



# Cystic Fibrosis Research News

# Title:

The impact of cystic fibrosis on the working life of patients: A systematic review

# Lay Title:

The influence of cystic fibrosis on work ability of affected patients

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# What was your research question?

Cystic fibrosis (CF) is an inherited disorder that causes alterations to the lungs, digestive system and other organs in the body. Over the last decades, life expectancy of CF patients significantly increased enhancing the possibility for labor force participation. However, the expectation for a job should face the physical and emotional implications of such chronic and progressive disease. Therefore, we looked at the impact that CF can have on the rate of employment, type of profession, capacity for work and predictive factors for work disability in affected patients.

## Why is this important?

To assure CF patients a suitable balance among competing needs of seeking and retaining employment with maintenance of health status, improving disease outcomes, and patients' personal, social and professional lives.

#### What did you do?

We systematically reviewed the scientific knowledge available from 2000 until February 2021 on the possible influencing role of CF on multiple aspects of occupational lives of working age patients.

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# What did you find?

The global worldwide percentage of CF patients employed in full- or part-time jobs ranged from 44% to 86%, suggesting that a significant portion of them could effectively retain a paid job. Not physically demanding professions were primarily chosen (i.e. professional, technical or managerial occupations). This may be due to the disease-related inability to sustain a heavy workload and the possibility for non-manual jobs to be more easily modifiable according to a possible decline in health. Generally, less than a half of the patients reported that CF affected their choice of occupation and career perspectives, being responsible for job limitations or work cessation. In some studies, disease severity features, such as having been treated with intravenous antibiotics or oxygen therapies in the previous year, or having a reduction in lung function parameters were associated with a higher risk for unemployment and work disability, although other investigations failed to confirm such findings. Age, gender and marital status were also reported as affecting work ability, although with not homogeneous results. Higher educational levels were demonstrated to be associated with a greater chance of obtaining a job and with a lower risk for work disability.

## What does this mean and reasons for caution?

Clinicians should carefully assess the work function of their CF patients as part of routine clinical management. However, caution should be paid in extrapolating inferences in the relationship between the disease and occupational impairments due to possible confounding role of the global ageing of patients, variable stages of severity, treatment approaches, task requirements and occupational risk factors, that has been not fully explored.

### What's next?

To achieve a multidisciplinary, comprehensive CF management that may include both clinical and occupational health support. This latter may regard career counselling, vocational rehabilitation guidance, job accommodation and social support in occupational settings that may all contribute to improve patients' ability to cope with their health status, thus improving disease outcomes, social inclusion, self-esteem, financial situation, and quality of life of CF workers.

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