

## DAFTAR PUSTAKA

- Aaron, S.D. *et al.* (2003) ‘Outpatient Oral Prednisone after Emergency Treatment of Chronic Obstructive Pulmonary Disease’, *New England Journal of Medicine*, 348(26), pp. 2618–2625. Available at: <https://doi.org/10.1056/NEJMoa023161>.
- AbuDagga, A. *et al.* (2013) ‘Healthcare utilization and costs among chronic bronchitis patients treated with maintenance medications from a US managed care population’, *Journal of Medical Economics*, 16(3), pp. 421–429. Available at: <https://doi.org/10.3111/13696998.2013.766614>.
- Adeloye, D. *et al.* (2022) ‘Global, regional, and national prevalence of, and risk factors for, chronic obstructive pulmonary disease (COPD) in 2019: a systematic review and modelling analysis’, *The Lancet Respiratory Medicine*, 10(5), pp. 447–458. Available at: [https://doi.org/10.1016/S2213-2600\(21\)00511-7](https://doi.org/10.1016/S2213-2600(21)00511-7).
- Agustí, A. *et al.* (2022) ‘Pathogenesis of chronic obstructive pulmonary disease: understanding the contributions of gene-environment interactions across the lifespan.’, *The Lancet. Respiratory medicine*, 10(5), pp. 512–524. Available at: [https://doi.org/10.1016/S2213-2600\(21\)00555-5](https://doi.org/10.1016/S2213-2600(21)00555-5).
- Agusti, A. dan Faner, R. (2019) ‘Lung function trajectories in health and disease’, *The Lancet Respiratory Medicine*, 7(4), pp. 358–364. Available at: [https://doi.org/10.1016/S2213-2600\(18\)30529-0](https://doi.org/10.1016/S2213-2600(18)30529-0).
- Ahmed, Q.A., Arabi, Y.M. dan Memish, Z.A. (2006) ‘Health risks at the Hajj.’, *Lancet (London, England)*, 367(9515), pp. 1008–15. Available at: [https://doi.org/10.1016/S0140-6736\(06\)68429-8](https://doi.org/10.1016/S0140-6736(06)68429-8).
- Alamsyah, P.R. *et al.* (2022) ‘Factors Related to Complaints of Lung Function Disorders In UPN Veteran Jakarta Employees’, *Respiratory Science*, 3(1), pp. 14–24. Available at: <https://doi.org/10.36497/respirsci.v3i1.36>.
- Aleeban, M. dan Mackey, T.K. (2016) ‘Global Health and Visa Policy Reform to Address Dangers of Hajj during Summer Seasons.’, *Frontiers in public health*, 4, p. 280. Available at: <https://doi.org/10.3389/fpubh.2016.00280>.
- Almehmadi, M. dan Alqahtani, J.S. (2023) ‘Healthcare Research in Mass Religious Gatherings and Emergency Management: A Comprehensive Narrative Review.’, *Healthcare (Basel, Switzerland)*, 11(2). Available at: <https://doi.org/10.3390/healthcare11020244>.

- Alqahtani, J.S. (2022) 'Prevalence, incidence, morbidity and mortality rates of COPD in Saudi Arabia: Trends in burden of COPD from 1990 to 2019', *PLOS ONE*, 17(5), p. e0268772. Available at: <https://doi.org/10.1371/journal.pone.0268772>.
- Alter, P. et al. (2022) 'Disease Progression and Age as Factors Underlying Multimorbidity in Patients with COPD: Results from COSYCONET', *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 17, pp. 1703–1713. Available at: <https://doi.org/10.2147/COPD.S364812>.
- Amaral, A.F.S. et al. (2017) 'Female Smokers Are at Greater Risk of Airflow Obstruction Than Male Smokers. UK Biobank', *American Journal of Respiratory and Critical Care Medicine*, 195(9), pp. 1226–1235. Available at: <https://doi.org/10.1164/rccm.201608-1545OC>.
- American Lung Association (2024a) *COPD Causes and Risk Factors*. Available at: <https://www.lung.org/lung-health-diseases/lung-disease-lookup/copd/what-causes-copd> (Accessed: 29 March 2024).
- American Lung Association (2024b) *Learn About COPD*. Available at: <https://www.lung.org/lung-health-diseases/lung-disease-lookup/copd/learn-about-copd> (Accessed: 6 May 2024).
- American Thoracic Society (1995) 'Standards for the diagnosis and care of patients with chronic obstructive pulmonary disease.', *American journal of respiratory and critical care medicine*, 152(5 Pt 2), pp. S77-121.
- Antariksa, B. et al. (2023) *Pedoman Diagnosis dan Penatalaksanaan di Indonesia*.
- Antuni, J.D. dan Barnes, P.J. (2016) 'Evaluation of Individuals at Risk for COPD: Beyond the Scope of GOLD', *Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation*, 3(3), pp. 653–667. Available at: <https://doi.org/10.15326/jcopdf.3.3.2016.0129>.
- Apte, K. dan Salvi, S. (2016) 'Household air pollution and its effects on health.', *F1000Research*, 5. Available at: <https://doi.org/10.12688/f1000research.7552.1>.
- Assad, N. et al. (2020) 'New Mexico Female Miners Have Lower Odds for COPD than Their Male Counterparts', *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 17(5), pp. 509–514. Available at: <https://doi.org/10.1080/15412555.2020.1804847>.
- 'ATS Statement' (2002) *American Journal of Respiratory and Critical Care Medicine*, 166(1), pp. 111–117. Available at: <https://doi.org/10.1164/ajrccm.166.1.at1102>.

- Backman, H. *et al.* (2020) ‘Decreased COPD prevalence in Sweden after decades of decrease in smoking’, *Respiratory Research*, 21(1), p. 283. Available at: <https://doi.org/10.1186/s12931-020-01536-4>.
- Bakke, P.S., Hanoa, R. dan Gulsvik, A. (1995) ‘Educational level and obstructive lung disease given smoking habits and occupational airborne exposure: a Norwegian community study.’, *American journal of epidemiology*, 141(11), pp. 1080–8. Available at: <https://doi.org/10.1093/oxfordjournals.aje.a117373>.
- Balmes, J. *et al.* (2003) ‘American Thoracic Society Statement :Occupational contribution to the burden of airway disease’, *American Journal of Respiratory and Critical Care Medicine*, 167(5), pp. 787–797. Available at: <https://doi.org/10.1164/rccm.167.5.787>.
- Baraldi, E. dan Filippone, M. (2007) ‘Chronic Lung Disease after Premature Birth’, *New England Journal of Medicine*, 357(19), pp. 1946–1955. Available at: <https://doi.org/10.1056/NEJMra067279>.
- Baraldo, S., Turato, G. dan Saetta, M. (2012) ‘Pathophysiology of the Small Airways in Chronic Obstructive Pulmonary Disease’, *Respiration*, 84(2), pp. 89–97. Available at: <https://doi.org/10.1159/000341382>.
- Barbagelata, E. *et al.* (2018) ‘Gender differences and chronic obstructive pulmonary disease: an update on the literature’, *Italian Journal of Medicine*, 12(3), pp. 171–179. Available at: <https://doi.org/10.4081/itjm.2018.987>.
- Barker, D.J. *et al.* (1991) ‘Relation of birth weight and childhood respiratory infection to adult lung function and death from chronic obstructive airways disease.’, *BMJ*, 303(6804), pp. 671–675. Available at: <https://doi.org/10.1136/bmj.303.6804.671>.
- Barnes, P.J. (2000) ‘Mechanisms in COPD’, *Chest*, 117(2), pp. 10S-14S. Available at: [https://doi.org/10.1378/chest.117.2\\_suppl.10S](https://doi.org/10.1378/chest.117.2_suppl.10S).
- Barnes, P.J. (2016) ‘Sex Differences in Chronic Obstructive Pulmonary Disease Mechanisms’, *American Journal of Respiratory and Critical Care Medicine*, 193(8), pp. 813–814. Available at: <https://doi.org/10.1164/rccm.201512-2379ED>.
- Barnes, P.J. (2022) ‘Oxidative Stress in Chronic Obstructive Pulmonary Disease.’, *Antioxidants (Basel, Switzerland)*, 11(5). Available at: <https://doi.org/10.3390/antiox11050965>.
- Bauer, W.S. dan Schiffman, R.F. (2020) ‘Factors Influencing Self-Management of Chronic Obstructive Pulmonary Disease by Community-Dwelling Adults’, *Western Journal of Nursing Research*, 42(6), pp. 423–430. Available at: <https://doi.org/10.1177/0193945919865532>.

- Becklake, M.R. (1989) ‘Occupational Exposures: Evidence for a Causal Association with Chronic Obstructive Pulmonary Disease’, *American Review of Respiratory Disease*, 140(3 pt 2), pp. S85–S91. Available at: [https://doi.org/10.1164/ajrccm/140.3\\_Pt\\_2.S85](https://doi.org/10.1164/ajrccm/140.3_Pt_2.S85).
- Bennett, W.D., Zeman, K.L. dan Kim, C. (1996) ‘Variability of fine particle deposition in healthy adults: effect of age and gender.’, *American Journal of Respiratory and Critical Care Medicine*, 153(5), pp. 1641–1647. Available at: <https://doi.org/10.1164/ajrccm.153.5.8630615>.
- Benton, M.J., Wagner, C.L. dan Alexander, J.L. (2010) ‘Relationship Between Body Mass Index, Nutrition, Strength, and Function in Elderly Individuals With Chronic Obstructive Pulmonary Disease’, *Journal of Cardiopulmonary Rehabilitation and Prevention*, 30(4), pp. 260–263. Available at: <https://doi.org/10.1097/HCR.0b013e3181d6f94f>.
- Beran, D. et al. (2015) ‘Burden of asthma and chronic obstructive pulmonary disease and access to essential medicines in low-income and middle-income countries’, *The Lancet Respiratory Medicine*, 3(2), pp. 159–170. Available at: [https://doi.org/10.1016/S2213-2600\(15\)00004-1](https://doi.org/10.1016/S2213-2600(15)00004-1).
- Berkman, L.F., Kawachi, I. dan Glymour, M.M. (2014) *Social Epidemiology*. 2nd edn. New York: Oxford University Press.
- Bestall, J.C. et al. (1999) ‘Usefulness of the Medical Research Council (MRC) dyspnoea scale as a measure of disability in patients with chronic obstructive pulmonary disease.’, *Thorax*, 54(7), pp. 581–6. Available at: <https://doi.org/10.1136/thx.54.7.581>.
- Blanc, P.D. et al. (2019) ‘The Occupational Burden of Nonmalignant Respiratory Diseases. An Official American Thoracic Society and European Respiratory Society Statement’, *American Journal of Respiratory and Critical Care Medicine*, 199(11), pp. 1312–1334. Available at: <https://doi.org/10.1164/rccm.201904-0717ST>.
- Blanchette, C. et al. (2011) ‘Economic burden of chronic bronchitis in the United States: a retrospective case-control study’, *International Journal of Chronic Obstructive Pulmonary Disease*, p. 73. Available at: <https://doi.org/10.2147/COPD.S15882>.
- Blanco, I. et al. (2019) ‘Geographic distribution of COPD prevalence in the world displayed by Geographic Information System maps’, *European Respiratory Journal*, 54(1), p. 1900610. Available at: <https://doi.org/10.1183/13993003.00610-2019>.
- Brigham, E.P. et al. (2021) ‘Challenging the obesity paradox: extreme obesity and COPD mortality in the SUMMIT trial’, *ERJ Open Research*, 7(3), pp. 00902–02020. Available at: <https://doi.org/10.1183/23120541.00902-2020>.

