

Table 2: Characteristics of the reviews and number of studies in each country

First author	No. of studies referenced within each review*	No. of participants within each review*	Aim of review
Abdelaziz ¹¹	4 (25)	217 (334)	This review of the literature analyses how HCoVs, in general, and SARS-CoV-2, in particular, affect the nervous system, highlights the various underlying mechanisms, addresses the associated neurological and psychiatric manifestations, and identifies the neurological risk factors involved.
Abdullahi ¹²	60	10314 (11069)	[T]o summarize the evidence on the neurological and musculoskeletal symptoms of the disease. This may help with early diagnosis, prevention of disease spread, and treatment planning.
Abu-rumeileh ¹³	52	58 (73)	[T]o provide a comprehensive and updated overview of all case reports and series of COVID-19-related GBS to identify predominant clinical, laboratory, and neurophysiological patterns and to discuss the possible underlying pathophysiology.
Agyeman ¹⁴	24	8438	To estimate the prevalence of olfactory and gustatory dysfunctions (OGDs) among patients infected with novel coronavirus disease 2019 (COVID-19). ¹
Almqvist ¹⁵	41 (378)	11509 (14418)	[T]o systematically summarize neurological and neuroimaging manifestations of all known HCoVs in order to provide possibilities to predict short- and long-term neurological complications of COVID-19.
Asadi-Pooya ¹⁶	6	765 (not stated)	[To] discuss the evidence on the occurrence of central nervous system (CNS) involvement and neurological manifestations in patients with COVID-19.
Bhatia ¹⁷	30	115	[T]o report the characteristics of stroke in patients with COVID-19.
Carrillo-Larco ¹⁸	8	12	[T]o summarize the main features of patients with GBS and COVID-19.
Ceravolo ¹⁹	18 (36)	346 (not stated)	[T]o gather and present the current evidence informing rehabilitation of patients with COVID-19 and/or describing the consequences due to the disease and its treatment.
Collantes ²⁰	47 (49)	6094 (6335)	[T]o determine the neurological manifestations and complications, including laboratory findings, and outcomes among patients with COVID-19 101 infection.
Correia ²¹	4 (7)	329 (409)	To describe the main neurological manifestations related to coronavirus infection in humans.
Di Carlo ²²	19	6958 (12157)	[T]o analyse the overall rate of neurologic symptoms among COVID-19 patients. Secondary objective was to compare the results between patients with severe and non-severe infection.
Dinakaran ²³	31 (12)	2552 (399)	[To] report the available evidence of neuropsychiatric morbidity during the current COVID-19 crisis. The authors also discuss the postulated neuronal mechanisms of the corona virus infection sequelae.
Fatima ²⁴	6	39	[T]o determine the aetiology, underlying risk factors, and outcomes among patients with COVID-19 presenting with stroke.
Ghannam ²⁵	43 (42)	314 (82)	To clarify the neurological complications of SARS-CoV-2 infection including the potential mechanisms and therapeutic options.
Gittermann ²⁶	24	30	[T]o analyse the available evidence on [the] ... symptoms of Guillain-Barré syndrome associated with COVID-19 ... in the adult population.

Katal ²⁷	21 (28)	681 (not stated)	[To] systematically review ... the available imaging findings of patients diagnosed with neurological symptoms associated with coronavirus infections.
Katyal ²⁸	11	16	[To] analyse ... the current literature on neuromuscular complications associated with SARS-COV-2 and highlighted possible mechanisms of neuromuscular invasion.
Leonardi ²⁹	9 (29)	510 (not stated)	[To examine] neurological manifestations associated with COVID-19
Liguoro ³⁰	11 (65)	34 (7480)	[T]o systematically review main clinical characteristics and outcomes of SARS-CoV-2 infections in paediatric age.
Montalvan ³¹	20 (67)	749	To review the neurological aspects of SARS-cov2 and other coronavirus, including transmission pathways, mechanisms of invasion into the nervous system, and mechanisms of neurological disease.
Narula ³²	11	13	[To] review ... current literature on seizures linked with SARS-COV 2 infection
Nepal ³³	37	3152	[T]o inform and improve decision-making among the physicians treating COVID-19 by presenting a systematic analysis of the neurological manifestations experienced within these patients.
Orrù ³⁴	87	6890	[To review] neurological complications ... of SARS-COV-2
Paliwali ³⁵	80	>15858	[To] focus ... on the neuromuscular manifestations of SARS-CoV-2 infection.
Panda ³⁶	26	3707	[T]o determine neurological manifestations of COVID-19.
Pinzon ³⁷	33	7113 (7559)	To conduct a systematic review and meta-analysis on the neurologic characteristics in patients with COVID-19.
Pousa ³⁸	28	199	[T]o summarize the most common extrapulmonary manifestations in paediatric patients with COVID-19, as well as to discuss clinical, epidemiological, and pathophysiological aspects of these clinical presentations in children.
Raschetti ³⁹	74	176	[T]o clarify the transmission route, clinical features and outcomes of ... SARS-CoV-2 ... in neonates.
Rogers ⁴⁰	12 (72)	1048 (3559)	[T]o assess the psychiatric and neuropsychiatric presentations of SARS, MERS, and COVID-19.
Scoppettuolo ⁴¹	40 (42)	1640 (903)	[T]o provide a clinical approach of SARS-CoV-2 neurological complications based on the direct or indirect (systemic/ immune-mediated) role of the SARS-CoV-2 in their genesis.
Sharifan ⁴²	177 (208)	17595 (not stated)	To summarize available information regarding the potential effects of different types of CoV on the nervous system and describes the range of clinical neurological complications that have been reported thus far in COVID-19.
Taherifard ⁴³	21 (22)	489 (57)	[T]o systematically review the neurological complications in patients with SARS-CoV-2 infection and the methods used to diagnose both neurological complications and coronavirus infection.
Tan ⁴⁴	37 (39)	4720 (135)	[T]o characterize the clinical characteristics, neuroimaging findings, and outcomes of AIS [Acute ischemic stroke] in COVID-19 patients.
Trevisanuto ⁴⁵	26	44	To summarise currently reported neonatal cases of SARS-CoV-2 infection.
Tsai ⁴⁶	36 (142)	3116 (not stated)	[To r]eview and integrate the neurologic manifestations of the Coronavirus Disease 2019 (COVID-19) pandemic, to aid medical practitioners who are combating the newly derived infectious disease.
Tsivgoulis ⁴⁷	13 (not stated)	1641 (not stated)	[T]o present the neurological manifestations associated with SARS-CoV-2 infection and COVID-19. ... We also evaluated the impact of the COVID-19 pandemic on the health care of neurological patients.

