

Table 2. Characteristics of studies

| Authors (year of publication) | Country | Sample (number of participants, chronic illness (comorbidities), current or ex-smoker) | Participant recruitment | Time period data collected (during COVID pandemic) | Health care setting | Data Collection method | Type of Methodology |
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| Liang (2021) | China | n = 153 COPD patients who are 40 years of age or older. Median age = 71, 85% of patients were male. 29.7% of patients were current smokers, 49.7% were ex-smokers, and 20.9% had never smoked before. | Patients selected randomly from the COPD database at the Pekin University Third Hospital through the following inclusion criteria: 1) 40 years of age or older; 2) a history of at least 3 months of diagnosed COPD according to the GOLD report. | January 25 to April 25 2020. | Specialised healthcare, general hospitals. | Telephone interviews | Single centre, cross-sectional |

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| Mansfield (2021) | UK | <p>n = 9,863,903 (Jan 1 2017) -> n = 10,226,939 (Jan 1 2020).</p> <p>Individuals aged 11 years or older who had at least 1 year of registration with practices contributing to CPRD Aurum.</p> <p>Population demographics include primary care contacts for selected acute physical and mental health conditions: anxiety, depression, self-harm, severe mental illness, eating disorder, OCD, acute alcohol-related events, asthma exacerbation, COPD, cardiovascular events, diabetic emergency.</p> | Participant information collected from de-identified electronic health records from the Clinical Research Practice Datalink Aurum between 2017 and 2020 and after March 29 2020. | March 29 to July 18 2020 | Primary healthcare | Utilised de-identified electronic health records and primary care data from the Clinical Research Practice Datalink Aurum between 2017 and 2020 and after March 29 2020. | Quantitative |
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| | | COPD patients were 41 years old or older with evidence of a smoking history. | | | | | |
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| Mousing (2021) | Denmark | n = 13 COPD patients, 4 males and 9 females. Smoking status was not collected. | Participants recruited through advertisements on Facebook as a convenience sample for semi-structured individual interviews. | June to September 2020 | Specialist healthcare, primary healthcare | Individual semi-structured interviews | Qualitative exploratory study design |
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| Oliveira (2021) | Canada | n = 16 (3 COPD patients, 10 healthcare professionals, 3 policymakers) Smoking status not collected. | COPD patients - eligible if they had a confirmed diagnosis of COPD according to GOLD criteria, had previously attended pulmonary rehabilitation and experienced at least one hospitalisation in for acute exacerbation COPD in the past year. These patients were recruited over the phone by a research coordinator not involved in their care. HCPs (e.g. respirologists, physiotherapists, nurses) who had cared for patients with or up to 3 weeks following an AECOPD were invited to participate via email. Policymakers (e.g. | September to December 2020 | Specialised healthcare (creation of a rapid access rehabilitation program) | Semi-structured interviews via Zoom. | Qualitative |
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| | | | program coordinators, executive directors, and board directors) were recruited via email. | | | | |
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| Philip (2020) - Respiratory patient | UK | <p>n = 9515 participants with long-term respiratory conditions</p> <p>81% female, age ranges from 17 years and under to 80 years and above.</p> <p>Asthma (83%), COPD (10%), bronchiectasis (4%), interstitial lung disease (2%), 'other' (<1%, lung cancer, pulmonary endometriosis)</p> <p>13.93% of participants with chronic respiratory disease (n = 1541) were current smokers.</p> | <p>Patients and members of the public were not specifically involved in the design, conduct or reporting of this research.</p> <p>Data collected from an online survey conducted by the Asthma UK and British Lung Foundation Partnership.</p> | April 1-8 2020 | Specialised healthcare (pulmonary rehabilitation), hospital settings (appointments), primary healthcare (GP appointments) | Data analysed from an online survey conducted by the Asthma UK and British Lung Foundation Partnership. | Cross-sectional study design |
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| Philip (2020) - COVID-19 related concerns | UK | n = 7039 responses, respondents from under 17 to over 80. 82.7% female, 17.2% male. Asthma (80%), COPD (9%), bronchiectasis (4%), interstitial lung disease (2%), 'other' (1%, lung cancer) Smoking status not collected. | The survey was distributed via the AUK-BLF partnership's mailing lists and websites, advertised through social media including Facebook, Twitter, Instagram and LinkedIn Participants in surveys consented to the use of their responses for analysis and publication. | April 1-8 2020 (3rd week of national social distancing measures and advice) | Primary care (GP access), hospital settings, specialised healthcare | Data used from an online survey conducted by the Asthma UK and British Lung Foundation (AUK-BLF) partnership. | Qualitative, thematic analysis |
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| Pleguezuelos (2020) | Spain | n = 100 COPD patients, 24% women Differentiation between current and former smokers not made. | Patients were recruited from the list of out-patient clinics of two general hospitals in the area of Barcelona. Inclusion criteria: age older than 40 years, smokers or former smokers of at least 10 pack-years, FEV1/FVC < 0.7, FEV1 (% predicted) <70%. Exclusion criteria: severe neurological disease, active oncological disease, inability to understand the questions to the survey | May 2 - 18, 2020 | Specialised healthcare (pulmonary rehabilitation, telerehabilitation), primary healthcare | Telephone interviews | Cross-sectional, observational study |
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| Stamenova (2022) | Canada | <p>Considered virtual and in-person ambulatory care visits, 215 million between Jan 1 2018 and Jan 15 2021 (73,460,386 in 2018, 73,629,600 in 2019, 68,032,404 in 2020)</p> <p>Stratifications completed to examine patients with COPD, heart failure, asthma, hypertension, diabetes, mental illness, angina.</p> <p>Smoking status not collected.</p> | <p>Patient data collected from administrative databases (outlined in 'Data Collection method'</p> <p>All data was de-identified at ICES and individual patient consent was waived</p> | Comparison of data before and during the pandemic (Jan 01, 2018 to Jan 16, 2021) | Specialised healthcare (administration of virtual care visits with physicians) | Used administrative databases | Population-based, repeated cross-sectional study |
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| Volpato (2021) | Italy | <p>n = 146 (79 COPD patients, 24 caregivers, 43 HCPs)</p> <p>Average age 71.1</p> <p>Patients: 22.9% were smokers at the time of the survey, 63.9% were former smokers, 11.3% had never smoked.</p> | <p>Convenience sample recruited from seven hospitals, give outpatient clinics operated by GPs, and two patients' associations for pulmonary diseases across Italy.</p> <p>Inclusion criteria: patients with COPD of any severity according to GOLD criteria, caregivers for patients with COPD, aged 18 years or older, no cognitive impairment documented, HCPs (preferably pulmonologists or GPs) treating COPD</p> | July and November 2020 | Primary healthcare (caregivers, GPs), specialised healthcare (HCPs - pulmonologists, physiotherapists), hospitals | Online semi-structured questionnaire | Cross-sectional observational narrative medicine study |
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| Wu (2021) | UK | n = 55 clinicians + 19 COPD patients Smoking status not collected. | Surveys were hosted using Thiscovery (www.thiscovery.org), which allows members of the public, including patients carers, healthcare professionals and others to engage in research. Patient eligibility criteria - 18 years or older, accessed specialty COPD care in the last 3 months, been diagnosed with COPD. | Collected during pandemic, but exact dates not mentioned. | Specialised healthcare | Two questionnaires for clinicians and COPD patients | Qualitative |
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