- Brutsche, M.H. *et al.* (2006) ‘Bronchial hyperresponsiveness and the development of asthma and COPD in asymptomatic individuals: SAPALDIA cohort study.’, *Thorax*, 61(8), pp. 671–7. Available at: <https://doi.org/10.1136/thx.2005.052241>.
- Burge, S. dan Wedzicha, J.A. (2003) ‘COPD exacerbations: definitions and classifications.’, *The European respiratory journal. Supplement*, 41, pp. 46s–53s. Available at: <https://doi.org/10.1183/09031936.03.00078002>.
- Burgel, P.-R., Paillasseur, J.-L. dan Roche, N. (2014) ‘Identification of Clinical Phenotypes Using Cluster Analyses in COPD Patients with Multiple Comorbidities’, *BioMed Research International*, 2014, pp. 1–9. Available at: <https://doi.org/10.1155/2014/420134>.
- Cai, L. *et al.* (2020) ‘Socioeconomic variations in chronic obstructive pulmonary disease prevalence, diagnosis, and treatment in rural Southwest China’, *BMC Public Health*, 20(1), p. 536. Available at: <https://doi.org/10.1186/s12889-020-08687-5>.
- Capistrano, S.J. *et al.* (2017) ‘Evidence of Biomass Smoke Exposure as a Causative Factor for the Development of COPD.’, *Toxics*, 5(4). Available at: <https://doi.org/10.3390/toxics5040036>.
- Castaldi, P.J. *et al.* (2010) ‘The COPD genetic association compendium: a comprehensive online database of COPD genetic associations’, *Human Molecular Genetics*, 19(3), pp. 526–534. Available at: <https://doi.org/10.1093/hmg/ddp519>.
- Cazzola, M. *et al.* (2023) ‘Hyperglycaemia and Chronic Obstructive Pulmonary Disease’, *Diagnostics*, 13(21), p. 3362. Available at: <https://doi.org/10.3390/diagnostics13213362>.
- CDC (2023a) *Basics About COPD*. Available at: <https://www.cdc.gov/copd/basics-about.html> (Accessed: 7 May 2024).
- CDC (2023b) *COPD: Symptoms, Diagnosis, and Treatment*. Available at: <https://www.cdc.gov/copd/features/copd-symptoms-diagnosis-treatment.html> (Accessed: 7 May 2024).
- CDC (2023c) *Smoking and COPD | Overviews of Diseases/Conditions | Tips From Former Smokers*. Available at: <https://www.cdc.gov/tobacco/campaign/tips/diseases/copd.html> (Accessed: 12 May 2024).
- CDC (2023d) *Socioeconomic Factors*. Available at: [https://www.cdc.gov/dhdsp/health\\_equity/socioeconomic.htm](https://www.cdc.gov/dhdsp/health_equity/socioeconomic.htm) (Accessed: 14 May 2024).

- Celli, B. *et al.* (2022) ‘Definition and Nomenclature of Chronic Obstructive Pulmonary Disease: Time for Its Revision.’, *American journal of respiratory and critical care medicine*, 206(11), pp. 1317–1325. Available at: <https://doi.org/10.1164/rccm.202204-0671PP>.
- Celli, B.R. *et al.* (2005) ‘Airway obstruction in never smokers: Results from the Third National Health and Nutrition Examination Survey’, *The American Journal of Medicine*, 118(12), pp. 1364–1372. Available at: <https://doi.org/10.1016/j.amjmed.2005.06.041>.
- Celli, B.R. dan Agustí, A. (2018) ‘COPD: time to improve its taxonomy?’, *ERJ open research*, 4(1). Available at: <https://doi.org/10.1183/23120541.00132-2017>.
- Celli, B.R. dan Wedzicha, J.A. (2019) ‘Update on Clinical Aspects of Chronic Obstructive Pulmonary Disease’, *New England Journal of Medicine*, 381(13), pp. 1257–1266. Available at: <https://doi.org/10.1056/NEJMra1900500>.
- Chakrabarti, B. *et al.* (2009) ‘Hyperglycaemia as a predictor of outcome during non-invasive ventilation in decompensated COPD’, *Thorax*, 64(10), pp. 857–862. Available at: <https://doi.org/10.1136/thx.2008.106989>.
- Chandra, D. *et al.* (2012) ‘The Relationship Between Pulmonary Emphysema and Kidney Function in Smokers’, *Chest*, 142(3), pp. 655–662. Available at: <https://doi.org/10.1378/chest.11-1456>.
- Charususin, N. *et al.* (2018) ‘Respiratory muscle function and exercise limitation in patients with chronic obstructive pulmonary disease: a review’, *Expert Review of Respiratory Medicine*, 12(1), pp. 67–79. Available at: <https://doi.org/10.1080/17476348.2018.1398084>.
- Chen, K. *et al.* (2023) ‘Physical Activity, Air Pollution Exposure, and Lung Function Interactions Among Adults with COPD’, *Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation*, 10(2), pp. 170–177. Available at: <https://doi.org/10.15326/jcopdf.2022.0385>.
- Chen, S. *et al.* (2023) ‘The global economic burden of chronic obstructive pulmonary disease for 204 countries and territories in 2020-50: a health-augmented macroeconomic modelling study.’, *The Lancet. Global health*, 11(8), pp. e1183–e1193. Available at: [https://doi.org/10.1016/S2214-109X\(23\)00217-6](https://doi.org/10.1016/S2214-109X(23)00217-6).
- Chen, X. *et al.* (2023) ‘Global, regional, and national burden of chronic respiratory diseases and associated risk factors, 1990–2019: Results from the Global Burden of Disease Study 2019’, *Frontiers in Medicine*, 10. Available at: <https://doi.org/10.3389/fmed.2023.1066804>.

- Cho, M.H., Hobbs, B.D. dan Silverman, E.K. (2022) ‘Genetics of chronic obstructive pulmonary disease: understanding the pathobiology and heterogeneity of a complex disorder’, *The Lancet Respiratory Medicine*, 10(5), pp. 485–496. Available at: [https://doi.org/10.1016/S2213-2600\(21\)00510-5](https://doi.org/10.1016/S2213-2600(21)00510-5).
- Chung, C. et al. (2023) ‘Effect of smoking on the development of chronic obstructive pulmonary disease in young individuals: a nationwide cohort study’, *Frontiers in Medicine*, 10. Available at: <https://doi.org/10.3389/fmed.2023.1190885>.
- Cohen, A.J. et al. (2017) ‘Estimates and 25-year trends of the global burden of disease attributable to ambient air pollution: an analysis of data from the Global Burden of Diseases Study 2015’, *The Lancet*, 389(10082), pp. 1907–1918. Available at: [https://doi.org/10.1016/S0140-6736\(17\)30505-6](https://doi.org/10.1016/S0140-6736(17)30505-6).
- Çolak, Y. et al. (2020) ‘Prevalence, Characteristics, and Prognosis of Early Chronic Obstructive Pulmonary Disease. The Copenhagen General Population Study’, *American Journal of Respiratory and Critical Care Medicine*, 201(6), pp. 671–680. Available at: <https://doi.org/10.1164/rccm.201908-1644OC>.
- Conger, R.D. dan Donnellan, M.B. (2007) ‘An Interactionist Perspective on the Socioeconomic Context of Human Development’, *Annual Review of Psychology*, 58(1), pp. 175–199. Available at: <https://doi.org/10.1146/annurev.psych.58.110405.085551>.
- Cosío, B.G. et al. (2020) ‘Phenotypic characterisation of early COPD: a prospective case-control study’, *ERJ Open Research*, 6(4), pp. 00047–02020. Available at: <https://doi.org/10.1183/23120541.00047-2020>.
- Cosío, B.G. et al. (2023) ‘Unravelling young COPD and pre-COPD in the general population’, *ERJ Open Research*, 9(1), pp. 00334–02022. Available at: <https://doi.org/10.1183/23120541.00334-2022>.
- Cox, N.S. et al. (2021) ‘Telerehabilitation for chronic respiratory disease’, *Cochrane Database of Systematic Reviews*, 2021(1). Available at: <https://doi.org/10.1002/14651858.CD013040.pub2>.
- Coxson, H.O. et al. (2013) ‘The presence and progression of emphysema in COPD as determined by CT scanning and biomarker expression: a prospective analysis from the ECLIPSE study’, *The Lancet Respiratory Medicine*, 1(2), pp. 129–136. Available at: [https://doi.org/10.1016/S2213-2600\(13\)70006-7](https://doi.org/10.1016/S2213-2600(13)70006-7).
- Darawshy, F. et al. (2021) ‘Waterpipe smoking: a review of pulmonary and health effects’, *European Respiratory Review*, 30(160), p. 200374. Available at: <https://doi.org/10.1183/16000617.0374-2020>.

- Davis, W.A. *et al.* (2004) ‘Glycemic Exposure Is Associated With Reduced Pulmonary Function in Type 2 Diabetes’, *Diabetes Care*, 27(3), pp. 752–757. Available at: <https://doi.org/10.2337/diacare.27.3.752>.
- den Dekker, H.T. *et al.* (2016) ‘Early growth characteristics and the risk of reduced lung function and asthma: A meta-analysis of 25,000 children’, *Journal of Allergy and Clinical Immunology*, 137(4), pp. 1026–1035. Available at: <https://doi.org/10.1016/j.jaci.2015.08.050>.
- Denes, P. (1978) ‘A Characteristic Precordial Repolarization Abnormality with Intermittent Left Bundle-Branch Block’, *Annals of Internal Medicine*, 89(1), p. 55. Available at: <https://doi.org/10.7326/0003-4819-89-1-55>.
- Denguezli, M. *et al.* (2020) ‘Prevalence and Characteristics of Undiagnosed COPD in Adults 40 Years and Older – Reports from the Tunisian Population-Based Burden of Obstructive Lung Disease Study’, *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 17(5), pp. 515–522. Available at: <https://doi.org/10.1080/15412555.2020.1804848>.
- Diabetes UK (2019) *Prediabetes*. Available at: <https://www.diabetes.org.uk/about-diabetes/type-2-diabetes/prediabetes> (Accessed: 24 December 2024).
- Diaz-Guzman, E., Aryal, S. dan Mannino, D.M. (2012) ‘Occupational Chronic Obstructive Pulmonary Disease’, *Clinics in Chest Medicine*, 33(4), pp. 625–636. Available at: <https://doi.org/10.1016/j.ccm.2012.07.004>.
- Díez-Manglano, J. dan Asín Samper, U. (2021) ‘Pulmonary function tests in type 2 diabetes: a meta-analysis’, *ERJ Open Research*, 7(1), pp. 00371–02020. Available at: <https://doi.org/10.1183/23120541.00371-2020>.
- Ding, B. *et al.* (2023) ‘History of Respiratory Events Prior to a First COPD Diagnosis and Future Exacerbations: A Longitudinal Observational Cohort Database Study in Japan’, *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 18, pp. 247–258. Available at: <https://doi.org/10.2147/COPD.S389297>.
- Divo, M. *et al.* (2014) ‘Comorbidity Distribution, Clinical Expression and Survival in COPD Patients with Different Body Mass Index’, *Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation*, 1(2), pp. 229–238. Available at: <https://doi.org/10.15326/jcopdf.1.2.2014.0117>.
- Divo, M.J. *et al.* (2018) ‘Chronic Obstructive Pulmonary Disease (COPD) as a disease of early aging: Evidence from the EpiChron Cohort’, *PLOS ONE*, 13(2), p. e0193143. Available at: <https://doi.org/10.1371/journal.pone.0193143>.
- Divo, M.J. *et al.* (2022) ‘Comorbidities and mortality risk in adults younger than 50 years of age with chronic obstructive pulmonary disease.’, *Respiratory*

- research*, 23(1), p. 267. Available at: <https://doi.org/10.1186/s12931-022-02191-7>.
- Divo, M.J. et al. (2023) ‘From pre-COPD to COPD: a Simple, Low cost and easy to IMplement (SLIM) risk calculator’, *European Respiratory Journal*, 62(3), p. 2300806. Available at: <https://doi.org/10.1183/13993003.00806-2023>.
- DJPHU (2024) *Data Kematian Jemaah Haji Indonesia*. Available at: <https://haji.kemenag.go.id/sidb/admin/index.php?page=wafat2024&nav=4> (Accessed: 16 May 2024).
- Domej, W., Oetll, K. and Renner, W. (2014) ‘Oxidative stress and free radicals in COPD &ndash; implications and relevance for treatment’, *International Journal of Chronic Obstructive Pulmonary Disease*, p. 1207. Available at: <https://doi.org/10.2147/COPD.S51226>.
- Doney, B. et al. (2019) ‘Occupational exposure and airflow obstruction and self-reported COPD among ever-employed US adults using a COPD-job exposure matrix.’, *American journal of industrial medicine*, 62(5), pp. 393–403. Available at: <https://doi.org/10.1002/ajim.22958>.
- Dorner, T.E., Brath, H. dan Kautzky-Willer, A. (2020) ‘Sex-specific trends in smoking prevalence over seven years in different Austrian populations: results of a time-series cross-sectional analysis’, *BMJ Open*, 10(9), p. e035235. Available at: <https://doi.org/10.1136/bmjopen-2019-035235>.
- Dotan, Y., So, J.Y. dan Kim, V. (2019) ‘Chronic Bronchitis: Where Are We Now?’, *Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation*, 6(2), pp. 178–192. Available at: <https://doi.org/10.15326/jcopdf.6.2.2018.0151>.
- Duan, P. et al. (2021) ‘Impact of early life exposures on <scp>COPD</scp> in adulthood: A systematic review and meta-analysis’, *Respirology*, 26(12), pp. 1131–1151. Available at: <https://doi.org/10.1111/resp.14144>.
- Duan, R., Hao, K. dan Yang, T. (2020) ‘Air pollution and chronic obstructive pulmonary disease’, *Chronic Diseases and Translational Medicine*, 6(4), pp. 260–269. Available at: <https://doi.org/10.1016/j.cdtm.2020.05.004>.
- Duke, J. (2011) *Anesthesia Secrets*. Elsevier. Available at: <https://doi.org/10.1016/C2009-0-54968-9>.
- Eagan, T.M.L. et al. (2004) ‘The effect of educational level on the incidence of asthma and respiratory symptoms’, *Respiratory Medicine*, 98(8), pp. 730–736. Available at: <https://doi.org/10.1016/j.rmed.2004.02.008>.

