Supplementary material

A systematic review and meta-analysis of autism spectrum disorder prevalence in Latin America and the Caribbean

Supplementary tables

Table S1. PRISMA 2020 checklist 2

Table S2. MOOSE checklist 3

Table S3. Deviations from the registered protocol 4

Table S4. Search strategies 5

Table S5. Diagnostic definitions 7

Table S6. Studies excluded at full-text 8

Table S7. Risk of bias (JBI) 10

Supplementary figures

Figure S1. Prevalence of autism spectrum disorder per 1,000, by sex (prespecified) 10

Figure S2. Prevalence of historical Asperger syndrome per 10,000, by study and country (post hoc) 11

Figure S3. Prevalence of autism spectrum disorder per 1,000, by case-identification method (post hoc) 11

Figure S4. Prevalence of autism spectrum disorder per 1,000, by geographic coverage (exploratory) 11

Table S1. PRISMA 2020 checklist

Section	Item	Checklist item (abridged)	Location where item is reported
Title	1	Identify the report as a systematic review	p. 1
Abstract	2	See the PRISMA 2020 for Abstracts checklist	pp. 1–2
Introduction	3	Rationale	Introduction (p. 3)
	4	Objectives	Introduction (p. 3)
Methods	5	Eligibility criteria	Methods, Eligibility criteria (p. 4)
	6	Information sources	Methods, Search strategy (p. 4)
	7	Search strategy	Methods, Search strategy (p. 4); Table S3
	8	Selection process	Methods, Study selection and data extraction (p. 5)
	9	Data collection process	Methods, Study selection and data extraction (p. 5)
	10a	Data items: outcomes	Methods, Study selection and data extraction (p. 5)
	10b	Data items: other variables	Methods, Study selection and data extraction (p. 5)
	11	Study risk of bias assessment	Methods, Risk of bias (p. 6); Table S6
	12	Effect measures	Methods, Data synthesis (p. 6)
	13a	Synthesis methods: eligibility for each synthesis	Methods, Data synthesis (p. 6)
	13b	Synthesis methods: data preparation	Methods, Study selection and data extraction (p. 5)
	13c	Synthesis methods: tabulation and display	Methods, Data synthesis (p. 6); Table 1; Figure 1
	13d	Synthesis methods: model and rationale	Methods, Data synthesis (p. 6)
	13e	Synthesis methods: exploring heterogeneity	Methods, Data synthesis (p. 6)
	13f	Synthesis methods: sensitivity analyses	Methods, Data synthesis (p. 6)
	14	Reporting bias assessment	Methods, Data synthesis (p. 6)
	15	Certainty assessment	Methods, Certainty of evidence (p. 7)
Results	16a	Study selection	Results (p. 7); Figure 2
	16b	Excluded studies	Table S5
	17	Study characteristics	Results (p. 7); Table 1
	18	Risk of bias in studies	Results, Risk of bias (p. 8); Table 1; Table S6
	19	Results of individual studies	Table 1; Figure 1
	20a	Results of syntheses: characteristics and risk of bias	Results (p. 8)
	20b	Results of syntheses: statistical results	Results, Prevalence (pp. 8–9); Table 2; Figure 1
	20c	Results of syntheses: heterogeneity investigations	Results (p. 9); Figures S3–S4
	20d	Results of syntheses: sensitivity analyses	Results (p. 8); Table 2 footnote
	21	Reporting biases	Not assessed statistically (<10 studies); Methods, Data synthesis; Discussion (p. 10)
	22	Certainty of evidence	Results (p. 9); Table 2
Discussion	23a	General interpretation	Discussion (p. 9)
	23b	Limitations of the evidence	Discussion (p. 10)
	23c	Limitations of the review processes	Discussion (p. 10)
	23d	Implications	Discussion (p. 10)
Other information	24a	Registration	Abstract (p. 1); Methods (p. 3)
	24b	Protocol access	PROSPERO CRD42023425738 (Abstract, p. 1)
	24c	Amendments to protocol	Table S7
	25	Support	Abstract (p. 1); title page
	26	Competing interests	Title page
	27	Availability of data, code and other materials	Title page; extracted data are in Table 1, Figure 1 and Figures S1–S4; analysis code available on request

Source: Page MJ et al. BMJ 2021;372:n71. Item wording abridged.

