, although, as the authors acknowledged, relevant studies may have been omitted by restricting the search to electronic databases, thus leading to potential publication bias. The authors used methods to minimise selection and observer bias when selecting the studies and extracting the data from the included studies. Given the methodological differences between the studies, a narrative summary of the results was appropriate. Although no method was used to assess validity, it is evident that the strength of evidence of effectiveness was weak since the included studies lacked a control group. Consequently, the authors' cautious conclusion and recommendation for further research is suitable given the available evidence.

Implications of the review for practice and research
Practice: The authors suggested that the low utilisation of vocational programmes for patients with chronic rheumatic disease should be addressed by increasing patient and professional awareness of such services.

Research: The authors stated that randomised controlled trials with long-term follow-up are required to determine the clinical and cost-effectiveness of vocational programmes for patients with chronic rheumatic disease.

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.