- Eschenbacher, W.L. (2016) ‘Defining Airflow Obstruction’, *Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation*, 3(2), pp. 515–518. Available at: <https://doi.org/10.15326/jcopdf.3.2.2015.0166>.
- Fan, J. et al. (2024) ‘Potential pre-COPD indicators in association with COPD development and COPD prediction models in Chinese: a prospective cohort study’, *The Lancet Regional Health - Western Pacific*, 44, p. 100984. Available at: <https://doi.org/10.1016/j.lanwpc.2023.100984>.
- Filley, G.F. et al. (1968) ‘Chronic obstructive bronchopulmonary disease’, *The American Journal of Medicine*, 44(1), pp. 26–38. Available at: [https://doi.org/10.1016/0002-9343\(68\)90234-9](https://doi.org/10.1016/0002-9343(68)90234-9).
- Firdausi, N.L. dan Li, C.-Y. (2021) ‘Analysis of Risk Factors Affecting the Occurrence of Chronic Obstructive Pulmonary Disease in Indonesia’, *Jurnal Berkala Epidemiologi*, 9(1), pp. 18–25. Available at: <https://doi.org/10.20473/jbe.v9i12021.18–25>.
- Fletcher, C. dan Peto, R. (1977) ‘The natural history of chronic airflow obstruction.’, *British medical journal*, 1(6077), pp. 1645–8. Available at: <https://doi.org/10.1136/bmj.1.6077.1645>.
- Florkowski, C. (2013) ‘HbA1c as a Diagnostic Test for Diabetes Mellitus - Reviewing the Evidence.’, *The Clinical biochemist. Reviews*, 34(2), pp. 75–83.
- Foumani, A.A. et al. (2019) ‘Waist Circumference and Spirometric Measurements in Chronic Obstructive Pulmonary Disease.’, *Osong public health and research perspectives*, 10(4), pp. 240–245. Available at: <https://doi.org/10.24171/j.phrp.2019.10.4.07>.
- Franssen, F.M.E. et al. (2018) ‘The physical, mental, and social impact of COPD in a population-based sample: results from the Longitudinal Aging Study Amsterdam’, *npj Primary Care Respiratory Medicine*, 28(1), p. 30. Available at: <https://doi.org/10.1038/s41533-018-0097-3>.
- Gaffney, A.W. et al. (2022) ‘Health Care Disparities Across the Urban-Rural Divide: A National Study of Individuals with COPD’, *The Journal of Rural Health*, 38(1), pp. 207–216. Available at: <https://doi.org/10.1111/jrh.12525>.
- Gan, W.Q. et al. (2006) ‘Female smokers beyond the perimenopausal period are at increased risk of chronic obstructive pulmonary disease: a systematic review and meta-analysis’, *Respiratory Research*, 7(1), p. 52. Available at: <https://doi.org/10.1186/1465-9921-7-52>.
- García-Sanz, M.-T. dan González-Barcala, F.-J. (2021) ‘COPD is more than just lung function: Let’s not forget depression.’, *Archivos de bronconeumología*, 57(8), pp. 519–520. Available at: <https://doi.org/10.1016/j.arbr.2021.05.023>.

- General Authority for Statistics (2024) *GASTAT: Total number of pilgrims in 1445 H Hajj season is 1,833,164.* Available at: <https://www.stats.gov.sa/en/news/532> (Accessed: 20 August 2024).
- Gerhardt, T. et al. (1987) ‘Serial determination of pulmonary function in infants with chronic lung disease’, *The Journal of Pediatrics*, 110(3), pp. 448–456. Available at: [https://doi.org/10.1016/S0022-3476\(87\)80516-4](https://doi.org/10.1016/S0022-3476(87)80516-4).
- Gershon, A.S. et al. (2011) ‘Lifetime risk of developing chronic obstructive pulmonary disease: a longitudinal population study’, *The Lancet*, 378(9795), pp. 991–996. Available at: [https://doi.org/10.1016/S0140-6736\(11\)60990-2](https://doi.org/10.1016/S0140-6736(11)60990-2).
- Gershon, A.S. et al. (2012) ‘Chronic Obstructive Pulmonary Disease and SocioEconomic Status: a Systematic Review’, *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 9(3), pp. 216–226. Available at: <https://doi.org/10.3109/15412555.2011.648030>.
- Gil, H.-I. et al. (2021) ‘Clinical Characteristics of COPD Patients According to COPD Assessment Test (CAT) Score Level: Cross-Sectional Study.’, *International journal of chronic obstructive pulmonary disease*, 16, pp. 1509–1517. Available at: <https://doi.org/10.2147/COPD.S297089>.
- Gilkes, A. et al. (2017) ‘Ethnic differences in smoking intensity and COPD risk: an observational study in primary care’, *npj Primary Care Respiratory Medicine*, 27(1), p. 50. Available at: <https://doi.org/10.1038/s41533-017-0052-8>.
- Gjerdevik, M. et al. (2015) ‘The Relationship of Educational Attainment with Pulmonary Emphysema and Airway Wall Thickness.’, *Annals of the American Thoracic Society*, 12(6), pp. 813–20. Available at: <https://doi.org/10.1513/AnnalsATS.201410-485OC>.
- Gläser, S. et al. (2015) ‘Chronic Obstructive Pulmonary Disease and Diabetes Mellitus: A Systematic Review of the Literature’, *Respiration*, 89(3), pp. 253–264. Available at: <https://doi.org/10.1159/000369863>.
- Global Initiative for Chronic Obstructive Lung Disease (2016) *Gold Spirometry Guide*.
- Global Initiative for Chronic Obstructive Lung Disease (2024) *Global Initiative for Chronic Obstructive Lung Disease*.
- Grigsby, M.R. et al. (2019) ‘Low Body Mass Index Is Associated with Higher Odds of COPD and Lower Lung Function in Low- and Middle-Income Countries’, *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 16(1), pp. 58–65. Available at: <https://doi.org/10.1080/15412555.2019.1589443>.

- Grønseth, R. *et al.* (2015) ‘Unemployment in COPD: Results from the BOLD study’, in *6.1 Epidemiology*. European Respiratory Society, p. PA626. Available at: <https://doi.org/10.1183/13993003.congress-2015.PA626>.
- Grossmann, V. *et al.* (2015) ‘Profile of the Immune and Inflammatory Response in Individuals With Prediabetes and Type 2 Diabetes’, *Diabetes Care*, 38(7), pp. 1356–1364. Available at: <https://doi.org/10.2337/dc14-3008>.
- Güder, G. *et al.* (2012) ‘The Impact of Heart Failure on the Classification of COPD Severity’, *Journal of Cardiac Failure*, 18(8), pp. 637–644. Available at: <https://doi.org/10.1016/j.cardfail.2012.05.008>.
- Guerra, S. *et al.* (2009) ‘Chronic bronchitis before age 50 years predicts incident airflow limitation and mortality risk’, *Thorax*, 64(10), pp. 894–900. Available at: <https://doi.org/10.1136/thx.2008.110619>.
- Gunasekaran, K. *et al.* (2021) ‘The Impact of Diabetes Mellitus in Patients with Chronic Obstructive Pulmonary Disease (COPD) Hospitalization.’, *Journal of clinical medicine*, 10(2). Available at: <https://doi.org/10.3390/jcm10020235>.
- Guo, Y. *et al.* (2016) ‘Body mass index and mortality in chronic obstructive pulmonary disease: A dose-response meta-analysis.’, *Medicine*, 95(28), p. e4225. Available at: <https://doi.org/10.1097/MD.0000000000004225>.
- Gut-Gobert, C. *et al.* (2019) ‘Women and COPD: do we need more evidence?’, *European Respiratory Review*, 28(151), p. 180055. Available at: <https://doi.org/10.1183/16000617.0055-2018>.
- Gutiérrez Villegas, C. *et al.* (2021) ‘Cost analysis of chronic obstructive pulmonary disease (COPD): a systematic review’, *Health Economics Review*, 11(1), p. 31. Available at: <https://doi.org/10.1186/s13561-021-00329-9>.
- Hall, R., Hall, I.P. dan Sayers, I. (2019) ‘Genetic risk factors for the development of pulmonary disease identified by genome-wide association’, *Respirology*, 24(3), pp. 204–214. Available at: <https://doi.org/10.1111/resp.13436>.
- Han, M.K. *et al.* (2007) ‘Gender and Chronic Obstructive Pulmonary Disease’, *American Journal of Respiratory and Critical Care Medicine*, 176(12), pp. 1179–1184. Available at: <https://doi.org/10.1164/rccm.200704-553CC>.
- Han, M.K. *et al.* (2021) ‘From GOLD 0 to Pre-COPD’, *American Journal of Respiratory and Critical Care Medicine*, 203(4), pp. 414–423. Available at: <https://doi.org/10.1164/rccm.202008-3328PP>.
- Hancu, A. (2019) ‘Nutritional Status as a Risk Factor in COPD.’, *Maedica*, 14(2), pp. 140–143. Available at: <https://doi.org/10.26574/maedica.2019.14.2.140>.

- Harik-Khan, R.I., Fleg, J.L. dan Wise, R.A. (2002) ‘Body Mass Index and the Risk of COPD’, *Chest*, 121(2), pp. 370–376. Available at: <https://doi.org/10.1378/chest.121.2.370>.
- Hartina, S., Wahiduddin, W. dan Rismayanti, R. (2021) ‘FAKTOR RISIKO KEJADIAN PENYAKIT PARU OBSTRUKTIF KRONIK PADA PASIEN RSUD KOTA MAKASSAR’, *Hasanuddin Journal of Public Health*, 2(2), pp. 159–171. Available at: <https://doi.org/10.30597/hjph.v2i2.13139>.
- Hegewald, M.J. dan Crapo, R.O. (2007) ‘Socioeconomic Status and Lung Function’, *Chest*, 132(5), pp. 1608–1614. Available at: <https://doi.org/10.1378/chest.07-1405>.
- Hendryx, M. et al. (2019) ‘Air Pollution Exposures from Multiple Point Sources and Risk of Incident Chronic Obstructive Pulmonary Disease (COPD) and Asthma’, *Environmental Research*, 179, p. 108783. Available at: <https://doi.org/10.1016/j.envres.2019.108783>.
- Hennerberger, P.K. (2022) *The Risk of COPD is Increased for Workers in Certain Industries and Occupations and with Certain Occupational Exposures*. Available at: <https://blogs.cdc.gov/niosh-science-blog/2022/11/16/copd-month/> (Accessed: 9 May 2024).
- Hnizdo, E. (2002) ‘Association between Chronic Obstructive Pulmonary Disease and Employment by Industry and Occupation in the US Population: A Study of Data from the Third National Health and Nutrition Examination Survey’, *American Journal of Epidemiology*, 156(8), pp. 738–746. Available at: <https://doi.org/10.1093/aje/kwf105>.
- Hnizdo, E. (2010) ‘Lung Function Loss Associated with Occupational Dust Exposure in Metal Smelting’, *American Journal of Respiratory and Critical Care Medicine*, 181(11), pp. 1162–1163. Available at: <https://doi.org/10.1164/rccm.201002-0306ED>.
- Hogea, S. et al. (2020) ‘Risk factors of chronic obstructive pulmonary disease exacerbations’, *The Clinical Respiratory Journal*, 14(3), pp. 183–197. Available at: <https://doi.org/10.1111/crj.13129>.
- Hou, W. et al. (2019) ‘Cigarette Smoke Induced Lung Barrier Dysfunction, EMT, and Tissue Remodeling: A Possible Link between COPD and Lung Cancer’, *BioMed Research International*, 2019, pp. 1–10. Available at: <https://doi.org/10.1155/2019/2025636>.
- Hsu, H.-T. et al. (2021) ‘The effects of traffic-related air pollutants on chronic obstructive pulmonary disease in the community-based general population.’, *Respiratory research*, 22(1), p. 217. Available at: <https://doi.org/10.1186/s12931-021-01812-x>.

