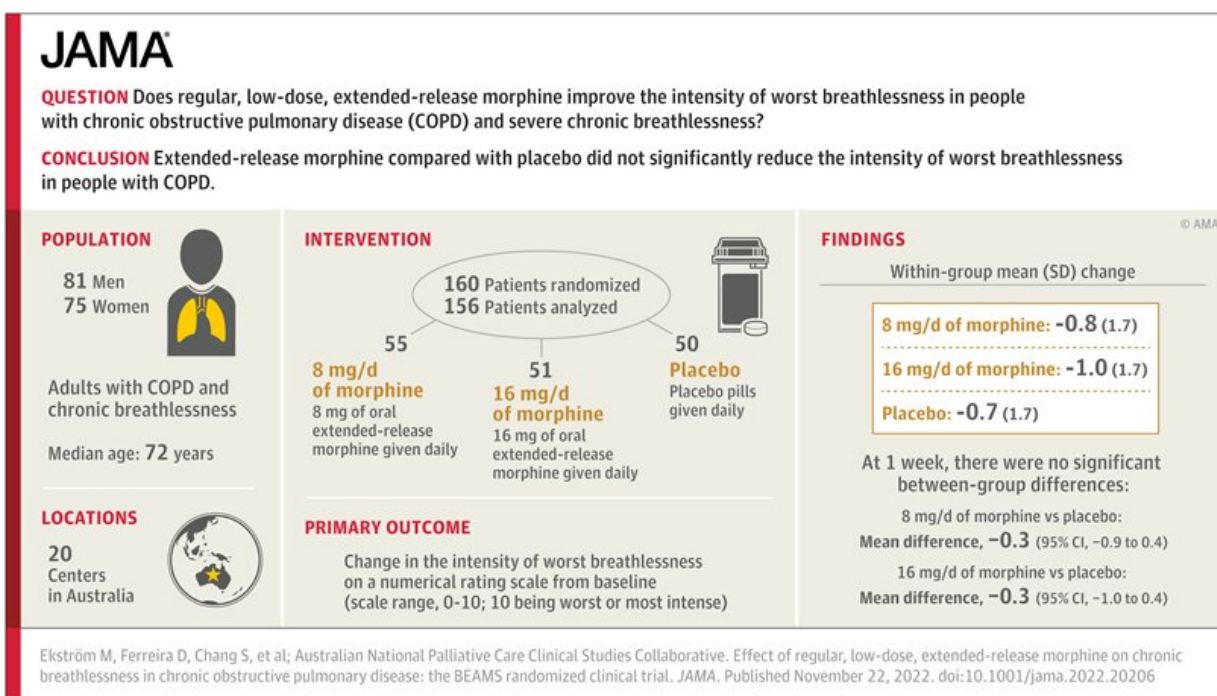


New study on morphine treatment in people with COPD and severe, long term breathlessness

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Graphical abstract. Credit: *JAMA* (2022). DOI: 10.1001/jama.2022.20206

Sometimes health care professionals treat patients with opioids such as morphine to relieve symptoms, but there has been a lack of evidence as to whether this helps with severe chronic breathlessness. A randomized Phase 3 study conducted by Swedish and Australian researchers now

finds that morphine does not reduce the intensity of worst breathlessness.

The study is published in *JAMA*.

Long-term shortness of breath is a common cause of ongoing suffering that often occurs with advanced serious illness and at the end of life. COPD can cause breathlessness by damaging the lungs and airways and for seriously ill people with severe long term breathlessness, physical activity is often a challenge.

"Many people live with shortness of breath. It is distressing that no better treatment exists, but based on the results we've seen, we cannot generally recommend giving [morphine](#) to people with chronic breathlessness," says Magnus Ekström, a researcher in Palliative Medicine and Pulmonary Medicine at Lund University in Sweden and Chief Physician in Pulmonary Medicine at Blekinge Hospital.

The researchers included 156 patients, each for three weeks, with [chronic obstructive pulmonary disease](#) (COPD) who suffered from severe long term breathlessness. In the first week, the participants were randomized into three groups, two to regular low doses of once daily morphine (8 milligrams daily or 16 milligrams daily), and a third control group that received a placebo.

During the subsequent two weeks, participants were randomized to receive either an additional 8 milligrams of morphine or placebo, in addition to the previous treatment. This was done to investigate the efficacy of the treatment and the risk of side effects resulting from an increased dose of morphine. The treatment was double-blind, which means the participants and those who treated them didn't know what treatment each group was receiving.

"Given the prevalence of long term breathlessness across the world, it is crucial that we find ways that safely and predictably reduce the suffering that this causes people, often for years," says David Currow, a palliative medicine physician at the University of Wollongong in Australia whose team worked on the study as a part of a national program to improve symptom control of people with advanced, life-limiting illnesses.

The researchers then compared the groups to see how they rated their experience of shortness of breath. With the help of motion sensors, the researchers also measured the participants' [physical activity](#) during the study.

"Some probably expected that the study would show that regular, low dose morphine may allow people to be more physically active. Unfortunately, across all participants, we did not see this. We didn't see any improvements in terms of the worst breathlessness that participants experienced," says Magnus Ekström.

According to Ekström, the use of regular low dose morphine for severe long term breathlessness should not be widely used in health care as a treatment for groups that experience chronic, activity-limiting shortness of breath.

However, the study should not be interpreted as suggesting that morphine does not provide any relief to patients with severe shortness of breath at rest, or in [palliative care](#) at the end of life. "We didn't investigate that in the study. In most cases, our patients did not have shortness of breath at rest. Clinical experience shows that at the end of life and in crisis situations, morphine treatment can help," says Magnus Ekström.

The next step will be to investigate in greater detail whether certain groups respond better to morphine, as well as which ones are at a higher

risk of experiencing side effects.

More information: Magnus Ekström et al, Effect of Regular, Low-Dose, Extended-release Morphine on Chronic Breathlessness in Chronic Obstructive Pulmonary Disease, *JAMA* (2022). [DOI: 10.1001/jama.2022.20206](https://doi.org/10.1001/jama.2022.20206)

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