CONTENT

METHODS: Data Cleaning

Content for each post was downloaded in Microsoft Excel and was manually anonymised and cleaned to filter out duplicates (based on article identification (ID), social media link and/or content e.g. posts with similar content on different social media or re-post by the same user identifiable by content) and to remove non-English language posts. We removed all posts containing data from social media websites outside the scope of this study, aggregator or junk websites (i.e. websites leading to unsolicited advertisements or misleading links not related to scope of the study) from links that were not publicly accessible or not working, content pertaining to buying or selling drugs, market reports from pharmaceutical companies or e-retailers and posts by pharmacies.

Texts on social media are often written casually, which contain many deviations from rules of spelling, grammar and punctuations. Spelling correction was applied to an extent where possible while evaluating the content of the post; it might be possible that some online content was missed during the search due to incorrect spelling of the online posts.

TABLE S1 Search terms

Disease related	Symptom related	Diagnosis related/Other
COPD	Mucus	Chest X-ray
Chronic obstructive pulmonary	Phlegm	FEV1
Emphysema	Spit	FEV1/FVC
Obstructive lung disease	Sputum	ICS
Chronic bronchitis	Breathless	Inhaler
Pulmonary obstructive airflow	Cough	LABA
	Shortness of breath	LAMA
	Fatigue	Mild
	Breathlessness	Moderate
	Chest pain	Oxygen therapy
	Chest tight	Pulmonologist
	Cold	Rehabilitation
	Cyanosis	SABA
	Expectoration	SAMA
	Saliva	Severe
	Slime	Smoking
	Smoke	Spirometry
	Wheeziness	Stage
	Wheezing	

COPD: chronic obstructive pulmonary disease; FEV1: forced expiratory volume in one second; FVC: forced vital capacity; ICS: inhaled corticosteroid;

LABA: long-acting beta2-agonist; LAMA: long-acting muscarinic antagonist; SABA: short-acting beta agonist; SAMA: short-acting muscarinic antagonist.

RESULTS: Perception about incontinence

It was likely that individuals are shy about revealing incontinence:

Besides, individuals also attributed incontinence to their old age and other co-morbidities. The commonly observed co-morbid conditions in such cases included diabetes, allergic asthma, aspiration pneumonia and congestive heart failure. Posts also mentioned the use of adult diapers to manage incontinence, and one patient mentioned the use electrical impulse-generating device to stop urine leakage.

RESULTS: Quality of life

Supplementary table S3 provides an illustrative list of verbatim pertaining to perceived impact of chronic obstructive pulmonary disease (COPD) on quality of life (QoL). Patients felt that various symptoms such as dyspnoea, mucus, cough and chest tightness affect the QoL, limiting their physical activity. In addition, acute exacerbations (based on disease severity) leading to frequent hospitalisation are perceived to impact QoL and may drive patients to frustration. Cough and mucus or phlegm, in addition to breathlessness or shortness of breath, interfered with patients' sleeping patterns and daily activities. Perceived poor management of exacerbations may drive patients to frustration, and likely to lead to depression.

TABLE S2 Most common words in posts (frequency ≥75)

Word	Frequency
Breath	276
Lung	184
Cough	178
Live	156
Mucus	149
Smoke	147
Time	116
Help	116
Emphysema	108
Chest	90
One	85
Month	85
Asthma	84
Suffer	78
Work	78
Week	78
Feel	77
Well	77
Severe	75
Hospital	75
Infection	75