- Hsu, I.-L. *et al.* (2018) ‘Population-based cohort study suggesting a significantly increased risk of developing chronic obstructive pulmonary disease in people with type 2 diabetes mellitus’, *Diabetes Research and Clinical Practice*, 138, pp. 66–74. Available at: <https://doi.org/10.1016/j.diabres.2018.01.037>.
- Hua, Y. *et al.* (2024) ‘Association between socioeconomic status and risk of chronic obstructive pulmonary disease in China: a prospective cohort study’, *BMC Public Health*, 24(1), p. 2077. Available at: <https://doi.org/10.1186/s12889-024-19490-x>.
- Hurst, J.R. *et al.* (2020) ‘Understanding the impact of chronic obstructive pulmonary disease exacerbations on patient health and quality of life’, *European Journal of Internal Medicine*, 73, pp. 1–6. Available at: <https://doi.org/10.1016/j.ejim.2019.12.014>.
- Hwang, Y. Il *et al.* (2015) ‘History of pneumonia is a strong risk factor for chronic obstructive pulmonary disease (COPD) exacerbation in South Korea: the Epidemiologic review and Prospective Observation of COPD and Health in Korea (EPOCH) study.’, *Journal of thoracic disease*, 7(12), pp. 2203–13. Available at: <https://doi.org/10.3978/j.issn.2072-1439.2015.12.17>.
- Incalzi, R.A. *et al.* (2014) ‘Chronic Obstructive Pulmonary Disease in the elderly’, *European Journal of Internal Medicine*, 25(4), pp. 320–328. Available at: <https://doi.org/10.1016/j.ejim.2013.10.001>.
- Ivey, M. *et al.* (2024) ‘COPD in Never-Smokers: BOLD Australia Study’, *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 19, pp. 161–174. Available at: <https://doi.org/10.2147/COPD.S439307>.
- Jacobsen, P.A. *et al.* (2021) ‘Employment Status, Readmission and Mortality After Acute Exacerbation of COPD’, *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 16, pp. 2257–2265. Available at: <https://doi.org/10.2147/COPD.S319840>.
- Jansen, S.N.G. *et al.* (2024) ‘Ethics of early detection of disease risk factors: A scoping review’, *BMC Medical Ethics*, 25(1), p. 25. Available at: <https://doi.org/10.1186/s12910-024-01012-4>.
- Janssens, J.-P. (2005) ‘Aging of the Respiratory System: Impact on Pulmonary Function Tests and Adaptation to Exertion’, *Clinics in Chest Medicine*, 26(3), pp. 469–484. Available at: <https://doi.org/10.1016/j.ccm.2005.05.004>.
- Janssens, J.P., Pache, J.C. dan Nicod, L.P. (1999) ‘Physiological changes in respiratory function associated with ageing.’, *The European respiratory journal*, 13(1), pp. 197–205. Available at: <https://doi.org/10.1034/j.1399-3003.1999.13a36.x>.

- Jasmine, M.S. *et al.* (2024) ‘Ammonia Exposure Based on the Length of Work to Lung Function Abnormalities Among Traditional Scavengers’, *Kesmas: Jurnal Kesehatan Masyarakat Nasional*, 19(5). Available at: <https://doi.org/https://doi.org/10.21109/kesmas.v19isp1.1092>.
- Jiang, Z. *et al.* (2016) ‘A Chronic Obstructive Pulmonary Disease Susceptibility Gene, FAM13A, Regulates Protein Stability of β-Catenin’, *American Journal of Respiratory and Critical Care Medicine*, 194(2), pp. 185–197. Available at: <https://doi.org/10.1164/rccm.201505-0999OC>.
- Jones, P. *et al.* (2009) ‘Improving the process and outcome of care in COPD: development of a standardised assessment tool’, *Primary Care Respiratory Journal*, 18(3), pp. 208–215. Available at: <https://doi.org/10.4104/pcrj.2009.00053>.
- Jones, P.W. (2001) ‘Health status measurement in chronic obstructive pulmonary disease’, *Thorax*, 56(11), pp. 880–887. Available at: <https://doi.org/10.1136/thorax.56.11.880>.
- Jones, P.W. *et al.* (2009) ‘Development and first validation of the COPD Assessment Test’, *European Respiratory Journal*, 34(3), pp. 648–654. Available at: <https://doi.org/10.1183/09031936.00102509>.
- Kahnert, K. *et al.* (2017) ‘Relationship of hyperlipidemia to comorbidities and lung function in COPD: Results of the COSYCONET cohort’, *PLOS ONE*, 12(5), p. e0177501. Available at: <https://doi.org/10.1371/journal.pone.0177501>.
- Kaise, T. *et al.* (2021) ‘Prevalence and Characteristics of Individuals with Preserved Ratio Impaired Spirometry (PRISm) and/or Impaired Lung Function in Japan: The OCEAN Study’, *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 16, pp. 2665–2675. Available at: <https://doi.org/10.2147/COPD.S322041>.
- Kalbfleisch, S.J. *et al.* (1991) ‘Repolarization abnormalities after catheter ablation of accessory atrioventricular connections with radiofrequency current’, *Journal of the American College of Cardiology*, 18(7), pp. 1761–1766. Available at: [https://doi.org/10.1016/0735-1097\(91\)90518-E](https://doi.org/10.1016/0735-1097(91)90518-E).
- Kamil, F., Pinzon, I. dan Foreman, M.G. (2013) ‘Sex and race factors in early-onset COPD’, *Current Opinion in Pulmonary Medicine*, 19(2), pp. 140–144. Available at: <https://doi.org/10.1097/MCP.0b013e32835d903b>.
- Karki, K.B. *et al.* (2021) ‘Factors Associated with Chronic Obstructive Pulmonary Diseases in Nepal: Evidence from a Nationally Representative Population-Based Study’, *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 16, pp. 1109–1118. Available at: <https://doi.org/10.2147/COPD.S295321>.

- Karloh, M. *et al.* (2016) ‘The COPD Assessment Test: What Do We Know So Far?: A Systematic Review and Meta-Analysis About Clinical Outcomes Prediction and Classification of Patients Into GOLD Stages.’, *Chest*, 149(2), pp. 413–425. Available at: <https://doi.org/10.1378/chest.15-1752>.
- Kemenkes (2021) *Merokok, Penyebab Utama Penyakit Paru Obstruktif Kronis – Sehat Negeriku*. Available at: <https://sehatnegeriku.kemkes.go.id/baca/rilis-media/20211123/4538882/merokok-penyebab-utama-penyakit-paru-obstruktif-kronis/> (Accessed: 29 March 2024).
- Kemenkes (2024a) *Evaluasi Kesehatan Haji 2024 Dari kecukupan Obat Hingga SDM Kesehatan*. Available at: <https://kemkes.go.id/eng/evaluasi-kesehatan-haji-2024-dari-kecukupan-obat-hingga-sdm-kesehatan> (Accessed: 6 October 2024).
- Kemenkes (2024b) *Faktor Risiko Penyakit Paru Obstruktif Kronik (PPOK)* . Available at: <https://p2ptm.kemkes.go.id/infographic-p2ptm/penyakit-paru-kronik/faktor-risiko-penyakit-paru-obstruktif-kronik-ppok> (Accessed: 29 March 2024).
- Kemenkes (2024c) *ICD-10*. Available at: <https://satusehat.kemkes.go.id/platform/docs/id/terminology/icd/icd-10/> (Accessed: 7 October 2024).
- Kemenkes (2024d) *Pedoman Pemeriksaan Kesehatan Jemaah Haji untuk Tim Penyelenggara Kesehatan Haji Provinsi dan Kabupaten/Kota*.
- Kementerian Agama (2024a) *Haji Cukup Sekali, Menuju Kebijakan Haji yang Adil dan Merata*. Available at: <https://kemenag.go.id/kolom/haji-cukup-sekali-menuju-kebijakan-haji-yang-adil-dan-merata-ZRYkS> (Accessed: 18 December 2024).
- Kementerian Agama (2024b) *Kuota 2024 Terbesar Sepanjang Sejarah Penyelenggaraan Ibadah Haji*. Available at: <https://haji.kemenag.go.id/v5/detail/kuota-2024-terbesar-sepanjang-sejarah-penyelenggaraan-ibadah-haji> (Accessed: 18 December 2024).
- Kementerian Agama (2024c) *Tandatangani MoU, Indonesia akan Berangkatkan 241 Ribu Jemaah Haji*.
- Kementerian Kesehatan (2013) *Riset Kesehatan Dasar 2013*.
- Kementerian Kesehatan (2017) *Ibadah Haji Itu Syaratnya Istitho’ah* . Available at: <https://sehatnegeriku.kemkes.go.id/baca/rilis-media/20171101/1623612/ibadah-haji-syaratnya-istithoah/> (Accessed: 16 May 2024).
- Kementerian Kesehatan (2024a) *Profil Kesehatan Indonesia 2023*.

Kementerian Kesehatan (2024b) *Survei Kesehatan Indonesia 2023*.

- Kida, K. *et al.* (2011) ‘Excessive visceral fat accumulation in advanced chronic obstructive pulmonary disease’, *International Journal of Chronic Obstructive Pulmonary Disease*, p. 423. Available at: <https://doi.org/10.2147/COPD.S22885>.
- Kim, J.M. *et al.* (2019) ‘Association between glycemic state and pulmonary function and effect of walking as a protective factor in subjects with diabetes mellitus’, *Annals of Translational Medicine*, 7(20), pp. 530–530. Available at: <https://doi.org/10.21037/atm.2019.09.139>.
- Kim, S. *et al.* (2013) ‘Differences in classification of COPD group using COPD assessment test (CAT) or modified Medical Research Council (mMRC) dyspnea scores: a cross-sectional analyses’, *BMC Pulmonary Medicine*, 13(1), p. 35. Available at: <https://doi.org/10.1186/1471-2466-13-35>.
- Kim, V. *et al.* (2013) ‘Severe Chronic Bronchitis in Advanced Emphysema Increases Mortality and Hospitalizations’, *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 10(6), pp. 667–678. Available at: <https://doi.org/10.3109/15412555.2013.827166>.
- Kim, V. dan Criner, G.J. (2013) ‘Chronic Bronchitis and Chronic Obstructive Pulmonary Disease’, *American Journal of Respiratory and Critical Care Medicine*, 187(3), pp. 228–237. Available at: <https://doi.org/10.1164/rccm.201210-1843CI>.
- Kim-Dorner, S.-J. *et al.* (2022) ‘Age- and gender-based comorbidity categories in general practitioner and pulmonology patients with COPD’, *npj Primary Care Respiratory Medicine*, 32(1), p. 17. Available at: <https://doi.org/10.1038/s41533-022-00278-8>.
- Kinney, G.L. *et al.* (2014a) ‘Pulmonary Function Reduction in Diabetes With and Without Chronic Obstructive Pulmonary Disease’, *Diabetes Care*, 37(2), pp. 389–395. Available at: <https://doi.org/10.2337/dc13-1435>.
- Kinney, G.L. *et al.* (2014b) ‘Pulmonary Function Reduction in Diabetes With and Without Chronic Obstructive Pulmonary Disease’, *Diabetes Care*, 37(2), pp. 389–395. Available at: <https://doi.org/10.2337/dc13-1435>.
- Kohansal, R. *et al.* (2009) ‘The natural history of chronic airflow obstruction revisited: an analysis of the Framingham offspring cohort.’, *American journal of respiratory and critical care medicine*, 180(1), pp. 3–10. Available at: <https://doi.org/10.1164/rccm.200901-0047OC>.
- Kopf, S. *et al.* (2018) ‘Breathlessness and Restrictive Lung Disease: An Important Diabetes-Related Feature in Patients with Type 2 Diabetes’, *Respiration*, 96(1), pp. 29–40. Available at: <https://doi.org/10.1159/000488909>.

