

## Supplementary Appendix

### Literature search methodology

To highlight the relationship of human activities with the emergence and spread of epidemics-pandemics, as well as the approach of this relationship through the COVID-19 pandemic, a literature search was carried out on article search platforms (PubMed, Google Scholar, and ScienceDirect), websites of international organizations (CDC, EMA, European Commission, FDA, IAGG, ICAO, IMF, IUCN, OECD, UNEP, UNICEF, UNWTO, WHO, WORLD BANK, WTO, WTTC) and on data platforms to collect epidemiological data on the pandemic (infections, deaths, SARS-COV-2 variants, pandemic waves) and vaccinations.

The search was performed using combinations of keywords covering the full range of subject areas discussed in this article. The keywords used, the eligibility criteria defined by subject area, the number of articles excluded, the reasons for exclusion, and the final number of articles selected for the article review and those excluded are presented in the tables in the Supplementary Appendix. The literature search was based on scanning the abstract and full text of the papers.

From the search platforms PubMed, Google Scholar, and ScienceDirect, 127 articles were retrieved. After deleting 9 duplicate articles (Table 5), eligibility criteria (Table 3) were defined to evaluate the remaining articles (n=118). When evaluating the abstract and full text, 9 articles were excluded (Table 5) because they did not meet the eligibility criteria, leaving 109 articles for use.

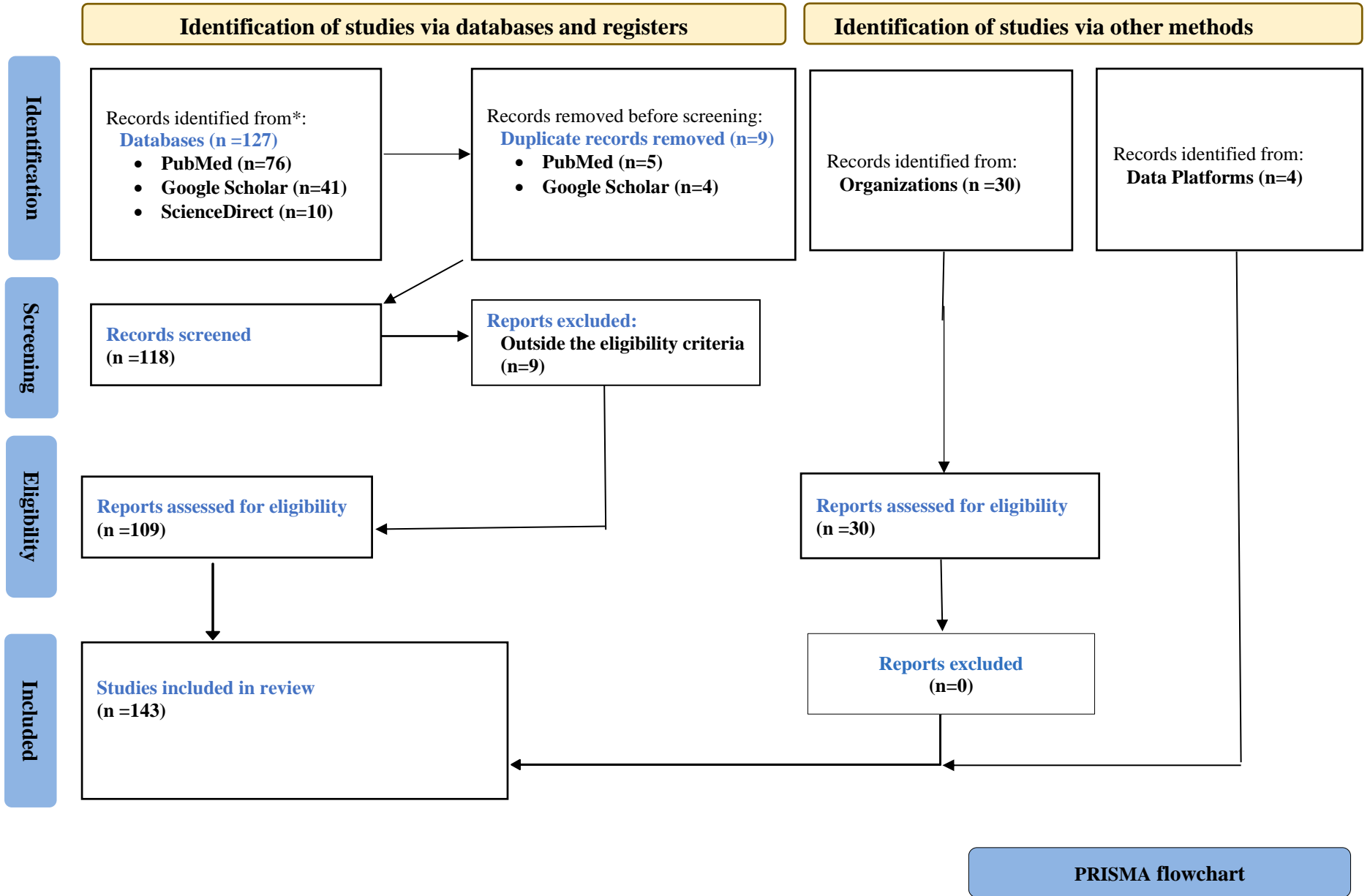
The search of websites of international organizations (CDC, EMA, European Commission, FDA, IAGG, ICAO, IMF, IUCN, OECD, UNEP, UNICEF, UNWTO, WHO, WORLD BANK, WTO, WTTC) retrieved 30 articles that met the eligibility criteria.

