

[Singing, breathing, coping: holistic approaches to managing the breathlessness and anxiety of long COVID \(who.int\)](#)

- **Singing, breathing, coping: holistic approaches to managing the breathlessness and anxiety of long COVID**

Credits

Singing, breathing, coping: holistic approaches to managing the breathlessness and anxiety of long COVID

14 December 2023

News release

Reading time: 5 min (1365 words)

At the beginning of the COVID-19 pandemic, with the United Kingdom (UK) in lockdown, staff from the costume department of the London-based English National Opera (ENO) threw themselves into making scrubs for medical workers. Sparked by this contact with hospitals, an apparently unlikely collaboration began. It saw the ENO's vocal leaders working with lung specialists at Imperial College Healthcare NHS Trust to develop a remarkable series of online workshops aimed at people with long COVID experiencing breathlessness and the associated anxiety.

The programme is called ENO Breathe, and from small beginnings, it has grown into a nationwide programme that now takes referrals from 88 National Health Service (NHS) clinics, providing an online programme of medically grounded exercises that have already offered rehabilitation and relief to over 3000 participants. ENO Breathe has also inspired other initiatives across the European Region.

The science behind the sessions

Dr Sarah Elkin is a consultant in respiratory medicine at Imperial College London. She worked with vocal leader and ENO Breathe's Creative Director Suzi Zumpe to design the initial session content and resources.

"A disordered breathing pattern is when the amount of breath people perceive they need is out of kilter with what they actually need," Dr Elkin explains. "So, when people are stressed, they take in a breath, then a bit more. If that stress continues on your body, then that disordered breathing pattern stays – the brain adapts to breathing in this way."

Although the mechanism is not yet fully understood, Dr Elkin says it appears that a proportion of people are left with this disordered breathing pattern as a consequence of the viral effects of SARS-CoV-2 – the virus that causes COVID-19 – in the body. In developing the ENO Breathe programme, they consulted with a range of health-care professionals, from physiotherapists through to speech and language teams, to develop a safe and impactful 6-week programme. It uses simple exercises to encourage calmer, more regulated breathing, longer exhalation and better body awareness to return participants to more normal patterns of breathing.

Imperial College London also conducted a randomized controlled trial, producing the first published paper to show that this holistic approach to rehabilitation after COVID-19 was genuinely beneficial.

"It's really reassuring to see the results coming out," says Dr Elkin. "80% of participants are saying that their levels of breathlessness have improved by the end of the programme. We're seeing a similar improvement in levels of anxiety. So, whatever it is the programme does, there is no doubt it reduces stress and allows the nervous system to re-equilibrate and work better."

The music of safety

"Everything we sing in this programme is connected to lullabies," says Zumpe. "That's intentional as a music choice because a lullaby is the music of safety. It is also culturally something that exists everywhere, in every society in the world."

To ensure participants are not set back in their recovery by over-exertion, ENO Breathe only receives referrals from the UK's network of post COVID-19 assessment centres. The calming tunes the programme uses are designed to be sung by non-specialist singers, with short phrases that offer just enough stretch to help extend the breath without pushing people past their limits. Participants

join from the privacy of their own home, with their microphones switched off during exercises, which removes any pressure to perform.

Eric, from Oxfordshire, UK, took part in the ENO Breathe programme: “It was absolutely fantastic. Not only did the sessions really help with my breathing, they also relieved my anxiety and gave me the chance to meet with other people in the same position. I felt less alone and it was a real turning point for me thinking ‘Yes, this is temporary, I will get better’”.

Building on a tradition of music as medicine

Jennifer Davison, an opera singer, is co-founder of the Arts for Health Austria initiative “Aufatmen” (German for “a sigh of relief”). Their vocal programme for long COVID builds on the country’s strong tradition of music therapy, incorporating a range of breathing exercises and folk songs. Aufatmen has also developed a recording which people can listen to for inspiration and meditation, based on music beloved in Vienna’s opera tradition.

Davison explains the mechanism by which singing or humming can be calming: “The vagus nerve moves from your gut to your brain, literally through your voice box. This is one of our main ways that we can get from fight and flight into rest and digest directly through the voice”.

She reports that after sessions many people report that they have more energy than before. They find it easier to express their feelings about their illness and many speak of a tightness in the chest or a knot in the throat that has disappeared.

“I think we are looking at a paradigm shift regarding how we think about health, and I am really excited about the possibility to integrate these sorts of practices to bring better respiration into our daily practices for health and flourishing, says Davison.

German voice teachers take the lead

Other countries are following the UK’s example. In Germany, the professional voice teachers’ association Bundesverband Deutscher Gesangspädagogen (BDG) started its programme “Durchatmen” (“Take a deep breath – regeneration support”) in 2021. The BDG is a certified educational institution and founding member of the European Voice Teachers’ Association.

All BDG members are experienced in teaching breathing, singing and relaxation techniques, but it is essential that those engaged in Durchatmen regeneration support are trained in recognizing and dealing with the special needs of those with long COVID. To this end, a group of dedicated members initiated qualifying seminars, exclusively for BDG members.

Current members of the Durchatmen team include Bettina Kerth, Corinna Reynolds and Marilyn Schmiege.

“Many attend our seminars because they themselves or their students are affected by long COVID,” says Schmiege.

“We have learned that we must be very, very patient and gentle in this work,” adds Kerth.

“People go from one doctor to the next and they still feel so unwell,” comments Reynolds. “When they come to us, we take them seriously. It is not a quick result, but we see immediate improvements. As we say, we need to take a deep breath. It takes time to change things.”

Arts and health

The arts have long been recognized as having an important role in health and well-being.

With demand far outstripping supply for participation in courses, all 3 organizations are seeking more recognition of the benefits of holistic, patient-centred approaches in the management of long COVID. They have learned a lot from the way that socially prescribed singing and breath work can complement medical care for those with long COVID who suffer breathlessness, which, in turn, also supports over-burdened health services.

“Working with medicine and the arts has been a real eye-opener to me,” said Dr Elkin. “The skill sets of the vocal coaching team have been really beneficial to my medical team as well. We’ve learned that we can help people get better without them having to attend clinic.”

Since publishing its landmark scoping review on the evidence base for arts and health in 2019, WHO has advocated for more research into how the arts can benefit health and well-being. In collaboration with the newly established Jameel Arts and Health Lab, WHO/Europe is leading a consortium of research centres around the world looking at the evidence base for the health benefits of creative expression, and in particular how they can be focused on individual and community health improvement.

“Often, we intuitively understand how the arts can have an important health impact, whether it’s through singing to improve lung function for those living with long COVID, or dancing to support balance and well-being in people living with Parkinson disease,” said Nils Fietje, Technical Officer in the Behavioural and Cultural Insights Unit at WHO/Europe. “Together with academics world-wide, WHO is now growing the scientific evidence base to back up this intuition, and

learning how best to implement arts and health interventions that work at scale in hospitals, community care settings, and health systems generally.”

The organizations featured in this story are not WHO/Europe partners. WHO/Europe does not necessarily endorse any of their approaches and/or products.