- Krieger, N. (2001) 'A glossary for social epidemiology', *Journal of Epidemiology & Community Health*, 55(10), pp. 693–700. Available at: <https://doi.org/10.1136/jech.55.10.693>.
- Kuziemski, K., Słomiński, W. dan Jassem, E. (2019) 'Impact of diabetes mellitus on functional exercise capacity and pulmonary functions in patients with diabetes and healthy persons', *BMC Endocrine Disorders*, 19(1), p. 2. Available at: <https://doi.org/10.1186/s12902-018-0328-1>.
- Kwon, H. dan Kim, E. (2016) 'Factors contributing to quality of life in COPD patients in South Korea', *International Journal of Chronic Obstructive Pulmonary Disease*, p. 103. Available at: <https://doi.org/10.2147/COPD.S90566>.
- Labonte, R., Laverack, G. dan Baum, F. (2009) 'Health Promotion in Action – From Local to Global Empowerment', *International Journal of Health Care Quality Assurance*, 22(1). Available at: <https://doi.org/10.1108/ijhcqa.2009.06222aae.003>.
- Lai, S.Y. (2024) *Indonesia to send largest-ever number of Hajj pilgrims this year*. Available at: <https://www.arabnews.com/node/2438611/world> (Accessed: 20 August 2024).
- Lange, P. et al. (2015a) 'Lung-Function Trajectories Leading to Chronic Obstructive Pulmonary Disease', *New England Journal of Medicine*, 373(2), pp. 111–122. Available at: <https://doi.org/10.1056/NEJMoa1411532>.
- Lange, P. et al. (2015b) 'Lung-Function Trajectories Leading to Chronic Obstructive Pulmonary Disease', *New England Journal of Medicine*, 373(2), pp. 111–122. Available at: <https://doi.org/10.1056/NEJMoa1411532>.
- Leb, J.S., D'Souza, B. dan Steiner, R.M. (2018) 'Marijuana Lung', *Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation*, 5(1), pp. 81–83. Available at: <https://doi.org/10.15326/jcopdf.5.1.2017.0180>.
- Lee, J.H. et al. (2023) 'COPD Risk Factor Profiles in General Population and Referred Patients: Potential Etiotypes', *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 18, pp. 2509–2520. Available at: <https://doi.org/10.2147/COPD.S427774>.
- Lee, S.J. et al. (2015) 'Risk factors for chronic obstructive pulmonary disease among never-smokers in Korea', *International Journal of Chronic Obstructive Pulmonary Disease*, p. 497. Available at: <https://doi.org/10.2147/COPD.S77662>.
- Lee, Y.S. et al. (2019) 'The association between living below the relative poverty line and the prevalence of chronic obstructive pulmonary disease', *Journal of*

- Thoracic Disease*, 11(2), pp. 427–437. Available at: <https://doi.org/10.21037/jtd.2019.01.40>.
- Leopold, P.L. et al. (2009) ‘Smoking Is Associated with Shortened Airway Cilia’, *PLoS ONE*, 4(12), p. e8157. Available at: <https://doi.org/10.1371/journal.pone.0008157>.
- Li, C. et al. (2015) ‘Extreme Values of Hemoglobin A1c Are Associated With Increased Risks of Chronic Obstructive Pulmonary Disease in Patients With Type 2 Diabetes’, *Medicine*, 94(1), p. e367. Available at: <https://doi.org/10.1097/MD.0000000000000367>.
- Li, J. et al. (2020) ‘Association between adiposity measures and COPD risk in Chinese adults’, *European Respiratory Journal*, 55(4), p. 1901899. Available at: <https://doi.org/10.1183/13993003.01899-2019>.
- Li, R. et al. (2015) ‘Effects of ambient PM2.5 on pathological injury, inflammation, oxidative stress, metabolic enzyme activity, and expression of c-fos and c-jun in lungs of rats’, *Environmental Science and Pollution Research*, 22(24), pp. 20167–20176. Available at: <https://doi.org/10.1007/s11356-015-5222-z>.
- Li, W. et al. (2022) ‘Association of lung function and blood glucose level: a 10-year study in China’, *BMC Pulmonary Medicine*, 22(1), p. 444. Available at: <https://doi.org/10.1186/s12890-022-02208-3>.
- Li, X. et al. (2024) ‘Prevalence, mortality and risk factors for self-reported COPD among smokers and never smokers, NHANES 1999–2018’, *Tobacco Induced Diseases*, 22(September), pp. 1–11. Available at: <https://doi.org/10.18332/tid/192745>.
- Li, Y. et al. (2013) ‘Prediabetes and impaired lung function in asymptomatic adults’, *Diabetes Research and Clinical Practice*, 100(2), pp. e51–e54. Available at: <https://doi.org/10.1016/j.diabres.2013.01.021>.
- Liang, X., Chou, O.H.I. dan Cheung, B.M. (2023) ‘The Association Between Systemic Arterial Hypertension and Chronic Obstructive Pulmonary Disease. Results from the U.S. National Health and Nutrition Examination Survey 1999–2018: A Cross-sectional Study.’, *Chronic obstructive pulmonary diseases (Miami, Fla.)*, 10(2), pp. 190–198. Available at: <https://doi.org/10.15326/jcopdf.2022.0306>.
- Liang, Y. et al. (2017) ‘Chronic bronchitis is associated with severe exacerbation and prolonged recovery period in Chinese patients with COPD: a multicenter cross-sectional study’, *Journal of Thoracic Disease*, 9(12), pp. 5120–5130. Available at: <https://doi.org/10.21037/jtd.2017.11.54>.

- Liani, P.S. dan Machmud, P.B. (2020) ‘Risk Factors for Respiratory Death among Indonesian Pilgrims in 2018’, *Jurnal Berkala Epidemiologi*, 8(1), p. 57. Available at: <https://doi.org/10.20473/jbe.V8I12020.57-64>.
- Liberatos, P., Link, B.G. dan Kelsey, J.L. (1988) ‘The Measurement of Social Class in Epidemiology’, *Epidemiologic Reviews*, 10(1), pp. 87–121. Available at: <https://doi.org/10.1093/oxfordjournals.epirev.a036030>.
- Liew, S.M. et al. (2018) ‘Dangers of COPD and asthma under-recognised among Hajj pilgrims’, *The Lancet Respiratory Medicine*, 6(8), p. 590. Available at: [https://doi.org/10.1016/S2213-2600\(18\)30297-2](https://doi.org/10.1016/S2213-2600(18)30297-2).
- Lim, J.U. et al. (2017) ‘Comparison of World Health Organization and Asia-Pacific body mass index classifications in COPD patients’, *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 12, pp. 2465–2475. Available at: <https://doi.org/10.2147/COPD.S141295>.
- Lim, S.S. et al. (2012) ‘A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010’, *The Lancet*, 380(9859), pp. 2224–2260. Available at: [https://doi.org/10.1016/S0140-6736\(12\)61766-8](https://doi.org/10.1016/S0140-6736(12)61766-8).
- Liu, S. et al. (2007) ‘Biomass fuels are the probable risk factor for chronic obstructive pulmonary disease in rural South China’, *Thorax*, 62(10), pp. 889–897. Available at: <https://doi.org/10.1136/thx.2006.061457>.
- Løkke, A. et al. (2021) ‘Economic Burden of COPD by Disease Severity - A Nationwide Cohort Study in Denmark.’, *International journal of chronic obstructive pulmonary disease*, 16, pp. 603–613. Available at: <https://doi.org/10.2147/COPD.S295388>.
- López-Campos, J.L. et al. (2017) ‘Occupational and Biomass Exposure in COPD: Results of a Cross-Sectional Analysis of the On-Sint Study’, *Archivos de Bronconeumología (English Edition)*, 53(1), pp. 7–12. Available at: <https://doi.org/10.1016/j.arbr.2016.06.022>.
- Lou, P. et al. (2012) ‘Vulnerability of patients with chronic obstructive pulmonary disease according to gender in China’, *International Journal of Chronic Obstructive Pulmonary Disease*, p. 825. Available at: <https://doi.org/10.2147/COPD.S37447>.
- Lung Foundation Australia (2024) *Symptoms*. Available at: <https://lungfoundation.com.au/patients-carers/living-with-a-lung-disease/copd/symptoms/> (Accessed: 7 May 2024).
- Lutter, J.I. et al. (2020) ‘Impact of Education on COPD Severity and All-Cause Mortality in Lifetime Never-Smokers and Longtime Ex-Smokers: Results of

- the COSYCONET Cohort</p>', *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 15, pp. 2787–2798. Available at: <https://doi.org/10.2147/COPD.S273839>.
- Lwanga, S.K. dan Lemeshow, S. (1991) *Sample Size Determination in Health Studies: A Practical Manual*. Geneva: World Health Organization.
- MacNee, W. (2016) 'Is Chronic Obstructive Pulmonary Disease an Accelerated Aging Disease?', *Annals of the American Thoracic Society*, 13(Supplement\_5), pp. S429–S437. Available at: <https://doi.org/10.1513/AnnalsATS.201602-124AW>.
- MacNee, W. (2006) 'Pathology, Pathogenesis, and Pathophysiology', *BMJ: British Medical Journal*, 332(7551), pp. 1202–1204. Available at: <https://doi.org/10.1097/00008469-199202000-00007>.
- Mamary, A.J. et al. (2018) 'Race and Gender Disparities are Evident in COPD Underdiagnoses Across all Severities of Measured Airflow Obstruction.', *Chronic obstructive pulmonary diseases (Miami, Fla.)*, 5(3), pp. 177–184. Available at: <https://doi.org/10.15326/jcopdf.5.3.2017.0145>.
- Mannino, D.M. dan Buist, A.S. (2007) 'Global burden of COPD: risk factors, prevalence, and future trends.', *Lancet (London, England)*, 370(9589), pp. 765–73. Available at: [https://doi.org/10.1016/S0140-6736\(07\)61380-4](https://doi.org/10.1016/S0140-6736(07)61380-4).
- Mao, X. et al. (2021) 'Outcomes associated with comorbid diabetes among patients with COPD exacerbation: findings from the ACURE registry', *Respiratory Research*, 22(1), p. 7. Available at: <https://doi.org/10.1186/s12931-020-01607-6>.
- de Marco, R. et al. (2013) 'The Coexistence of Asthma and Chronic Obstructive Pulmonary Disease (COPD): Prevalence and Risk Factors in Young, Middle-aged and Elderly People from the General Population', *PLoS ONE*, 8(5), p. e62985. Available at: <https://doi.org/10.1371/journal.pone.0062985>.
- Martinez, F.J. et al. (2007) 'Sex Differences in Severe Pulmonary Emphysema', *American Journal of Respiratory and Critical Care Medicine*, 176(3), pp. 243–252. Available at: <https://doi.org/10.1164/rccm.200606-828OC>.
- Martinez, F.J. et al. (2018) 'At the Root: Defining and Halting Progression of Early Chronic Obstructive Pulmonary Disease', *American Journal of Respiratory and Critical Care Medicine*, 197(12), pp. 1540–1551. Available at: <https://doi.org/10.1164/rccm.201710-2028PP>.
- Martinez, F.J. et al. (2022) 'Treatment Trials in Young Patients with Chronic Obstructive Pulmonary Disease and Pre-Chronic Obstructive Pulmonary Disease Patients: Time to Move Forward', *American Journal of Respiratory*

- and Critical Care Medicine*, 205(3), pp. 275–287. Available at: <https://doi.org/10.1164/rccm.202107-1663SO>.
- Martínez García, M.Á. dan Soriano, J.B. (2022) ‘Asthma, bronchiectasis, and chronic obstructive pulmonary disease: the Bermuda Triangle of the airways’, *Chinese Medical Journal*, 135(12), pp. 1390–1393. Available at: <https://doi.org/10.1097/CM9.0000000000002225>.
- Martínez-Gestoso, S. *et al.* (2022) ‘Impact of anxiety and depression on the prognosis of copd exacerbations’, *BMC Pulmonary Medicine*, 22(1), p. 169. Available at: <https://doi.org/10.1186/s12890-022-01934-y>.
- Matkovic, Z. dan Miravitles, M. (2013) ‘Chronic bronchial infection in COPD. Is there an infective phenotype?’, *Respiratory Medicine*, 107(1), pp. 10–22. Available at: <https://doi.org/10.1016/j.rmed.2012.10.024>.
- De Matteis, S. *et al.* (2019) ‘The occupations at increased risk of COPD: analysis of lifetime job-histories in the population-based UK Biobank Cohort’, *European Respiratory Journal*, 54(1), p. 1900186. Available at: <https://doi.org/10.1183/13993003.00186-2019>.
- Miravitles, M. dan Ribera, A. (2017) ‘Understanding the impact of symptoms on the burden of COPD’, *Respiratory Research*, 18(1), p. 67. Available at: <https://doi.org/10.1186/s12931-017-0548-3>.
- Mitkus, R.J. *et al.* (2013) ‘Comparative physicochemical and biological characterization of NIST Interim Reference Material PM2.5 and SRM 1648 in human A549 and mouse RAW264.7 cells’, *Toxicology in Vitro*, 27(8), pp. 2289–2298. Available at: <https://doi.org/10.1016/j.tiv.2013.09.024>.
- Montes de Oca, M. *et al.* (2017) ‘Smoke, Biomass Exposure, and COPD Risk in the Primary Care Setting: The PUMA Study’, *Respiratory Care*, 62(8), pp. 1058–1066. Available at: <https://doi.org/10.4187/respcare.05440>.
- Murgia, N. dan Gamberlungh, A. (2022a) ‘Occupational COPD—The most under-recognized occupational lung disease?’, *Respirology*, 27(6), pp. 399–410. Available at: <https://doi.org/10.1111/resp.14272>.
- Murgia, N. dan Gamberlungh, A. (2022b) ‘Occupational COPD—The most under-recognized occupational lung disease?’, *Respirology*, 27(6), pp. 399–410. Available at: <https://doi.org/10.1111/resp.14272>.
- Murray, C.J.L. *et al.* (2020) ‘Global burden of 87 risk factors in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019’, *The Lancet*, 396(10258), pp. 1223–1249. Available at: [https://doi.org/10.1016/S0140-6736\(20\)30752-2](https://doi.org/10.1016/S0140-6736(20)30752-2).