Table S2. MOOSE checklist (Meta-analyses Of Observational Studies in Epidemiology)

Item	Recommendation (abridged)	Location where item is reported
Reporting of background		
1	Problem definition	Introduction (p. 3)
2	Hypothesis statement	Introduction (p. 3): objectives stated; no hypothesis (descriptive review)
3	Description of study outcome(s)	Introduction (p. 3); Methods (p. 4)
4	Type of exposure or intervention used	Not applicable (prevalence review)
5	Type of study designs used	Methods, Eligibility criteria (p. 4)
6	Study population	Methods, Eligibility criteria (p. 4)
Reporting of search strategy		
7	Qualifications of searchers	Methods (pp. 4–5): reviewers identified by initials; title page
8	Search strategy, including time period and keywords	Methods, Search strategy (p. 4); Table S3
9	Effort to include all available studies, including contact with authors	Methods (p. 4): reference lists, previous reviews, ASD specialist; contact with authors not reported
10	Databases and registries searched	Methods (p. 4); Table S3
11	Search software used, name and version	Methods (p. 5): Systematic Review Accelerator, Rayyan
12	Use of hand searching	Methods (p. 4): reference lists of eligible studies and previous reviews
13	List of citations located and those excluded, with justification	Figure 2; Table S5
14	Method of addressing articles published in languages other than English	Methods (p. 4): no language restrictions; SciELO searched in Spanish
15	Method of handling abstracts and unpublished studies	Methods (p. 4): any publication type eligible; ProQuest Dissertations & Theses searched
16	Description of any contact with authors	Not reported
Reporting of methods		
17	Description of relevance or appropriateness of studies assembled	Methods, Eligibility criteria (p. 4)
18	Rationale for the selection and coding of data	Methods, Study selection and data extraction (p. 5)
19	Documentation of how data were classified and coded	Methods (p. 5); Table S4
20	Assessment of confounding	Not applicable; case-ascertainment differences explored by subgroup (Methods, p. 6)
21	Assessment of study quality, including blinding of quality assessors	Methods, Risk of bias (p. 6); Table S6; assessors were not blinded
22	Assessment of heterogeneity	Methods, Data synthesis (p. 6)
23	Description of statistical methods	Methods, Data synthesis (pp. 6–7)
24	Provision of appropriate tables and graphics	Tables 1–2; Figures 1–2; Figures S1–S4
Reporting of results		
25	Graphic summarizing individual study estimates and overall estimate	Figure 1
26	Table giving descriptive information for each study	Table 1
27	Results of sensitivity testing	Results (p. 8); Table 2 footnote
28	Indication of statistical uncertainty of findings	Results (pp. 8–9): 95% CIs, I^2, T^2
Reporting of discussion		
29	Quantitative assessment of bias	Methods (p. 7); Discussion (p. 10)
30	Justification for exclusion	Table S5
31	Assessment of quality of included studies	Results, Risk of bias (p. 8); Table 2
Reporting of conclusions		
32	Consideration of alternative explanations for observed results	Discussion (p. 9)
33	Generalization of the conclusions	Discussion (pp. 9–10)
34	Guidelines for future research	Discussion (p. 10)
35	Disclosure of funding source	Abstract (p. 1); title page

Source: Stroup DF et al. JAMA 2000;283:2008–2012.

Table S3. Deviations from the registered protocol (PROSPERO CRD42023425738, version 1.1, 21 May 2023)