Epidemiological and vaccination data from the pandemic, from three databases (GISAID, Our World in Data, and COVID-19 Vaccine Tracker) were also used to write the article.

The total number of references used to write this article amounted to 143 (Tables 2 and 4).

The PRISMA flow chart (Table 1) depicts the process followed for searching the article's literature.

**Table 1:** bibliography search flow chart



**Table 2:** Number of accepted articles per literature search platform

<b>Article Search Platforms</b>	<b>Accepted n= 109</b>
PubMed	65
GoogleScholar	34
ScienceDirect	10
<b>Organization</b>	<b>Accepted n =30</b>
BOOKING (Online travel agency for lodging reservations & other travel)	1
CDC: Centers for Disease Control and Prevention	2
CLIA: Cruise Lines International Association	1
EMA: European Medicines Agency	1
European Commission	1
FDA: Food & Drug Administration	1
IPBES: The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services	1
ICAO: International Civil Aviation Organization	1
IMF: International Monetary Fund	1
IUNC: International Union for Conservation of Nature	1
OECD: Organization for Economic Cooperation and Development	4
TUI GROUP: Tourism Union International Group	1
UNEP: United Nations Environment Programme	1
UNICEF: United Nations International Children's Emergency Fund	1
UNODC: United Nations Office on Drugs and Crime	1
UNWTO: United Nations World Tourism Organization	1
WHO: World Health Organization	7
WTO: World Trade Organization	2
WTTC: World Travel & Tourism Council	1
<b>Data Platforms</b>	<b>n= 4</b>
GISAID	1
Our World in Data	1
COVID-19 Vaccine Tracker	2
<b>TOTAL</b>	<b>143</b>

**Table 3:** Eligibility criteria for articles by thematic section and keywords

<b>Thematic section</b>	<b>Keywords</b>	<b>Eligibility criteria</b>
<b>Zoonosis</b>	Zoonosis	Definition
<b>Transmission of zoonoses</b>	Modes of transmission of zoonotic diseases	Direct, indirect contact, consumption of food and water, transmission by carrier
	The natural host of pathogens	Definition
	The intermediate host of pathogens	Definition
<b>Classification of zoonoses</b>	Categories of zoonotic diseases	pathogens, mode of transmission, and pathogen reservoir hosts
<b>Dynamics of zoonosis typology</b>	Dynamics or typology of zoonosis	Size and dynamics of zoonotic disease. Its evolution from animals to man
<b>Infectious diseases and epidemics</b>	Infectious diseases and epidemics	Diseases and global health, medical breakthroughs
	Biodiversity, natural ecosystems, and zoonoses	Human activities and degradation of biodiversity, disturbance of wildlife balance
<b>Human Activities and Epidemics of Zoonoses</b>	Emerging diseases and human activities	emerging diseases and travel, trade, urbanization, migration, human behavior, and global spread
	Human environments, wild animals, pathogens, and zoonoses	Wild animals near domestic animals and in human dwellings. Risk and occurrence of diseases
<b>Human activities (direct)</b>	Deforestation and disease	Diseases after deforestation
	Reforestation and diseases	Diseases after reforestation
	Wildlife consumption and disease	Diseases caused by eating wild animal meat
<b>Human activities (indirect)-Climate Change</b>	Climate change temperature, rainfall, floods, environmental conditions, and disease	Climate change, biodiversity loss, ecosystems, life cycles and geographic distribution of vectors (arthropods, mammals) pathogens, temperature rainfall, flooding, environmental conditions (humidity, standing water), and disease outbreak
<b>International travel and trade</b>	Travel, trade, and the spread of zoonotic diseases	Travel, trade epidemics, and pandemics
<b>Intense urbanization</b>	Urbanization and zoonoses	Urban cities, poor sanitation, lack of cleanliness, and disease
<b>The migration of populations</b>	Migration and epidemics	Movement of populations and diseases Spread of diseases from endemic to non-endemic countries
<b>Human behavior</b>	Human behavior and disease	Sexual behavior, drug use