- Nguyen Viet, N. *et al.* (2015) 'The prevalence and patient characteristics of chronic obstructive pulmonary disease in non-smokers in Vietnam and Indonesia: An observational survey', *Respirology*, 20(4), pp. 602–611. Available at: <https://doi.org/10.1111/resp.12507>.
- NHLBI (2023) *COPD - What Is COPD?* . Available at: <https://www.nhlbi.nih.gov/health/copd> (Accessed: 6 May 2024).
- NHS (2021) *Spirometry* . Available at: <https://www.nhs.uk/conditions/spirometry/> (Accessed: 7 May 2024).
- NHS (2023a) *Chronic obstructive pulmonary disease (COPD) - Diagnosis*. Available at: <https://www.nhs.uk/conditions/chronic-obstructive-pulmonary-disease-copd/diagnosis/> (Accessed: 7 May 2024).
- NHS (2023b) *Chronic obstructive pulmonary disease (COPD) - Symptoms* . Available at: <https://www.nhs.uk/conditions/chronic-obstructive-pulmonary-disease-copd/symptoms/> (Accessed: 7 May 2024).
- NIH (2023) *COPD - Causes and Risk Factors*. Available at: <https://www.nhlbi.nih.gov/health/copd/causes> (Accessed: 29 March 2024).
- Nishimura, K. *et al.* (2002) 'Dyspnea Is a Better Predictor of 5-Year Survival Than Airway Obstruction in Patients With COPD', *Chest*, 121(5), pp. 1434–1440. Available at: <https://doi.org/10.1378/chest.121.5.1434>.
- O'Byrne, P.M. dan Inman, M.D. (2003) 'Airway Hyperresponsiveness', *Chest*, 123(3), pp. 411S-416S. Available at: [https://doi.org/10.1378/chest.123.3\\_suppl.411S](https://doi.org/10.1378/chest.123.3_suppl.411S).
- Oga, T. *et al.* (2012) 'Analysis of longitudinal changes in dyspnea of patients with chronic obstructive pulmonary disease: an observational study', *Respiratory Research*, 13(1), p. 85. Available at: <https://doi.org/10.1186/1465-9921-13-85>.
- Omori, K. *et al.* (2017) 'Clinically remitted childhood asthma is associated with airflow obstruction in middle-aged adults', *Respirology*, 22(1), pp. 86–92. Available at: <https://doi.org/10.1111/resp.12860>.
- Pane, M. *et al.* (2019) 'Indonesian Hajj Cohorts and Mortality in Saudi Arabia from 2004 to 2011.', *Journal of epidemiology and global health*, 9(1), pp. 11–18. Available at: <https://doi.org/10.2991/jegh.k.181231.001>.
- Papaioannou, A.I. *et al.* (2009) 'Global assessment of the COPD patient: Time to look beyond FEV1?', *Respiratory Medicine*, 103(5), pp. 650–660. Available at: <https://doi.org/10.1016/j.rmed.2009.01.001>.
- Pappe, E. *et al.* (2023) 'Impact of Coronavirus Disease 2019 on Hospital Admissions, Health Status, and Behavioral Changes of Patients with COPD', *Anggrahita Dwi Ariantini, 2025 FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN KEJADIAN PENYAKIT PARU OBSTRUKTIF KRONIK (PPOK) PADA CALON JEMAAH HAJI INDONESIA (ANALISIS DATA SISKOHATKES TAHUN 2024)*

- Chronic Obstructive Pulmonary Diseases: Journal of the COPD Foundation*, pp. 211–223. Available at: <https://doi.org/10.15326/jcopdf.2022.0383>.
- Park, H.J. *et al.* (2019) ‘The effect of low body mass index on the development of chronic obstructive pulmonary disease and mortality’, *Journal of Internal Medicine*, 286(5), pp. 573–582. Available at: <https://doi.org/10.1111/joim.12949>.
- Park, H.Y. *et al.* (2021) ‘Understanding racial differences of COPD patients with an ecological model: two large cohort studies in the US and Korea’, *Therapeutic Advances in Chronic Disease*, 12, p. 204062232098245. Available at: <https://doi.org/10.1177/2040622320982455>.
- Park, S.S. *et al.* (2022) ‘Mechanisms Linking COPD to Type 1 and 2 Diabetes Mellitus: Is There a Relationship between Diabetes and COPD?’, *Medicina*, 58(8), p. 1030. Available at: <https://doi.org/10.3390/medicina58081030>.
- Pasquale, M. *et al.* (2012) ‘Impact of exacerbations on health care cost and resource utilization in chronic obstructive pulmonary disease patients with chronic bronchitis from a predominantly Medicare population’, *International Journal of Chronic Obstructive Pulmonary Disease*, p. 757. Available at: <https://doi.org/10.2147/COPD.S36997>.
- Paulin, L.M. *et al.* (2024) ‘Relationship Between Tobacco Product Use and Health-Related Quality of Life Among Individuals With COPD in Waves 1-5 (2013-2019) of the Population Assessment of Tobacco and Health Study.’, *Chronic obstructive pulmonary diseases (Miami, Fla.)*, 11(1), pp. 68–82. Available at: <https://doi.org/10.15326/jcopdf.2023.0422>.
- Pellegrino, D. *et al.* (2023) ‘When GETomics meets aging and exercise in COPD’, *Respiratory Medicine*, 216, p. 107294. Available at: <https://doi.org/10.1016/j.rmed.2023.107294>.
- Perez, T.A. *et al.* (2020) ‘Sex differences between women and men with COPD: A new analysis of the 3CIA study’, *Respiratory Medicine*, 171, p. 106105. Available at: <https://doi.org/10.1016/j.rmed.2020.106105>.
- del Pino-Sedeño, T. *et al.* (2020) ‘Relationship between glycemic control and chronic obstructive pulmonary disease in patients with type 2 diabetes: A nested case-control study’, *Primary Care Diabetes*, 14(6), pp. 729–735. Available at: <https://doi.org/10.1016/j.pcd.2020.05.007>.
- Pinto-Plata, V.M. *et al.* (2004) ‘The 6-min walk distance: change over time and value as a predictor of survival in severe COPD’, *European Respiratory Journal*, 23(1), pp. 28–33. Available at: <https://doi.org/10.1183/09031936.03.00034603>.

- Polkey, M.I. *et al.* (1997) ‘The contractile properties of the elderly human diaphragm.’, *American Journal of Respiratory and Critical Care Medicine*, 155(5), pp. 1560–1564. Available at: <https://doi.org/10.1164/ajrccm.155.5.9154857>.
- Pudney, E. dan Doherty, M. (2016) ‘Plain chest x-ray (CXR) in the diagnosis of chronic obstructive pulmonary disease (COPD)’, in *1.6 General Practice and Primary Care*. European Respiratory Society, p. PA3936. Available at: <https://doi.org/10.1183/13993003.congress-2016.PA3936>.
- Pusat Kesehatan Haji (2024) *Kebijakan Pemeriksaan Kesehatan Haji*.
- Putcha, N. *et al.* (2022) ‘Mortality and Exacerbation Risk by Body Mass Index in Patients with COPD in TIOSPIR and UPLIFT.’, *Annals of the American Thoracic Society*, 19(2), pp. 204–213. Available at: <https://doi.org/10.1513/AnnalsATS.202006-722OC>.
- Putra, I.W.A. *et al.* (2021) ‘Characteristics and Degree of Dyspnea that Happened in COPD Patients Using Modified Medical Research Council (mMRC) Method at Dustira Cimahi Hospital’, in. Available at: <https://doi.org/10.2991/ahsr.k.210723.043>.
- Rajala, K. *et al.* (2017) ‘mMRC dyspnoea scale indicates impaired quality of life and increased pain in patients with idiopathic pulmonary fibrosis’, *ERJ Open Research*, 3(4), pp. 00084–02017. Available at: <https://doi.org/10.1183/23120541.00084-2017>.
- Ray, S. *et al.* (2013) ‘The clinical and economic burden of chronic obstructive pulmonary disease in the USA’, *ClinicoEconomics and Outcomes Research*, p. 235. Available at: <https://doi.org/10.2147/CEOR.S34321>.
- Rennard, S.I. *et al.* (2015) ‘Identification of Five Chronic Obstructive Pulmonary Disease Subgroups with Different Prognoses in the ECLIPSE Cohort Using Cluster Analysis’, *Annals of the American Thoracic Society*, 12(3), pp. 303–312. Available at: <https://doi.org/10.1513/AnnalsATS.201403-125OC>.
- Rey-Brandariz, J. *et al.* (2023) ‘Tobacco Patterns and Risk of Chronic Obstructive Pulmonary Disease: Results From a Cross-Sectional Study’, *Archivos de Bronconeumología*, 59(11), pp. 717–724. Available at: <https://doi.org/10.1016/j.arbres.2023.07.009>.
- Robin, B. *et al.* (2004) ‘Pulmonary function in bronchopulmonary dysplasia’, *Pediatric Pulmonology*, 37(3), pp. 236–242. Available at: <https://doi.org/10.1002/ppul.10424>.
- Rodrigues, S. de O. *et al.* (2021) ‘Mechanisms, Pathophysiology and Currently Proposed Treatments of Chronic Obstructive Pulmonary Disease’,

- Pharmaceuticals*, 14(10), p. 979. Available at: <https://doi.org/10.3390/ph14100979>.
- Sahni, S. et al. (2017) ‘Socioeconomic Status and Its Relationship to Chronic Respiratory Disease’, *Advances in Respiratory Medicine*, 85(2), pp. 97–108. Available at: <https://doi.org/10.5603/ARM.2017.0016>.
- Salvi, S.S. dan Barnes, P.J. (2009) ‘Chronic obstructive pulmonary disease in non-smokers’, *The Lancet*, 374(9691), pp. 733–743. Available at: [https://doi.org/10.1016/S0140-6736\(09\)61303-9](https://doi.org/10.1016/S0140-6736(09)61303-9).
- Sánchez, E. et al. (2019) ‘Lung function measurements in the prediabetes stage: data from the ILERVAS Project’, *Acta Diabetologica*, 56(9), pp. 1005–1012. Available at: <https://doi.org/10.1007/s00592-019-01333-6>.
- Sanchez-Salcedo, P. et al. (2014) ‘Disease progression in young patients with COPD: rethinking the Fletcher and Peto model’, *European Respiratory Journal*, 44(2), pp. 324–331. Available at: <https://doi.org/10.1183/09031936.00208613>.
- Sang, L. et al. (2024) ‘Proportions and risk factors of chronic obstructive pulmonary disease and preserved ratio impaired spirometry, and association with small airway disease, in the positive screening older population from China: a cross-sectional study’, *BMC Pulmonary Medicine*, 24(1), p. 114. Available at: <https://doi.org/10.1186/s12890-024-02920-2>.
- Santo, A.H. dan Fernandes, F.L.A. (2022) ‘Chronic Obstructive Pulmonary Disease-Related Mortality in Brazil, 2000–2019: A Multiple-Cause-of-Death Study’, *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 19(1), pp. 216–225. Available at: <https://doi.org/10.1080/15412555.2022.2061934>.
- dos Santos, C.F. et al. (2022) ‘DNA damage and antioxidant capacity in COPD patients with and without lung cancer’, *PLOS ONE*, 17(11), p. e0275873. Available at: <https://doi.org/10.1371/journal.pone.0275873>.
- Sav, A. et al. (2022) ‘Treatment Burden Discussion in Clinical Encounters: Priorities of COPD Patients, Carers and Physicians.’, *International journal of chronic obstructive pulmonary disease*, 17, pp. 1929–1942. Available at: <https://doi.org/10.2147/COPD.S366412>.
- Scadding, J.G. (1988) ‘Health and disease: what can medicine do for philosophy?’, *Journal of medical ethics*, 14(3), pp. 118–24. Available at: <https://doi.org/10.1136/jme.14.3.118>.
- Schembri, S. et al. (2009) ‘A predictive model of hospitalisation and death from chronic obstructive pulmonary disease.’, *Respiratory medicine*, 103(10), pp. 1461–7. Available at: <https://doi.org/10.1016/j.rmed.2009.04.021>.