Domain	Registered protocol	Conducted review	Reason or consequence
Population	Participants aged 5 years and over	No age restriction at eligibility; included studies covered ages 1–15 years	The age criterion was not applied at screening; all results are presented as childhood estimates
Context	Latin American countries	Latin America and the Caribbean	The search strategy and eligibility assessment included Caribbean countries and territories
Diagnostic criteria	DSM-III, DSM-IV, DSM-IV-TR, DSM-5 or ICD-10	ICD-9 also accepted	To capture older registry-based studies; no included study used ICD-9
Grey literature	ProQuest theses, Google Scholar and national research registries	ProQuest Dissertations & Theses only	Not completed; acknowledged as a limitation (Discussion)
Deduplication	EndNote X9	Systematic Review Accelerator Deduplicator	Change of tool; no effect on eligibility
Screening calibration	Two random samples of 50 records screened by both reviewers, target agreement ≥90%	Not documented	Not reported as completed; screening was nevertheless done independently in duplicate
Screening reviewers	HSR and NPB	JFC and JGA, with HSR resolving disagreements	Reallocation of tasks within the team
Extraction form piloting	Pre-designed form	Form piloted before extraction; number of pilot studies and revisions not documented	Reported transparently as a reporting limitation
Analysis software	JBI SUMARI	R, meta package	Greater flexibility for subgroup and sensitivity analyses; same model and transformation
Additional outcomes	Prevalence by diagnostic criteria or screening tests; subgroups by setting and population demographics	Sex (demographics, prespecified); national vs subnational coverage (setting, exploratory); historical Asperger syndrome, case-identification method, adults and rural populations (post hoc)	Labelled as prespecified, exploratory or post hoc in Methods and Table 2
Certainty of evidence	Not specified	Adapted GRADE	Added to support interpretation
Mexican estimate	Not specified	Crude count used in the primary analysis; weighted estimate in a sensitivity analysis	Consistency with other studies; impact reported (Results, Table 2)

Table S4. Full search strategies

Original search: all databases searched from inception to 15 May 2023 without date or language limits. Update: 16 September 2026, same strategies, restricted to records added from 15 May 2023 onwards. The LAC block follows Ruiz et al. (Glob Health Promot 2018;25:60–64) and names 28 countries and territories (Argentina, Bahamas, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Uruguay, Venezuela) plus regional terms (Latin America, Central America, South America, Caribbean, West Indies, Antilles, Mesoamerica, Amazon, Andes, Patagonia); territories not named individually, such as Aruba, are captured through these regional terms. The epidemiological-design block used the filter of Avau et al. (J Med Libr Assoc 2021;109:599–608).