**Table 3:** Eligibility criteria for articles by thematic section and keywords

<b>Thematic section</b>	<b>Keywords</b>	<b>Eligibility criteria</b>
<b>The natural and intermediate host</b>	SARS-COV-2, SARS-COV, MERS-COV, gene sequence	Familial origin, gene sequence, and association
	SARS-COV-2 cell structure	Virus cellular structure, proteins, and mode of human invasion
	Natural host SARS-COV-2	Wild animals are hosts of the virus
	Intermediate host SARS-COV-2	Wild or domestic animals' intermediate hosts of the virus
<b>Symptoms and clinical picture of COVID-19 disease</b>	COVID-19 disease	Symptoms, clinical picture of patients, organic complications
<b>Modes of transmission of SARS-CoV-2 and the cause of the pandemic</b>	Transmission of SARS-COV-2 Symptomatic and asymptomatic carriers	Modes of transmission, respiratory system, human contacts, symptomatic asymptomatic carriers
<b>The effect of weather and air pollution on the spread and mortality of COVID-19 disease</b>	Weather conditions and the spread of COVID-19	Temperature, humidity, reproduction rate, and cases of COVID-19
	Climatic conditions, containment measures, and spread	Temperature, humidity, and outbreaks with or without public health protection measures
	Air pollution and COVID-19	Concentrations of harmful atmospheric particles and cases of COVID-19.
<b>Infections and deaths from COVID-19, mortality rates, excess mortality</b>	Cases, deaths, mortality	Daily cases and deaths, excess mortality
<b>SARS-CoV-2 variants and the waves of the pandemic</b>	SARS-COV-2 variants	SARS-COV mutations, variants of concern, variants of interest
	Waves of the pandemic	variants, cases, deaths, and pandemic waves, continents
<b>Public health and health systems</b>	Lockdown and infection mitigation	Lockdown policies and reduction or increase in cases
	COVID-19 and health systems	Health systems and health service delivery, implications

**Table 3:** Eligibility criteria for articles by thematic section and keywords

<b>Thematic section</b>	<b>Keywords</b>	<b>Eligibility criteria</b>
<b>Global air transport</b>	Air transport and COVID-9	Pandemic and travel, airline passenger seats, airline revenue losses
<b>Global tourism industry</b>	Tourism and COVID-19	Pandemic and international tourist arrivals, overnight stays, cruises, small and medium enterprises, tour operators, job losses, and revenue losses.
<b>World trade</b>	Trade and COVID-19	Pandemic and trade in products and services
<b>Food security and nutrition</b>	Food, supply chains, and COVID-19	Pandemic and food, exports, imports, product availability and prices, supply systems, agricultural products, poor countries, malnutrition
<b>Education</b>	Education and COVID-19	Lockdown and training. Schools, Universities and distance education, the international student movement
<b>Society and psychology of citizens</b>	Lockdown and human activities	Daily life, exercise, sports, social relationships, and Lockdown.
	Lockdown and psychological effects	Psychological feelings (anxiety, depression), families, students, students, elderly, and Lockdown. Healthcare personnel and cases of COVID-19, psychological effects
<b>Therapeutic developments in the treatment of the pandemic</b>	Therapeutic methods and vaccinations for COVID-19	Approved, drugs and Vaccines, Pharmaceutical companies, and vaccines. Types of vaccines. Vaccinations by continent