- Schmidt, B.-M. *et al.* (2020) ‘Screening strategies for hypertension’, *Cochrane Database of Systematic Reviews*, 2020(5). Available at: <https://doi.org/10.1002/14651858.CD013212.pub2>.
- Seemungal, T.A. *et al.* (1998) ‘Effect of exacerbation on quality of life in patients with chronic obstructive pulmonary disease.’, *American journal of respiratory and critical care medicine*, 157(5 Pt 1), pp. 1418–22. Available at: <https://doi.org/10.1164/ajrccm.157.5.9709032>.
- Sekretariat Kabinet Republik Indonesia (2019) *Indonesian Hajj Waiting Time Not the Longest in ASEAN: Indonesian Hajj Authorities*. Available at: <https://setkab.go.id/en/Indonesian-hajj-waiting-time-not-the-longest-in-asean-Indonesian-hajj-authorities/> (Accessed: 20 August 2024).
- Sethi, S. (2010) ‘Infection as a comorbidity of COPD’, *European Respiratory Journal*, 35(6), pp. 1209–1215. Available at: <https://doi.org/10.1183/09031936.00081409>.
- Sethi, S. dan Murphy, T.F. (2008) ‘Infection in the Pathogenesis and Course of Chronic Obstructive Pulmonary Disease’, *New England Journal of Medicine*, 359(22), pp. 2355–2365. Available at: <https://doi.org/10.1056/NEJMra0800353>.
- Sheel, A.W. *et al.* (2009) ‘Evidence for dysanapsis using computed tomographic imaging of the airways in older ex-smokers’, *Journal of Applied Physiology*, 107(5), pp. 1622–1628. Available at: <https://doi.org/10.1152/japplphysiol.00562.2009>.
- Shin, S. *et al.* (2021) ‘Air Pollution as a Risk Factor for Incident Chronic Obstructive Pulmonary Disease and Asthma. A 15-Year Population-based Cohort Study’, *American Journal of Respiratory and Critical Care Medicine*, 203(9), pp. 1138–1148. Available at: <https://doi.org/10.1164/rccm.201909-1744OC>.
- Siddharthan, T. *et al.* (2018) ‘Association between Household Air Pollution Exposure and Chronic Obstructive Pulmonary Disease Outcomes in 13 Low- and Middle-Income Country Settings’, *American Journal of Respiratory and Critical Care Medicine*, 197(5), pp. 611–620. Available at: <https://doi.org/10.1164/rccm.201709-1861OC>.
- Silva, G.E. *et al.* (2004) ‘Asthma as a Risk Factor for COPD in a Longitudinal Study’, *Chest*, 126(1), pp. 59–65. Available at: <https://doi.org/10.1378/chest.126.1.59>.
- Silver, Sharon R, Alarcon, W.A. dan Li, J. (2021) ‘Incident chronic obstructive pulmonary disease associated with occupation, industry, and workplace exposures in the Health and Retirement Study.’, *American journal of*

- industrial medicine*, 64(1), pp. 26–38. Available at: <https://doi.org/10.1002/ajim.23196>.
- Silver, Sharon R., Alarcon, W.A. dan Li, J. (2021) ‘Incident chronic obstructive pulmonary disease associated with occupation, industry, and workplace exposures in the Health and Retirement Study’, *American Journal of Industrial Medicine*, 64(1), pp. 26–38. Available at: <https://doi.org/10.1002/ajim.23196>.
- Silverman, E.K. et al. (1998) ‘Genetic Epidemiology of Severe, Early-onset Chronic Obstructive Pulmonary Disease’, *American Journal of Respiratory and Critical Care Medicine*, 157(6), pp. 1770–1778. Available at: <https://doi.org/10.1164/ajrccm.157.6.9706014>.
- Silverman, E.K. dan Sandhaus, R.A. (2009) ‘Alpha 1-Antitrypsin Deficiency’, *New England Journal of Medicine*, 360(26), pp. 2749–2757. Available at: <https://doi.org/10.1056/NEJMcp0900449>.
- Sin, D.D. et al. (2002) ‘The Impact of Chronic Obstructive Pulmonary Disease on Work Loss in the United States’, *American Journal of Respiratory and Critical Care Medicine*, 165(5), pp. 704–707. Available at: <https://doi.org/10.1164/ajrccm.165.5.2104055>.
- Sin, D.D. et al. (2023) ‘Air pollution and COPD: GOLD 2023 committee report.’, *The European respiratory journal*, 61(5). Available at: <https://doi.org/10.1183/13993003.02469-2022>.
- Smith, K.R. et al. (2014) ‘Millions Dead: How Do We Know and What Does It Mean? Methods Used in the Comparative Risk Assessment of Household Air Pollution’, *Annual Review of Public Health*, 35(1), pp. 185–206. Available at: <https://doi.org/10.1146/annurev-publhealth-032013-182356>.
- Song, Q., Liu, C., et al. (2023) ‘Clinical characteristics and risk of all-cause mortality in low education patients with chronic obstructive pulmonary disease in the Chinese population’, *Journal of Global Health*, 13, p. 04163. Available at: <https://doi.org/10.7189/jogh.13.04163>.
- Song, Q., Zhou, A., et al. (2023) ‘The clinical characteristics and treatment response of patients with chronic obstructive pulmonary disease with low body mass index’, *Frontiers in Pharmacology*, 14. Available at: <https://doi.org/10.3389/fphar.2023.1131614>.
- Sood, A. et al. (2022) ‘Racial and Ethnic Minorities Have a Lower Prevalence of Airflow Obstruction than Non-Hispanic Whites’, *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 19(1), pp. 61–68. Available at: <https://doi.org/10.1080/15412555.2022.2029384>.

- Sorheim, I.-C. *et al.* (2010) ‘Gender differences in COPD: are women more susceptible to smoking effects than men?’, *Thorax*, 65(6), pp. 480–485. Available at: <https://doi.org/10.1136/thx.2009.122002>.
- Soriano, J.B. *et al.* (2021) ‘Prevalence and Determinants of COPD in Spain: EPISCAN II’, *Archivos de Bronconeumología*, 57(1), pp. 61–69. Available at: <https://doi.org/10.1016/j.arbres.2020.07.024>.
- Stanojevic, S. *et al.* (2022) ‘ERS/ATS technical standard on interpretive strategies for routine lung function tests’, *European Respiratory Journal*, 60(1), p. 2101499. Available at: <https://doi.org/10.1183/13993003.01499-2021>.
- Stoltz, D. (2020) ‘Chronic obstructive pulmonary disease risk: does genetics hold the answer?’, *The Lancet Respiratory Medicine*, 8(7), pp. 653–654. Available at: [https://doi.org/10.1016/S2213-2600\(20\)30191-0](https://doi.org/10.1016/S2213-2600(20)30191-0).
- Stoltz, D. *et al.* (2022) ‘Towards the elimination of chronic obstructive pulmonary disease: a Lancet Commission.’, *Lancet (London, England)*, 400(10356), pp. 921–972. Available at: [https://doi.org/10.1016/S0140-6736\(22\)01273-9](https://doi.org/10.1016/S0140-6736(22)01273-9).
- Su, J. *et al.* (2023) ‘Associations of diabetes, prediabetes and diabetes duration with the risk of chronic obstructive pulmonary disease: A prospective <scp>UK Biobank</scp> study’, *Diabetes, Obesity and Metabolism*, 25(9), pp. 2575–2585. Available at: <https://doi.org/10.1111/dom.15142>.
- Su, W.-C. *et al.* (2024) ‘Secondhand smoke increases the risk of developing chronic obstructive pulmonary disease’, *Scientific Reports*, 14(1), p. 7481. Available at: <https://doi.org/10.1038/s41598-024-58038-2>.
- Subdani, D. and Machmudi, Y. (2022) ‘The Role of the Governments of Indonesia and Saudi Arabia in Organizing the Hajj Pilgrimage 2015 – 2021’, *Journal of Strategic and Global Studies*, 5(1). Available at: <https://doi.org/10.7454/jsgs.v5i1.1106>.
- Sumit, A.F. *et al.* (2020) ‘Association between chronic obstructive pulmonary disease (COPD) and occupational exposures: A hospital based quantitative cross-sectional study among the Bangladeshi population’, *PLOS ONE*, 15(9), p. e0239602. Available at: <https://doi.org/10.1371/journal.pone.0239602>.
- Sundh, J. *et al.* (2012) ‘The Dyspnoea, Obstruction, Smoking, Exacerbation (DOSE) index is predictive of mortality in COPD.’, *Primary care respiratory journal : journal of the General Practice Airways Group*, 21(3), pp. 295–301. Available at: <https://doi.org/10.4104/pcrj.2012.00054>.
- Swathi Karanth, M. (2017) ‘Six Minute Walk Test: A Tool for Predicting Mortality in Chronic Pulmonary Diseases’, *JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH* [Preprint]. Available at: <https://doi.org/10.7860/JCDR/2017/24707.9723>.

- Syamlal, G. et al. (2022) ‘Chronic Obstructive Pulmonary Disease Mortality by Industry and Occupation — United States, 2020’, *Morbidity and Mortality Weekly Report*, 71(49).
- Tabak, C. et al. (2009) ‘Does educational level influence lung function decline (Doetinchem Cohort Study)?’, *European Respiratory Journal*, 34(4), pp. 940–947. Available at: <https://doi.org/10.1183/09031936.00111608>.
- Tagiyeva, N. et al. (2016) ‘Outcomes of Childhood Asthma and Wheezy Bronchitis. A 50-Year Cohort Study’, *American Journal of Respiratory and Critical Care Medicine*, 193(1), pp. 23–30. Available at: <https://doi.org/10.1164/rccm.201505-0870OC>.
- Talmaciu, I. et al. (2002) ‘Pulmonary function in technology-dependent children 2 years and older with bronchopulmonary dysplasia\*’, *Pediatric Pulmonology*, 33(3), pp. 181–188. Available at: <https://doi.org/10.1002/ppul.10068>.
- Thunqvist, P. et al. (2015) ‘Lung function at 6 and 18 months after preterm birth in relation to severity of bronchopulmonary dysplasia’, *Pediatric Pulmonology*, 50(10), pp. 978–986. Available at: <https://doi.org/10.1002/ppul.23090>.
- Tolep, K. dan Kelsen, S.G. (1993) ‘Effect of aging on respiratory skeletal muscles.’, *Clinics in chest medicine*, 14(3), pp. 363–78.
- de Torres, J.P. et al. (2007) ‘Gender and respiratory factors associated with dyspnea in chronic obstructive pulmonary disease’, *Respiratory Research*, 8(1), p. 18. Available at: <https://doi.org/10.1186/1465-9921-8-18>.
- de Torres, J.P. et al. (2011) ‘Gender Differences in Plasma Biomarker Levels in a Cohort of COPD Patients: A Pilot Study’, *PLoS ONE*, 6(1), p. e16021. Available at: <https://doi.org/10.1371/journal.pone.0016021>.
- de Torres, J.P. dan Celli, B.R. (2017) ‘Is Chronic Obstructive Pulmonary Disease Really a Progressive Disease?’, *Archivos de Bronconeumología (English Edition)*, 53(7), pp. 362–363. Available at: <https://doi.org/10.1016/j.arbr.2017.03.004>.
- Townend, J. et al. (2017) ‘The association between chronic airflow obstruction and poverty in 12 sites of the multinational BOLD study’, *European Respiratory Journal*, 49(6), p. 1601880. Available at: <https://doi.org/10.1183/13993003.01880-2016>.
- Traulsen, L.K. et al. (2018) ‘Risk factors for incident asthma and COPD in a cohort of young adults’, *The Clinical Respiratory Journal*, 12(3), pp. 1021–1029. Available at: <https://doi.org/10.1111/crj.12622>.
- Ulrik, C.S. dan Lange, P. (1994) ‘Decline of lung function in adults with bronchial asthma.’, *American Journal of Respiratory and Critical Care Medicine*,