Uncini ⁴⁸	33	21 (42)	[T]o clarify the clinical and electrophysiological phenotype, to discuss, on the basis of the available data, whether the disease mechanism could be parainfective or post-infective and to speculate on the possible pathogenesis.
Valiuddin ⁴⁹	26	>61	[To] update the clinical manifestations of COVID-19 concentrating on the neurological associations that have been described, including broad ranges in both central and peripheral nervous systems.
Vonck ⁵⁰	21 (20)	3575 (3423)	[T]o perform a review to describe neurological manifestations in patients with COVID-19 and possible neuro-invasive mechanisms of Sars-CoV-2.
Wang ⁵¹	41	4345 (not stated)	[T]o systematically collect and investigate the clinical manifestations and evidence of neurological involvement in COVID-19.
Werner ⁵²	14 (not stated)	3351 (not stated)	[To] conduct ... a review of the reported data for studies concerning COVID-19 pathophysiology, neurological manifestations, and neuroscience provider recommendations and guidelines.
Whittaker ⁵³	32 (31)	2582 (2504)	[To review] the virus' effects systemically, including that of the nervous system.
Wilson ⁵⁴	10	330 (not stated)	[T]o evaluate and summarize the current status of the COVID-19 literature at it applies to neurology and neurosurgery. Neurological symptomatology, neurological risk factors for poor prognosis, pathophysiology for neuro-invasion, and actions taken by neurological or neurosurgical services to manage the current COVID-19 crisis are reviewed.
Zahra ⁵⁵	23	12314	[T]o investigate the diagnostic value of symptoms of anosmia and dysgeusia for COVID-19.

*Many reviews referenced the same papers, in some cases reviews stated a different number of studies than were referenced within the review, some reviews did not state no. of participants, or total no. of participants, (no. in brackets is total no. of studies/participants where the review included studies not relevant to this review, e.g. reviews of symptoms of other coronaviruses, or no. stated differed from no. found), when reviews differed in their report of participants nos. within the same study a consensus was assumed

Country	No. studies in total	No. participants in total (where stated)	No. studies where no. of participants were not stated (within reviews)
Austria	1	1	
Bangladesh	1	7	
Belgium	4	134	
Brazil	6	256	2
Canada	3	135	1
China	148	27445	12
Europe	2	1837	
France	29	2569	4
France/Spain	1	1	
France/Switzerland	1	6	
Germany	11	188	1
Hong Kong	1	50	
India	6	99	
Indonesia	1	1	
Iran	20	100	5
Israel	2	170	
Italy	61	3708	7
Japan	3	3	
Kuwait	1	2	
Latin America	1	6	
Mexico	2	2	
Morocco	1	1	
Netherlands	4	447	1
Norway	1	2	
Poland/USA	1	u/k	1
Peru	1	1	
Romania	1	126	
Russia	1	1	
Saudi Arabia	2	2	
Singapore	1	870	
South Korea	5	3276	
Spain	24	5393	6
Sudan	1	1	
Sweden	2	2441	
Switzerland	7	17	1
Thailand	1	u/k	1
Turkey	11	176	
United Arab Emirates	2	1	1
United Kingdom	19	4916	2
USA	65	11004	11
Country not stated	156	2134	69
Total: 37 different countries (+ 3 dyads)	611 novel studies	more than 67529 participants	125 studies where participants could not be counted