Database	Search strategy	Records
PubMed	("Child Development Disorders, Pervasive"[MH] OR "Autism Spectrum Disorder"[MH] OR "Autistic disorder"[MH] OR "Asperger Syndrome"[MH] OR Autis*[TW] OR Asperger[TW]) AND (prevalence[MH] OR prevalence[TW] OR incidence[TW] OR Epidemiology[TW] OR Cohort[TW] OR Observational[TW] OR survey[TW] OR cross-sectional[TW]) AND ("latin america"[MeSH Terms] OR "latin america*"[Title/Abstract] OR "latinamerica*"[Title/Abstract] OR "latinoamerica*"[Title/Abstract] OR "Hispanoamerica"[Title/Abstract] OR "iberoamerica*"[Title/Abstract] OR "ibero americ*"[Title/Abstract] OR "panamerican*"[Title/Abstract] OR "central america"[MeSH Terms] OR "central america*"[Title/Abstract] OR "centroamerica*"[Title/Abstract] OR "mesoamerica*"[Title/Abstract] OR "meso america*"[Title/Abstract] OR "middle america*"[Title/Abstract] OR "south america"[MeSH Terms] OR "south america*"[Title/Abstract] OR "southamerica*"[Title/Abstract] OR "sudamerica*"[Title/Abstract] OR "America del sur"[Title/Abstract] OR "caribbean region"[MeSH Terms] OR "Caribbean"[Title/Abstract] OR "caribe*"[Title/Abstract] OR "west indies"[MeSH Terms] OR "west indi*"[Title/Abstract] OR "antill*"[Title/Abstract] OR "indians, south american"[MeSH Terms] OR "indians, central american"[MeSH Terms] OR "amerindian*"[Title/Abstract] OR "Indians"[Title/Abstract] OR "american indian*"[Title/Abstract] OR "native america*"[Title/Abstract] OR "patagoni*"[Title/Abstract] OR "Andes"[Title/Abstract] OR "andean*"[Title/Abstract] OR "amazon*"[Title/Abstract] OR "argentin*"[Affiliation] OR "argentin*"[Title/Abstract] OR "bolivia*"[Affiliation] OR "bolivia*"[Title/Abstract] OR "brazil*"[Affiliation] OR "brasil*"[Affiliation] OR "brasil*"[Title/Abstract] OR "brazil*"[Title/Abstract] OR "colombia*"[Affiliation] OR "colombia*"[Title/Abstract] OR "chile*"[Affiliation] OR "chile*"[Title/Abstract] OR "ecuador*"[Affiliation] OR "ecuator*"[Affiliation] OR "ecuador*"[Title/Abstract] OR "guiana*"[Affiliation] OR "guiana*"[Title/Abstract] OR "guyan*"[Affiliation] OR "guyan*"[Title/Abstract] OR "paraguay*"[Affiliation] OR "paraguay*"[Title/Abstract] OR "peru*"[Affiliation] OR "peru*"[Title/Abstract] OR "surinam*"[Affiliation] OR "surinam*"[Title/Abstract] OR "uruguay*"[Affiliation] OR "uruguay*"[Title/Abstract] OR "venez*"[Affiliation] OR "venez*"[Title/Abstract] OR "belize*"[Affiliation] OR "belize*"[Title/Abstract] OR "costa ric*"[Affiliation] OR "costarric*"[Affiliation] OR "costaric*"[Affiliation] OR "costa ric*"[Title/Abstract] OR "costarric*"[Title/Abstract] OR "costaric*"[Title/Abstract] OR "salvador*"[Affiliation] OR "salvador*"[Title/Abstract] OR "guatemal*"[Affiliation] OR "guatemal*"[Title/Abstract] OR "hondur*"[Affiliation] OR "hondur*"[Title/Abstract] OR "nicaragu*"[Affiliation] OR "nicaragu*"[Title/Abstract] OR "panam*"[Affiliation] OR "panam*"[Title/Abstract] OR "mexico"[MeSH Terms] OR "mexic*"[Affiliation] OR "mexic*"[Title/Abstract] OR "mejic*"[Title/Abstract] OR "baham*"[Affiliation] OR "baham*"[Title/Abstract] OR "cuba*"[Affiliation] OR "cuba*"[Title/Abstract] OR "dominic*"[Affiliation] OR "dominic*"[Title/Abstract] OR "haiti*"[Affiliation] OR "haiti*"[Title/Abstract] OR "jamaic*"[Affiliation] OR "jamaic*"[Title/Abstract] OR "puerto rico"[MeSH Terms] OR "puerto ric*"[Title/Abstract] OR "puertorric*"[Title/Abstract] OR "puertoric*"[Title/Abstract])	434
EMBASE	('Child Development Disorders, Pervasive'/exp OR 'Autism Spectrum Disorder'/exp OR 'Autistic disorder'/exp OR 'Asperger Syndrome'/exp OR Autis* OR Asperger) AND (prevalence/exp OR prevalence OR incidence OR Epidemiology OR Cohort OR Observational OR survey OR cross-sectional) AND (latin america'/exp OR 'latin america*':ti,ab OR latinamerica*:ti,ab OR latinoamerica*:ti,ab OR Hispanoamerica:ti,ab OR iberoamerica*:ti,ab OR 'ibero americ*':ti,ab OR panamerican*:ti,ab OR 'central america'/exp OR 'central america*':ti,ab OR centroamerica*:ti,ab OR mesoamerica*:ti,ab OR 'meso america*':ti,ab OR 'middle america*':ti,ab OR 'south america'/exp OR 'south america*':ti,ab OR southamerica*:ti,ab OR sudamerica*:ti,ab OR 'America del sur':ti,ab OR 'caribbean region'/exp OR Caribbean:ti,ab OR caribe*:ti,ab OR 'west indies'/exp OR 'west indi*':ti,ab OR antill*:ti,ab OR 'indians, south american'/exp OR 'indians, central american'/exp OR amerindian*:ti,ab OR Indians:ti,ab OR 'american indian*':ti,ab OR 'native america*':ti,ab OR patagoni*:ti,ab OR Andes:ti,ab OR andean*:ti,ab OR amazon*:ti,ab OR argentin*:ff OR argentin*:ti,ab OR bolivia*:ff OR bolivia*:ti,ab OR brazil*:ff OR brasil*:ff OR brazil*:ti,ab OR brasil*:ti,ab OR colombia*:ff OR colombia*:ti,ab OR chile*:ff OR chile*:ti,ab OR ecuador*:ff OR ecuator*:ff OR ecuador*:ti,ab OR guiana*:ff OR guiana*:ti,ab OR guyan*:ff OR guyan*:ti,ab OR paraguay*:ff OR paraguay*:ti,ab OR peru*:ff OR peru*:ti,ab OR surinam*:ff OR surinam*:ti,ab OR uruguay*:ff OR uruguay*:ti,ab OR venez*:ff OR venez*:ti,ab OR belize*:ff OR belize*:ti,ab OR 'costa ric*':ff OR costarric*:ff OR costaric*:ff OR 'costa ric*':ti,ab OR costarric*:ti,ab OR costaric*:ti,ab OR salvador*:ff OR salvador*:ti,ab OR guatemal*:ff OR guatemal*:ti,ab OR hondur*:ff OR hondur*:ti,ab OR nicaragu*:ff OR nicaragu*:ti,ab OR panam*:ff OR panam*:ti,ab OR mexico/exp OR mexic*:ff OR mexic*:ti,ab OR mejic*:ti,ab OR baham*:ff OR baham*:ti,ab OR cuba*:ff OR cuba*:ti,ab OR dominic*:ff OR dominic*:ti,ab OR haiti*:ff OR haiti*:ti,ab OR jamaic*:ff OR jamaic*:ti,ab OR 'puerto rico'/exp OR 'puerto ric*':ti,ab OR puertorric*:ti,ab OR puertoric*:ti,ab)	498