- 150(3), pp. 629–634. Available at: <https://doi.org/10.1164/ajrccm.150.3.8087330>.
- Usman, Y. et al. (2018) ‘Indonesia’s Sample Registration System in 2018: A Work in Progress’, *Journal of Population and Social Studies*, 27(1), pp. 39–52. Available at: <https://doi.org/10.25133/JPSSv27n1.003>.
- van Eeden, S.F. dan Hogg, J.C. (2020) ‘Immune-Modulation in Chronic Obstructive Pulmonary Disease: Current Concepts and Future Strategies’, *Respiration*, 99(7), pp. 550–565. Available at: <https://doi.org/10.1159/000502261>.
- Vaz Fragoso, C.A. dan Gill, T.M. (2012) ‘Respiratory Impairment and the Aging Lung: A Novel Paradigm for Assessing Pulmonary Function’, *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 67A(3), pp. 264–275. Available at: <https://doi.org/10.1093/gerona/glr198>.
- Verleden, S.E. et al. (2024) ‘Small Airway Disease in Pre-Chronic Obstructive Pulmonary Disease with Emphysema: A Cross-Sectional Study’, *American Journal of Respiratory and Critical Care Medicine*, 209(6), pp. 683–692. Available at: <https://doi.org/10.1164/rccm.202301-0132OC>.
- Vestbo, J. et al. (2011) ‘Changes in Forced Expiratory Volume in 1 Second over Time in COPD’, *New England Journal of Medicine*, 365(13), pp. 1184–1192. Available at: <https://doi.org/10.1056/NEJMoa1105482>.
- Viegi, G. et al. (2007) ‘Definition, epidemiology and natural history of COPD’, *European Respiratory Journal*, 30(5), pp. 993–1013. Available at: <https://doi.org/10.1183/09031936.00082507>.
- Vikjord, S.A.A. et al. (2020) ‘The association of anxiety and depression with mortality in a COPD cohort. The HUNT study, Norway’, *Respiratory Medicine*, 171, p. 106089. Available at: <https://doi.org/10.1016/j.rmed.2020.106089>.
- Vonk, J.M. (2003) ‘Risk factors associated with the presence of irreversible airflow limitation and reduced transfer coefficient in patients with asthma after 26 years of follow up’, *Thorax*, 58(4), pp. 322–327. Available at: <https://doi.org/10.1136/thorax.58.4.322>.
- Waatevik, M. et al. (2020) ‘One Year Change in 6-Minute Walk Test Outcomes is Associated with COPD Prognosis’, *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 17(6), pp. 662–671. Available at: <https://doi.org/10.1080/15412555.2020.1839041>.
- Al wachami, N. et al. (2024) ‘Prevalence and Risk Factors of Chronic Obstructive Pulmonary Disease Among Users of Primary Health Care Facilities in Morocco’, *International Journal of Chronic Obstructive Pulmonary Disease*,

- Volume 19, pp. 375–387. Available at: <https://doi.org/10.2147/COPD.S443081>.
- Wada, H. et al. (2021) ‘Low BMI and weight loss aggravate COPD mortality in men, findings from a large prospective cohort: the JACC study.’, *Scientific reports*, 11(1), p. 1531. Available at: <https://doi.org/10.1038/s41598-020-79860-4>.
- Wain, L. V et al. (2017) ‘Genome-wide association analyses for lung function and chronic obstructive pulmonary disease identify new loci and potential druggable targets.’, *Nature genetics*, 49(3), pp. 416–425. Available at: <https://doi.org/10.1038/ng.3787>.
- Walter, R.E. et al. (2003) ‘Association between Glycemic State and Lung Function’, *American Journal of Respiratory and Critical Care Medicine*, 167(6), pp. 911–916. Available at: <https://doi.org/10.1164/rccm.2203022>.
- Wang, C. et al. (2018a) ‘Prevalence and risk factors of chronic obstructive pulmonary disease in China (the China Pulmonary Health [CPH] study): a national cross-sectional study’, *The Lancet*, 391(10131), pp. 1706–1717. Available at: [https://doi.org/10.1016/S0140-6736\(18\)30841-9](https://doi.org/10.1016/S0140-6736(18)30841-9).
- Wang, C. et al. (2018b) ‘Prevalence and risk factors of chronic obstructive pulmonary disease in China (the China Pulmonary Health [CPH] study): a national cross-sectional study’, *The Lancet*, 391(10131), pp. 1706–1717. Available at: [https://doi.org/10.1016/S0140-6736\(18\)30841-9](https://doi.org/10.1016/S0140-6736(18)30841-9).
- Wang, L. et al. (2022) ‘Air pollution and risk of chronic obstructed pulmonary disease: The modifying effect of genetic susceptibility and lifestyle’, *eBioMedicine*, 79, p. 103994. Available at: <https://doi.org/10.1016/j.ebiom.2022.103994>.
- Wang, Z. et al. (2023) ‘Prevalence, risk factors, and mortality of COPD in young people in the USA: results from a population-based retrospective cohort’, *BMJ Open Respiratory Research*, 10(1), p. e001550. Available at: <https://doi.org/10.1136/bmjresp-2022-001550>.
- Warkentin, M.T., Lam, S. dan Hung, R.J. (2019) ‘Determinants of impaired lung function and lung cancer prediction among never-smokers in the UK Biobank cohort’, *EBioMedicine*, 47, pp. 58–64. Available at: <https://doi.org/10.1016/j.ebiom.2019.08.058>.
- Whitlock, G. et al. (2009) ‘Body-mass index and cause-specific mortality in 900 000 adults: collaborative analyses of 57 prospective studies.’, *Lancet (London, England)*, 373(9669), pp. 1083–96. Available at: [https://doi.org/10.1016/S0140-6736\(09\)60318-4](https://doi.org/10.1016/S0140-6736(09)60318-4).

- WHO (2012) *List of Official ICD-10 updates*. Available at: <https://www.who.int/standards/classifications/classification-of-diseases/list-of-official-icd-10-updates> (Accessed: 7 October 2024).
- WHO (2022) *Ambient (outdoor) Air Pollution*. Available at: [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health?gad\\_source=1&gclid=CjwKCAjwi\\_exBhA8EiwA\\_kU1MI91Nwi-9CaArYT\\_yGE9HQ6uosKklqMNVRftak\\_4sxywaEycjMipBhoCY14QAvD\\_BwE](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health?gad_source=1&gclid=CjwKCAjwi_exBhA8EiwA_kU1MI91Nwi-9CaArYT_yGE9HQ6uosKklqMNVRftak_4sxywaEycjMipBhoCY14QAvD_BwE) (Accessed: 10 May 2024).
- WHO (2023a) *Chronic obstructive pulmonary disease (COPD)*. Available at: [https://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-\(copd\)](https://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-(copd)) (Accessed: 3 May 2024).
- WHO (2023b) *Chronic obstructive pulmonary disease (COPD)*. Available at: [https://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-\(copd\)](https://www.who.int/news-room/fact-sheets/detail/chronic-obstructive-pulmonary-disease-(copd)) (Accessed: 25 March 2024).
- WHO (2023c) *Ensuring health and well-being for Hajj pilgrims through outreach*. Available at: <https://www.who.int/Indonesia/news/detail/12-06-2023-ensuring-health-and-well-being-for-hajj-pilgrims-through-outreach> (Accessed: 6 October 2024).
- WHO (2023d) *Household Air Pollution*. Available at: <https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-health> (Accessed: 9 May 2024).
- WHO (2023e) *Smoking is the leading cause of chronic obstructive pulmonary disease*. Available at: <https://www.who.int/news/item/15-11-2023-smoking-is-the-leading-cause-of-chronic-obstructive-pulmonary-disease> (Accessed: 7 May 2024).
- WHO (2023f) *WHO report on the global tobacco epidemic, 2023 Protect people from tobacco smoke fresh and alive*.
- WHO (2024a) *Global Health Estimates: Life Expectancy and Leading Causes of Death and Disability*. Available at: <https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates> (Accessed: 25 March 2024).
- WHO (2024b) *WHO Global Report on Trends in Prevalence of Tobacco 2000-2030*. Geneva.
- Wilkinson, T.M.A. *et al.* (2003) ‘Airway Bacterial Load and FEV<sub>1</sub> Decline in Patients with Chronic Obstructive Pulmonary Disease’, *American Journal of Respiratory and Critical Care Medicine*, 167(8), pp. 1090–1095. Available at: <https://doi.org/10.1164/rccm.200210-1179OC>.

- Winkleby, M.A. *et al.* (1992) ‘Socioeconomic status and health: how education, income, and occupation contribute to risk factors for cardiovascular disease.’, *American Journal of Public Health*, 82(6), pp. 816–820. Available at: <https://doi.org/10.2105/AJPH.82.6.816>.
- Woo, L., Smith, H.E. dan Sullivan, S.D. (2019) ‘The Economic Burden of Chronic Obstructive Pulmonary Disease in the Asia-Pacific Region: A Systematic Review’, *Value in Health Regional Issues*, 18, pp. 121–131. Available at: <https://doi.org/10.1016/j.vhri.2019.02.002>.
- World Population Review (2024) *Muslim Population by Country 2024*. Available at: <https://worldpopulationreview.com/country-rankings/muslim-population-by-country> (Accessed: 20 August 2024).
- Xia, J.-J. *et al.* (2023) ‘Investigation and Analysis of Risk Factors and Psychological Status of Chronic Obstructive Pulmonary Disease in Permanent Residents Aged 40 or Older in Hongyuan County, Aba Prefecture, Sichuan Province’, *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 18, pp. 827–835. Available at: <https://doi.org/10.2147/COPD.S399279>.
- Yang, I.A., Jenkins, C.R. dan Salvi, S.S. (2022) ‘Chronic obstructive pulmonary disease in never-smokers: risk factors, pathogenesis, and implications for prevention and treatment.’, *The Lancet. Respiratory medicine*, 10(5), pp. 497–511. Available at: [https://doi.org/10.1016/S2213-2600\(21\)00506-3](https://doi.org/10.1016/S2213-2600(21)00506-3).
- Yeh, H.-C. *et al.* (2008) ‘Cross-Sectional and Prospective Study of Lung Function in Adults With Type 2 Diabetes’, *Diabetes Care*, 31(4), pp. 741–746. Available at: <https://doi.org/10.2337/dc07-1464>.
- Yezli, S. *et al.* (2024) ‘Escalating climate-related health risks for Hajj pilgrims to Mecca’, *Journal of Travel Medicine*, 31(4). Available at: <https://doi.org/10.1093/jtm/taae042>.
- Yin, P. *et al.* (2022) ‘The Burden of COPD in China and Its Provinces: Findings From the Global Burden of Disease Study 2019’, *Frontiers in Public Health*, 10. Available at: <https://doi.org/10.3389/fpubh.2022.859499>.
- Yin, X. *et al.* (2023) ‘Comparison of newly diagnosed COPD patients and the non-COPD residents in Shanghai Minhang District.’, *Frontiers in public health*, 11, p. 1102509. Available at: <https://doi.org/10.3389/fpubh.2023.1102509>.
- Yoshida, T. dan Tuder, R.M. (2007) ‘Pathobiology of Cigarette Smoke-Induced Chronic Obstructive Pulmonary Disease’, *Physiological Reviews*, 87(3), pp. 1047–1082. Available at: <https://doi.org/10.1152/physrev.00048.2006>.
- Zhang, X. *et al.* (2022) ‘Association of Body Mass Index and Abdominal Obesity with the Risk of Airflow Obstruction: National Health and Nutrition

- Examination Survey (NHANES) 2007–2012’, *COPD: Journal of Chronic Obstructive Pulmonary Disease*, 19(1), pp. 99–108. Available at: <https://doi.org/10.1080/15412555.2022.2032627>.
- Zhang, Xuan *et al.* (2023) ‘Association of Exposure to Biomass Fuels with Occurrence of Chronic Obstructive Pulmonary Disease in Rural Western China: A Real-World Nested Case-Control Study’, *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 18, pp. 2207–2224. Available at: <https://doi.org/10.2147/COPD.S417600>.
- Zhang, Xiaolong *et al.* (2023) ‘Prevalence and Risk Factors for COPD in an Urbanizing Rural Area in Western China: A Cross-Sectional Study’, *International Journal of Chronic Obstructive Pulmonary Disease*, Volume 18, pp. 459–468. Available at: <https://doi.org/10.2147/COPD.S400213>.
- Zinellu, E. *et al.* (2016) ‘Circulating biomarkers of oxidative stress in chronic obstructive pulmonary disease: a systematic review’, *Respiratory Research*, 17(1), p. 150. Available at: <https://doi.org/10.1186/s12931-016-0471-z>.
- Zong, D. *et al.* (2019) ‘The role of cigarette smoke-induced epigenetic alterations in inflammation’, *Epigenetics & Chromatin*, 12(1), p. 65. Available at: <https://doi.org/10.1186/s13072-019-0311-8>.
- Zysman, M. dan Raherison-Semjen, C. (2021) ‘Women’s COPD.’, *Frontiers in medicine*, 8, p. 600107. Available at: <https://doi.org/10.3389/fmed.2021.600107>.