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| **Physical capacity and inactivity in obstructive airway diseases** |
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| **Introduction/Aim:** The ‘can do, do do’ concept aims to understand if physical capacity (PC) contributes to physical activity (PA) participation. This study applies the ‘can do, do do’ concept in people with and without obstructive airway disease (OAD), and identifies movement behaviour and clinical characteristic differences between quadrants (Figure 1).Figure 1**Methods:** Adults with bronchiectasis (n=60), severe asthma (n=93), chronic obstructive pulmonary disease (COPD) (n=70), and without-OAD (n=58) completed a multidimensional assessment. Participants were divided into categories (Figure 1) according to their PC and PA [i.e., 6-minute walk distance percent predicted (< or ≥ 70%); time spent in moderate-to-vigorous PA (< or ≥ 150 min/week)]. The groups proportions and characteristics of each quadrant were analysed.**Results:** Compared with the without-OAD group (5%), a higher proportion of people in the OAD groups (bronchiectasis 30%, severe asthma 25% and COPD 59%) were in the ‘can’t do, don’t do’ quadrant. Within the OAD groups, the COPD group had the lowest proportion of people in the ‘can do, do do’ quadrant (10%) (p<0.05). Participants in the ‘can’t do, don’t do’ quadrant spent significantly more time in sedentary behaviour compared with the ‘can do, do do’ quadrant for the bronchiectasis and COPD groups (p<0.05). People in the ‘can do, do do’ quadrant spent more time doing light PA compared with the ‘don’t do’ quadrants for each OAD group (p<0.05). Compared with the ‘can do, do do’ quadrant, participants in the ‘can’t do, don’t do’ quadrant had more comorbidities, reduced lung function, impaired quality of life, and greater breathlessness impact (p<0.05).**Conclusion:** People with OAD often have low PC and low PA. Optimising light activity and sedentary behaviour in people with OAD who are inactive is a potential target for intervention. Behavioural interventions may be of benefit to people with OAD who remain inactive despite having preserved PC. **Grant Support:** University of Newcastle, NHMRC, Hunter Medical Research Institute, John Hunter Hospital Charitable Trust |