CINAHL	((MH "Child Development Disorders, Pervasive+") OR (MH "Autism Spectrum Disorder+") OR (MH "Autistic disorder+") OR (MH "Asperger Syndrome+") OR Autis* OR Asperger) AND ((MH prevalence+) OR prevalence OR incidence OR Epidemiology OR Cohort OR Observational OR survey OR cross-sectional) AND ((MH "latin america+") OR (TI "latin america*" OR AB "latin america*") OR (TI latinamerica* OR AB latinamerica*) OR (TI latinoamerica* OR AB latinoamerica*) OR (TI Hispanoamerica OR AB Hispanoamerica) OR (TI iberoamerica* OR AB iberoamerica*) OR (TI "ibero americ*" OR AB "ibero americ*") OR (TI panamerican* OR AB panamerican*) OR (MH "central america+") OR (TI "central america*" OR AB "central america*") OR (TI centroamerica* OR AB centroamerica*) OR (TI mesoamerica* OR AB mesoamerica*) OR (TI "meso america*" OR AB "meso america*") OR (TI "middle america*" OR AB "middle america*") OR (MH "south america+") OR (TI "south america*" OR AB "south america*") OR (TI southamerica* OR AB southamerica*) OR (TI sudamerica* OR AB sudamerica*) OR (TI "America del sur" OR AB "America del sur") OR (MH "caribbean region+") OR (TI Caribbean OR AB Caribbean) OR (TI caribe* OR AB caribe*) OR (MH "west indies+") OR (TI "west indi*" OR AB "west indi*") OR (TI antill* OR AB antill*) OR (MH "indians, south american+") OR (MH "indians, central american+") OR (TI amerindian* OR AB amerindian*) OR (TI Indians OR AB Indians) OR (TI "american indian*" OR AB "american indian*") OR (TI "native america*" OR AB "native america*") OR (TI patagoni* OR AB patagoni*) OR (TI Andes OR AB Andes) OR (TI andean* OR AB andean*) OR (TI amazon* OR AB amazon*) OR (AF argentin*) OR (TI argentin* OR AB argentin*) OR (AF bolivia*) OR (TI bolivia* OR AB bolivia*) OR (AF brazil*) OR (AF brasil*) OR (TI brazil* OR AB brazil*) OR (TI brasil* OR AB brasil*) OR (AF colombia*) OR (TI colombia* OR AB colombia*) OR (AF chile*) OR (TI chile* OR AB chile*) OR (AF ecuador*) OR (AF ecuator*) OR (TI ecuador* OR AB ecuador*) OR (AF guiana*) OR (TI guiana* OR AB guiana*) OR (AF guyan*) OR (TI guyan* OR AB guyan*) OR (AF paraguay*) OR (TI paraguay* OR AB paraguay*) OR (AF peru*) OR (TI peru* OR AB peru*) OR (AF surinam*) OR (TI surinam* OR AB surinam*) OR (AF uruguay*) OR (TI uruguay* OR AB uruguay*) OR (AF venez*) OR (TI venez* OR AB venez*) OR (AF belize*) OR (TI belize* OR AB belize*) OR (AF "costa ric*") OR (AF costarric*) OR (AF costaric*) OR (TI "costa ric*" OR AB "costa ric*") OR (TI costarric* OR AB costarric*) OR (TI costaric* OR AB costaric*) OR (AF salvador*) OR (TI salvador* OR AB salvador*) OR (AF guatemal*) OR (TI guatemal* OR AB guatemal*) OR (AF hondur*) OR (TI hondur* OR AB hondur*) OR (AF nicaragu*) OR (TI nicaragu* OR AB nicaragu*) OR (AF panam*) OR (TI panam* OR AB panam*) OR (MH mexico+) OR (AF mexic*) OR (TI mexic* OR AB mexic*) OR (TI mejic* OR AB mejic*) OR (AF baham*) OR (TI baham* OR AB baham*) OR (AF cuba*) OR (TI cuba* OR AB cuba*) OR (AF dominic*) OR (TI dominic* OR AB dominic*) OR (AF haiti*) OR (TI haiti* OR AB haiti*) OR (AF jamaic*) OR (TI jamaic* OR AB jamaic*) OR (MH "puerto rico+") OR (TI "puerto ric*" OR AB "puerto ric*") OR (TI puertorric* OR AB puertorric*) OR (TI puertoric* OR AB puertoric*))	162

