

## Heart health impacts wellbeing of patients with chronic obstructive pulmonary disease

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A new study has found that processes that control heart rate play an important role in the quality of life experienced by patients with chronic obstructive pulmonary disease (COPD). The study, which was published in the journal *Respirology*, indicates that heart-related treatments may improve the wellbeing of some individuals with COPD.

COPD occurs when the airways become constricted, making it difficult to breathe. Patients also often experience poor physical and mental quality of life, sometimes independent of their lung function.

Little is known about what determines COPD patients' quality of life. Because patients often have high resting heart rates and reduced <u>heart</u> rate variability, Arnoldus J.R. van Gestel, of the Zurich University of Applied Sciences, in Switzerland, and his colleagues wondered if patients' <u>heart health</u> might impact their quality of life.

The investigators studied 60 patients with COPD, measuring their quality of life through a questionnaire and their heart rates through monitoring devices. (Heart rate variability measures how the heart adjusts to varying levels of demand. Reduced heart rate variability implies an impaired ability of the heart to alter its own beat frequency.)

There was a significant correlation between patients' quality of life scores and their heart rate variability. Specifically, patients with low quality of life tended to have reduced heart rate variability.



"Researchers have been trying to investigate the main causes of poor quality of life in COPD patients in order to improve their heath status," said Dr. van Gestel. "In this study, we found that the <u>autonomic nervous system</u>, which controls heart rate, plays an important role in the decrease in quality of life," he added. More studies are needed to determine precisely what that role is; however, the findings underline the importance of testing, and perhaps treating, the heart health of COPD patients.

## Provided by Wiley

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