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| **Lack of participant diversity in COPD maintenance inhaler clinical trials** |
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| **Introduction/Aim:** Social determinants of health (SDH; sex, socioeconomic status, ethnicity, occupation, and education) play a key role in disease prevalence and progression in chronic obstructive pulmonary disease (COPD) and may impact acceptability or effectiveness of treatments. To date there have been no studies examining the reporting and inclusion of SDH in clinical trials of long-acting muscarinic antagonists (LAMA) and long-acting beta agonists (LABA) inhalers. This review aimed to examine recruitment strategies to target diverse populations in LAMA and/or LABA inhaled therapy COPD clinical trials and determine if SDH are reported in the primary trial documents or published results.  **Methods:** Four clinical trials databases (CENTRAL, Clinicaltrials.gov, ISRCTN and ANZCTR) were searched to identify LAMA and/or LABA clinical trials in adults with COPD between 01/01/2000 and 08/05/2023. Extracted data included: study location(s), targeted SDH, recruitment strategies, study outcomes, and eligibility criteria. Reporting of SDH was examined from trial database records and associated published papers from 01/01/2018 to 08/05/2023.  **Results:** Of 1822 trials identified, 34 primary trials were included, with 10 associated publications. Age and sex of participants were reported in all primary trials and publications. Of 6095 participants included in published results, there was a slight male preponderance (n=3370, 55.3%) and women (n=2725, 44.7%). Ethnicity was reported in three publications (30%) and included only one non-White individual. No primary trials or published papers reported on socioeconomic status, occupation, education, or rurality. Trials were mainly conducted in high or upper-middle income countries (98.1%) and half were single site (52.9%). No trials explicitly described recruitment strategies to diversify cohorts of participants.  **Conclusion:** SDH, other than age and sex, were under-reported in LABA and/or LAMA COPD trials, and when reported, lacked diversity in ethnicity among trial participants. Future trials must include and report on diverse populations to demonstrate efficacy for all people in all contexts.  **Grant support:** nil. |

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