**Table 4:** Accepted articles by thematic section, keywords, search platform and author

Thematic section	Keywords	Search Platform	Name of first author / acceptable
Zoonosis	Zoonosis	CDC	<a href="https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html">https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html</a>
Transmission of zoonoses	Modes of transmission of zoonotic diseases	IUCN.ORG	Kock Richard <a href="https://doi.org/10.2305/IUCN.CH.2022.01.en">https://doi.org/10.2305/IUCN.CH.2022.01.en</a>
	The natural host of pathogens	ScienceDirect	Wegner Giulia DOI: <a href="https://doi.org/10.1016/j.eclinm.2022.101386">https://doi.org/10.1016/j.eclinm.2022.101386</a>
	The intermediate host of pathogens		
Classification of zoonoses	Categories of zoonotic diseases	PubMed WHO WHO	Leaf Filho Walter PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/358776135/">PMC8776135</a> <a href="https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON410">https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON410</a> <a href="https://worldhealthorg.shinyapps.io/mpx_global/">https://worldhealthorg.shinyapps.io/mpx_global/</a>
Dynamics of zoonosis typology	Dynamics or typology of zoonosis	PubMed	Wolfe Nathan PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/357095142/">PMC7095142</a>
Infectious diseases and epidemics	Infectious diseases and epidemics	GoogleScholar	Gresham Louise <a href="https://doi.org/10.3402/ehj.v6i0.19912">https://doi.org/10.3402/ehj.v6i0.19912</a>
		GoogleScholar	Hays ISBN: 1851096639 (ebook)
	Biodiversity and zoonoses	GoogleScholar UNEP IPBES UNODC	Loh Elizabeth <a href="http://doi.org/10.1089/vbz.2013.1563">http://doi.org/10.1089/vbz.2013.1563</a> <a href="https://www.unenvironment.org/resources/report/preventing-future-zoonotic-disease-outbreaks-protecting-environment-animals-and">https://www.unenvironment.org/resources/report/preventing-future-zoonotic-disease-outbreaks-protecting-environment-animals-and</a> <a href="https://www.unep.org/resources/report/ipbes-workshop-report-biodiversity-and-pandemics">https://www.unep.org/resources/report/ipbes-workshop-report-biodiversity-and-pandemics</a> <a href="https://www.unodc.org/documents/wwcr/2020/Wildlife_crime_Pangolin_UNODC.pdf">https://www.unodc.org/documents/wwcr/2020/Wildlife_crime_Pangolin_UNODC.pdf</a>
Human Activities and Epidemics of Zoonoses	Emerging diseases and human activities	CDC	<a href="https://www.cdc.gov/mmwr/pdf/rr/rr4305.pdf">https://www.cdc.gov/mmwr/pdf/rr/rr4305.pdf</a>
		PubMed	Olivero Jesus PMID: PMC5662765
		PubMed	Quammen David PMID: PMC3584488
	Human environments, wild animals, pathogens, and zoonoses	GoogleScholar	Plowright Raina <a href="https://doi.org/10.1098/rspb.2014.2124">https://doi.org/10.1098/rspb.2014.2124</a>
		GoogleScholar	Reuter Kim <a href="https://doi.org/10.1371/journal.pone.0153192">https://doi.org/10.1371/journal.pone.0153192</a>
		GoogleScholar	Afelt Aneta <a href="https://doi.org/10.1016/j.meegid.2017.12.009">https://doi.org/10.1016/j.meegid.2017.12.009</a>
		ScienceDirect	Karesh William <a href="https://doi.org/10.1016/S0140-6736(12)61678-X">https://doi.org/10.1016/S0140-6736(12)61678-X</a>
GoogleScholar	Keesing Felicia <a href="http://dx.doi.org/10.1038/nature09575">http://dx.doi.org/10.1038/nature09575</a>		
GoogleScholar	Halliday Fletcher <a href="http://dx.doi.org/10.1038/s41467-019-13049-w">http://dx.doi.org/10.1038/s41467-019-13049-w</a>		





