# The importance of addressing physical activity and exercise intolerance in our patients with COPD

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**Both increased physical activity and increased exercise capacity are desired outcomes in the treatment of individuals with COPD** https://bit.ly/4apLYzm

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In one of his classical works, *De Anima* (circa 350 BCE), Aristotle considered movement to be an integral component of the essence of animal souls [1]. 2000 or so years later and viewed from the perspective of evolutionary theory, the ability to move is instrumental to survival and passing on one's genes through finding and acquiring nourishment, avoiding predators, reaching more favourable microclimates, and better locating a mate.

Exercise capacity and physical activity both give us some measure of movement, although they are different constructs. For the purposes of this editorial, we will consider physical activity as bodily movement produced by skeletal muscles resulting in energy expenditure, and exercise as a subset of physical activity that is typically planned, structured, repetitive or directed towards a goal, such as increasing fitness [2–4]. In this paradigm, higher levels of exercise capacity, through allowing for greater energy expenditure, can be considered permissive of increased physical activity. However, this is not always the case, since daily physical activity is modified by many other factors such as motivation, environment and self-efficacy, to name a few. This distinction has led to the separate concepts of "can do" (exercise capacity) and "do do" (physical activity). And with respect to people in general [5, 6], and our patients with COPD in particular, both "can do" and "do do" are associated with favourable outcomes, including greater quantity [7–13] and quality of life [14–17].

Although the missing piece of the equation – causality underpinning this association – has yet to be proven, most clinicians consider increasing exercise capacity and physical activity in their patients as worthy goals. Hence, the "should do" component of the trilogy.

The three reviews in this issue of *Breathe* represent the output of 35 health professionals from 12 countries who collaborated, either in-person or virtually, in a 1-day symposium entitled "Can Do, Do Do, Should Do: An International Symposium on Exercise Limitation and Physical Inactivity in COPD", which took place in Stresa, Italy on 7 September 2023 (figure 1a) [18–20]. This was a team effort that included those who wrote the initial drafts of the content of the reviews, those who summarised this preliminary output for discussion, and those adding to and revising the content of the reviews through discussion and editing. Its primary goal was to create a concise, narrative review of our current knowledge of physical activity and


**FIGURE 1** a) In-person symposium participants and guests. Virtual participants not shown: Felicity Blackstock, Rebecca Crouch, Andrea Gershon, Antarpreet Kaur, Linda Nici, Jonathan Raskin. b) Mary Gawlicki.

exercise capacity in COPD, including their importance to the COPD patient, factors that affect these important variables, and potential ways we may get our patients to increase their levels. What follows in this issue is the result of our collaborative efforts.

Finally, we dedicate this work to the memory of our colleague and dear friend, Mary Gawlicki (figure 1b), who did not allow impediments imposed by her pulmonary and cardiac disease to get in the way of her dedicated and tireless support of pulmonary rehabilitation in the comprehensive management of the respiratory patient. Mary had planned to attend the symposium to provide her perspective as a patient, but she died unexpectedly on 26 May 2023. She fought the good fight. *Requiescat in pace*, Mary.

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