**Table 4:** Accepted articles by thematic section, keywords, search platform and author

Thematic section	Keywords	Search Platform	Name of first author / acceptable	
<b>The natural and intermediate host</b>	SARS-COV-2, SARS-COV, MERS-COV, gene sequence	PubMed ScienceDirect	Mousavizadeh Leila <a href="https://doi.org/10.1016/j.jmii.2020.03.022">https://doi.org/10.1016/j.jmii.2020.03.022</a> Docea Anca PMID: PMC7169834	
	SARS-COV-2 and cellular structure	PubMed Google Scholar PubMed	Carfi Angelo PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/349096/">PMC7349096</a> Datta Deblina doi:10.1001/jama.2020.22717 Del Rio Carlos PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/3019677/">PMC8019677</a>	
	Natural host SARS-COV-2	ScienceDirect PubMed PubMed ScienceDirect Google Scholar	Zhou Hong <a href="https://doi.org/10.1016/j.cub.2020.05.023">https://doi.org/10.1016/j.cub.2020.05.023</a> Zhou Peng PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/37095418/">PMC7095418</a> Chan Jasper PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/37126491/">PMC7126491</a> Nguyen Thanh <a href="https://doi.org/10.1016/j.mlwa.2022.100328">https://doi.org/10.1016/j.mlwa.2022.100328</a> Ren Lili <a href="https://doi.org/10.1101/2020.06.30.175778">https://doi.org/10.1101/2020.06.30.175778</a>	
	Intermediate host SARS-COV-2		PubMed	Menachery Vineet PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/37095988/">PMC7095988</a>
			PubMed	Xiao Kangpeng, PMID: <b>32380510</b>
PubMed			Zhang Tao <a href="https://doi.org/10.1016/j.cub.2020.03.022">https://doi.org/10.1016/j.cub.2020.03.022</a>	
PubMed			Lam Tommy Tsan PMID: <b>32218527</b> , DOI: <a href="https://doi.org/10.1371/journal.ppat.1008421">10.1371/journal.ppat.1008421</a>	
PubMed			Liu Ping. PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/37224457/">PMC7224457</a>	
PubMed			Shi Jianzhong PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/37164390/">PMC7164390</a>	
Google Scholar			Kim Young PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/37144857/">PMC7144857</a>	
Google Scholar			Worobey Michael DOI: <a href="https://doi.org/10.1126/science.abp8715">10.1126/science.abp8715</a>	
PubMed			Oude Munnink PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/37857398/">PMC7857398</a>	
PubMed			Oreshkova Nadia <a href="https://doi.org/10.2807/1560-7917.ES.2020.25.23.2001005">https://doi.org/10.2807/1560-7917.ES.2020.25.23.2001005</a>	
PubMed	Enserink Martin DOI: <a href="https://doi.org/10.1126/science.368.6496.1169">10.1126/science.368.6496.1169</a>			
PubMed	Ji Wei PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/37138088/">PMC7138088</a>			
PubMed	Shi Jianzhong PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/37164390/">PMC7164390</a>			
WHO	<a href="https://www.who.int/emergencies/disease-outbreak-news/item/2020-DON301">https://www.who.int/emergencies/disease-outbreak-news/item/2020-DON301</a>			
<b>Symptoms and clinical picture of COVID-19 disease</b>	COVID-19 disease	Google Scholar PubMed PubMed Google Scholar	Guan Wei-Jie <a href="https://www.nejm.org/doi/10.1056/nejmoa2002032">https://www.nejm.org/doi/10.1056/nejmoa2002032</a> Huang Chaolin PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/37159299/">PMC7159299</a> Wang Dawei PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/32031570/">32031570</a> Datta S. DOI: <a href="https://doi.org/10.1001/jama.2020.22717">10.1001/jama.2020.22717</a>	

**Table 4:** Accepted articles by thematic section, keywords, search platform and author

Thematic section	Keywords	Search Platform	Name of first author / acceptable
<b>Modes of transmission of SARS-CoV-2 and the cause of the pandemic</b>	Transmission of SARS-COV-2 Symptomatic and asymptomatic carriers	PubMed	Dhand Rajiv PMCID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">PMC7462404</a>
		PubMed	van Doremalen Neeltje PMCID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">PMC7121658</a>
		PubMed	Zhao Hongjun PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">32525469</a>
		PubMed	Zuo YiYuo PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">33236896</a>
		PubMed	Gao Qin Yan PMCID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">PMC7162053</a>
		Google Scholar	Zhang Renyi <a href="https://doi.org/10.1073/pnas.2009637117">https://doi.org/10.1073/pnas.2009637117</a>
		PubMed	Wu Yongjian PMCID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">PMC7158584</a>
		PubMed	Medema Gertjan doi: <a href="https://doi.org/10.1021/acs.estlett.0c00357">10.1021/acs.estlett.0c00357</a>
		PubMed	Mallapaty Smriti DOI: <a href="https://doi.org/10.1038/d41586-020-00973-x">10.1038/d41586-020-00973-x</a>
		PubMed	Ommer Saad DOI: <a href="https://doi.org/10.1001/jama.2020.20892">10.1001/jama.2020.20892</a>
PubMed	Sanche Steven PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">32255761</a>		
<b>The effect of weather and air pollution on the spread and mortality of COVID-19 disease</b>	Weather and spread of COVID-19	Google Scholar	Chatziprodromidou I. doi: <a href="https://doi.org/10.1101/2020.05.10.20069732">https://doi.org/10.1101/2020.05.10.20069732</a>
		ScienceDirect	Wang Yaqi <a href="https://doi.org/10.1016/j.scitotenv.2020.139984">https://doi.org/10.1016/j.scitotenv.2020.139984</a>
		PubMed	Qi Hongchao PMCID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">PMC7167225</a>
<b>The effect of weather and air pollution on the spread and mortality of COVID-19 disease</b>	Climatic conditions, containment measures, and spread	PubMed	Livadiotis George PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">32469989</a>
		PubMed	Paraskevis Dimitrios PMCID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">PMC7765762</a>
		PubMed	Jüni Peter PMCID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">PMC7259972</a>
		Google Scholar	Oliveiros B. Doi: <a href="https://doi.org/10.1101/2020.03.05.20031872">https://doi.org/10.1101/2020.03.05.20031872</a>
		Air pollution and COVID-19	PubMed
	PubMed	Ogen Yaron PMCID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">PMC7151460</a>	
	PubMed	Travaglio Marco PMCID: <a href="https://pubmed.ncbi.nlm.nih.gov/3525469/">PMC7571423</a>	
	ScienceDirect	Wu Yu <a href="https://doi.org/10.1016/j.scitotenv.2020.139051">https://doi.org/10.1016/j.scitotenv.2020.139051</a>	
<b>Infections and deaths from COVID-19, mortality rates, excess mortality</b>	Cases, deaths, Mortality	Ourworldindata.org WHO	<a href="https://ourworldindata.org/coronavirus#explore-the-global-situation">https://ourworldindata.org/coronavirus#explore-the-global-situation</a> <a href="https://www.who.int/news/item/05-05-2022-14.9-million-excess-deaths-were-associated-with-the-covid-19-pandemic-in-2020-and-2021">https://www.who.int/news/item/05-05-2022-14.9-million-excess-deaths-were-associated-with-the-covid-19-pandemic-in-2020-and-2021</a>

**Table 4:** Accepted articles by thematic section, keywords, search platform and author

Thematic section	Keywords	Search Platform	Name of first author / acceptable
<b>SARS-CoV-2 variants and the waves of the pandemic</b>	SARS-COV-2 variants	WHO	<a href="https://www.who.int/docs/default-source/coronaviruse/situation-reports/20220713_weekly_epi_update_100.pdf?sfvrsn=503e4d74_3&amp;download=true">https://www.who.int/docs/default-source/coronaviruse/situation-reports/20220713_weekly_epi_update_100.pdf?sfvrsn=503e4d74_3&amp;download=true</a>
	Waves of the pandemic	GISAID Ourworldindata.org	<a href="https://www.gisaid.org/hcov19-variants/">https://www.gisaid.org/hcov19-variants/</a> <a href="https://ourworldindata.org/coronavirus#explore-the-global-situation">https://ourworldindata.org/coronavirus#explore-the-global-situation</a>
<b>Public health and systems</b>	Lockdown and infection mitigation	PubMed	Doumas Micheal PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/32513503/">32513503</a>
		PubMed	Moris Dimitrios PMCID: <a href="https://pubmed.ncbi.nlm.nih.gov/PMC8378029/">PMC8378029</a>
	COVID-19 and health systems	Google Scholar	Nalbandian Michele <a href="https://www.ghsindex.org/wp-content/uploads/2019/10/2019-Global-Health-Security-Index.pdf">https://www.ghsindex.org/wp-content/uploads/2019/10/2019-Global-Health-Security-Index.pdf</a>
		WHO	<a href="https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2020.1">https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2020.1</a>
<b>Global and European economy</b>	COVID-19, global and European economy	OECD	<a href="https://doi.org/10.1787/39a88ab1-en">https://doi.org/10.1787/39a88ab1-en</a>
		OECD	<a href="https://doi.org/10.1787/0d1d1e2e-en">https://doi.org/10.1787/0d1d1e2e-en</a>
		IMF	<a href="https://www.imf.org/en/Publications/GFSR/Issues/2020/10/13/global-financial-stability-report-October-2020">https://www.imf.org/en/Publications/GFSR/Issues/2020/10/13/global-financial-stability-report-October-2020</a>
		European Commission	<a href="https://ec.europa.eu/info/sites/info/files/economy-finance/ip136_en_2.pdf">https://ec.europa.eu/info/sites/info/files/economy-finance/ip136_en_2.pdf</a>
		WOLDBANK.ORG	Blake Paul <a href="https://blogs.worldbank.org/voices/2020-year-review-impact-covid-19-12-charts">https://blogs.worldbank.org/voices/2020-year-review-impact-covid-19-12-charts</a>
<b>Global air transport</b>	Air transport and COVID-9	ICAO	<a href="https://www.icao.int/sustainability/Documents/COVID-19/ICAO_Coronavirus_Econ_Impact.pdf">https://www.icao.int/sustainability/Documents/COVID-19/ICAO_Coronavirus_Econ_Impact.pdf</a>

**Table 4:** Accepted articles by thematic section, keywords, search platform and author

Thematic section	Keywords	Search Platform	Name of first author / acceptable
Global tourism industry	Tourism and COVID-19	UNWTO	<a href="https://www.e-unwto.org/doi/epdf/10.18111/wtobarometereng.2020.18.1.6">https://www.e-unwto.org/doi/epdf/10.18111/wtobarometereng.2020.18.1.6</a>
		WTTC	<a href="https://wttc.org/Research/Economic-Impact/Recovery-Scenarios">https://wttc.org/Research/Economic-Impact/Recovery-Scenarios</a>
		CLIA	<a href="https://cruising.org/-/media/Facts-and-Resources/Cruise-Industry-COVID-19-FAQs_August-13-2020">https://cruising.org/-/media/Facts-and-Resources/Cruise-Industry-COVID-19-FAQs_August-13-2020</a>
		TUI Group	<a href="https://www.tuigroup.com/en-en/investors/news/2020/ir-news/20200813">https://www.tuigroup.com/en-en/investors/news/2020/ir-news/20200813</a>
		Booking Holdings	<a href="https://s201.q4cdn.com/865305287/files/doc_news/2020/08/06/BKNG-Q2-2020-Press-Release-Final.pdf">https://s201.q4cdn.com/865305287/files/doc_news/2020/08/06/BKNG-Q2-2020-Press-Release-Final.pdf</a>
	OECD	<a href="https://read.oecd-ilibrary.org/view/?ref=137_137392-qsvjt75vnh&amp;title=Rebuilding-tourism-for-the-future-COVID-19-policy-response-and-recovery">https://read.oecd-ilibrary.org/view/?ref=137_137392-qsvjt75vnh&amp;title=Rebuilding-tourism-for-the-future-COVID-19-policy-response-and-recovery</a>	
World trade	Trade and COVID-19	WTO	<a href="https://www.wto.org/english/news_e/pres20_e/pr862_e.pdf6">https://www.wto.org/english/news_e/pres20_e/pr862_e.pdf6</a>
		WTO	<a href="https://www.wto.org/english/news_e/news21_e/serv_26jan21_e.htm">https://www.wto.org/english/news_e/news21_e/serv_26jan21_e.htm</a>
Food security and nutrition	Food, supply chains, and COVID-19	Google Scholar	Barrett Christopher <a href="https://doi.org/10.1038/s43016-020-0085-y">https://doi.org/10.1038/s43016-020-0085-y</a>
		Google Scholar	Laborde David DOI: <a href="https://doi.org/10.13140/RG.2.2.36562.58560">10.13140/RG.2.2.36562.58560</a>
		Google Scholar	Katsoras Angelo <a href="https://www.nbc.ca/content/dam/bnc/en/rates-and-analysis/economic-analysis/GeopoliticalBriefing_200629.pdf">https://www.nbc.ca/content/dam/bnc/en/rates-and-analysis/economic-analysis/GeopoliticalBriefing_200629.pdf</a>
		ScienceDirect	Arouna Aminou <a href="https://doi.org/10.1016/j.gfs.2020.100405">https://doi.org/10.1016/j.gfs.2020.100405</a>
		PubMed	Pu Mingzhe PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/337369589/">PMCID: PMC7369589</a>
		Google Scholar	Moseley William DOI: <a href="https://doi.org/10.1017/asr.2020.72">https://doi.org/10.1017/asr.2020.72</a>
	Google Scholar	Torero Maximo <a href="https://doi.org/10.2499/p15738coll2.133762_27">https://doi.org/10.2499/p15738coll2.133762_27</a>	

**Table 4:** Accepted articles by thematic section, keywords, search platform and author

Thematic section	Keywords	Search Platform	Name of first author / acceptable
<b>Education</b>	Education and COVID-19, lockdown, and education	UNICEF	<a href="https://weshare.unicef.org/archive/RemoteLearningFactsheet_Draft_v4-2AM408PZYD7C.html">https://weshare.unicef.org/archive/RemoteLearningFactsheet_Draft_v4-2AM408PZYD7C.html</a>
		OECD	<a href="https://doi.org/10.1787/69096873-en">https://doi.org/10.1787/69096873-en</a>
<b>Society and psychology of citizens</b>	Lockdown and human activities	PubMed	Fountoulakis Konstantinos PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/3605790/">PMC7605790</a>
		Lockdown and psychological effects	PubMed PubMed PubMed PubMed PubMed Google Scholar PubMed ScienceDirect Google Scholar  PubMed PubMed
<b>Therapeutic developments in the treatment of the pandemic</b>	Therapeutic methods and vaccinations for COVID-19	EMA	<a href="https://www.ema.europa.eu/en">https://www.ema.europa.eu/en</a>
		COVID-19 Vaccine Tracker	<a href="https://covid19.trackvaccines.org/vaccines/">https://covid19.trackvaccines.org/vaccines/</a>
		COVID-19 Vaccine Tracker	<a href="https://covid19.trackvaccines.org/trials-vaccines-by-country/">https://covid19.trackvaccines.org/trials-vaccines-by-country/</a>
		FDA	<a href="https://www.fda.gov/">https://www.fda.gov/</a>
		Google Scholar	Malpani, R., and Maitland, A. The People’s Vaccines <a href="https://app.box.com/s/hk2ezb71vf0sla719jx34v0ehs0l22os">https://app.box.com/s/hk2ezb71vf0sla719jx34v0ehs0l22os</a>
		PubMed	Williams Thomas PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/38009632/">PMC8009632</a>
		WHO	<a href="https://news.un.org/en/story/2021/12/1108622">https://news.un.org/en/story/2021/12/1108622</a>
		ourworldindata.org	<a href="https://ourworldindata.org/coronavirus#explore-the-global-situation">https://ourworldindata.org/coronavirus#explore-the-global-situation</a>

**Table 5:** Excluded articles and reasons for exclusion

Thematic section	Keywords	Search Platform	Name of first author / excluded n=18	Exception reason
<b>Human Activities and Epidemics of Zoonoses</b>	Human environments, wild animals, and zoonoses	PubMed	Ricardo Moratelli. PMID: <a href="#">25742261</a>	Duplicate article
<b>Human activities (indirect)-Climate Change</b>	Climate change and disease	PubMed	Gubler D J. PMID: <a href="#">11359689</a>	Duplicate article
<b>The natural and intermediate host</b>	SARS-COV-2, SARS-COV, MERS-COV, gene sequence	PubMed Google Scholar PubMed	Assiri Abdullah. PMCID: <a href="#">PMC4029105</a> Moira Chan-Yeung. PMID: <a href="#">12702616</a> Shi Zhengli. PMCID: <a href="#">PMC7114516</a>	Not relevant to the topic and outside the eligibility criteria
	Natural host SARS-COV-2	PubMed	Ye Zi-Wei. PMID: <a href="#">32226286</a>	Duplicate article
<b>Public health and health systems</b>	COVID-19, health systems and impacts	PubMed	Garcia-Castrillo Luis. PMID: <a href="#">32243317</a>	Not relevant to the topic and outside the eligibility criteria
<b>Global and European economy</b>	COVID-19, Global and European economy	Google Scholar	Anderson <a href="https://www.mdpi.com/2071-1050/12/13/5404#">https://www.mdpi.com/2071-1050/12/13/5404#</a>	Not relevant to the topic and outside the eligibility criteria
		Google Scholar	Bournarakis Ioannis DOI: <a href="#">10.1080/02692171.2013.858669</a>	
<b>Food security and nutrition</b>	Food, supply chains, and COVID-19	Google Scholar	Jane Battersby <a href="https://doi.org/10.1007/s10460-020-10078-w">https://doi.org/10.1007/s10460-020-10078-w</a>	Duplicate article
		PubMed	Bracale Reata. RPMCID: <a href="#">PMC7832660</a>	Duplicate article
		Google Scholar	Clapp Jennifer <a href="https://doi.org/10.1080/03066150.2020.1823838">https://doi.org/10.1080/03066150.2020.1823838</a>	Duplicate article
		Google Scholar	Jim Worstell DOI: <a href="https://doi.org/10.5304/jafscd.2020.093.015">https://doi.org/10.5304/jafscd.2020.093.015</a>	Duplicate article
<b>Society and psychology of citizens</b>	Lockdown και psychological effects	Google Scholar	Békés Vera <a href="https://doi.org/10.1037/int0000214">https://doi.org/10.1037/int0000214</a>	Duplicate article
		PubMed	Choi Namkee. PMCID: <a href="#">PMC3519946</a>	Not relevant to the topic and outside the eligibility criteria
		PubMed	Duan Li. PMCID: <a href="#">PMC7128328</a>	
	PubMed	Tsai Hsiu-Hsin. PMCID: <a href="#">PMC6986028</a>		
	Students, healthcare personnel, and psychological effects	PubMed	Grassi Luigi. DOI: <a href="#">10.1159/000012416</a>	Duplicate article