PsycINFO	(MM "Autism Spectrum Disorders" OR MM "Autistic Traits" OR "Autistic disorder" OR "Asperger Syndrome" OR Autis* OR Asperger)) AND (mm "Prevalence" OR "prevalence" OR "incidence" OR "Epidemiology" OR "Cohort" OR "Observational" OR "survey" OR "cross-sectional") AND ("latin america" OR "latin america*" OR latinamerica* OR latinoamerica* OR Hispanoamerica OR iberoamerica* OR "ibero americ*" OR panamerican* OR "central america" OR "central america*" OR centroamerica* OR mesoamerica* OR "meso america*" OR "middle america*" OR "south america" OR "south america*" OR southamerica* OR sudamerica* OR "America del sur" OR "caribbean region" OR Caribbean OR caribe* OR "west indies" OR "west indi*" OR antill* OR "indians, south american" OR "indians, central american" OR amerindian* OR Indians OR "american indian*" OR "native america*" OR patagoni* OR Andes OR andean* OR amazon* OR argentin* OR argentin* OR bolivia* OR bolivia* OR brazil* OR brasil* OR brazil* OR brasil* OR colombia* OR colombia* OR chile* OR chile* OR ecuador* OR ecuator* OR ecuador* OR guiana* OR guiana* OR guyan* OR guyan* OR paraguay* OR paraguay* OR peru* OR peru* OR surinam* OR surinam* OR uruguay* OR uruguay* OR venez* OR venez* OR belize* OR belize* OR "costa ric*" OR costarric* OR costaric* OR "costa ric*" OR costarric* OR costaric* OR salvador* OR salvador* OR guatemal* OR guatemal* OR hondur* OR hondur* OR nicaragu* OR nicaragu* OR panam* OR panam* OR mexico OR mexic* OR mexic* OR mejic* OR baham* OR baham* OR cuba* OR cuba* OR dominic* OR dominic* OR haiti* OR haiti* OR jamaic* OR jamaic* OR "puerto rico" OR "puerto ric*" OR puertorric* OR puertoric*)	547
Scielo	("Trastorno del espectro autista" OR "TEA" OR "Autismo" OR "Asperger" OR "Espectro autista") AND ("Prevalencia" OR "Incidencia" OR "Epidemiologia" OR "Encuesta" OR "Transversal" OR "Observacional")	218
LILACS	(mh:"Child Development Disorders, Pervasive" OR mh:"Autism Spectrum Disorder" OR mh:"Autistic Disorder" OR mh:"Asperger Syndrome" OR tw:"Autis*" OR tw:"Asperger") AND (mh:"Prevalence" OR tw:"prevalence" OR tw:"incidence" OR tw:"screening" OR (mh:"Epidemiologic Studies" OR tw:"case-control" OR (tw:"case" OR tw:"cases") AND (tw:"control" OR tw:"controls") OR tw:"cohort study" OR tw:"cohort analysis" OR tw:"follow up study" OR tw:"follow-up study" OR tw:"observational study" OR tw:"longitudinal" OR tw:"retrospective" OR tw:"cross-sectional" OR tw:"questionnaire" OR tw:"questionnaires" OR tw:"survey")) AND ((mh:"Latin America" OR tw:"latin america*" OR tw:"latinamerica*" OR tw:"latinoamerica*" OR tw:"Hispanoamerica" OR tw:"iberoamerica*" OR tw:"ibero americ*" OR tw:"panamerican*" OR mh:"Central America" OR tw:"central america*" OR tw:"centroamerica*" OR tw:"mesoamerica*" OR tw:"meso america*" OR tw:"middle america*" OR mh:"South America" OR tw:"south america*" OR tw:"southamerica*" OR tw:"sudamerica*" OR tw:"America del sur" OR mh:"Caribbean region" OR tw:"Caribbean" OR tw:"caribe*" OR mh:"West Indies" OR tw:"west indi*" OR tw:"antill*" OR mh:"Indians, South American" OR mh:"Indians, Central American" OR tw:"amerindian*" OR tw:"Indians" OR tw:"american indian*" OR tw:"native america*" OR tw:"patagoni*" OR tw:"Andes" OR tw:"andean*" OR tw:"amazon*" OR tw:"argentin*" OR tw:"bolivia*" OR tw:"brazil*" OR tw:"brasil*" OR tw:"colombia*" OR tw:"chile*" OR tw:"ecuador*" OR tw:"guiana*" OR tw:"guyan*" OR tw:"paraguay*" OR tw:"peru*" OR tw:"surinam*" OR tw:"uruguay*" OR tw:"venez*" OR tw:"belize*" OR tw:"costa ric*" OR tw:"costarric*" OR tw:"costaric*" OR tw:"salvador*" OR tw:"guatemal*" OR tw:"hondur*" OR tw:"nicaragu*" OR tw:"panam*" OR mh:"Mexico" OR tw:"mexic*" OR tw:"mejic*" OR tw:"baham*" OR tw:"cuba*" OR tw:"dominic*" OR tw:"haiti*" OR tw:"jamaic*" OR mh:"Puerto Rico" OR tw:"puerto ric*" OR tw:"puertorric*" OR tw:"puertoric*"))	68
Scopus	TITLE-ABS-KEY(("Autism Spectrum Disorder" OR "Autistic disorder" OR "Asperger Syndrome" OR Autis* OR Asperger) AND ("Prevalence" OR "prevalence" OR "incidence" OR "Epidemiology" OR "Cohort" OR "Observational" OR "survey" OR "cross-sectional") AND ("Argentina" OR "Argentina*" OR "Bolivia" OR "Bolivia*" OR "Brazil" OR "Brasil" OR "Brazil*" OR "Brasil*" OR "Chile" OR "Chile*" OR "Colombia" OR "Colombia*" OR "Costa Rica" OR "Costa Ric*" OR "Cuba" OR "Cuba*" OR "Dominican Republic" OR "Dominican Repub*" OR "Dominicana" OR "Dominican*" OR "Ecuador" OR "Ecuador*" OR "El Salvador" OR "El Salvad*" OR "Guatemala" OR "Guatemala*" OR "Haiti" OR "Haiti*" OR "Honduras" OR "Honduras*" OR "Mexico" OR "Mexico*" OR "México" OR "México*" OR "Nicaragua" OR "Nicaragua*" OR "Panama" OR "Panama*" OR "Panamá" OR "Panamá*" OR "Paraguay" OR "Paraguay*" OR "Peru" OR "Peru*" OR "Perú" OR "Perú*" OR "Puerto Rico" OR "Puerto Ric*" OR "Uruguay" OR "Uruguay*" OR "Venezuela" OR "Venezuela*"))	216
Web of Science	AB = (("Autism Spectrum Disorder" OR "Autistic disorder" OR "Asperger Syndrome" OR Autis* OR "Asperger")) AND ("Prevalence" OR "prevalence" OR "incidence" OR "Epidemiology" OR "Cohort" OR "Observational" OR "survey" OR "cross-sectional") AND ("Argentina" OR "Argentina*" OR "Bolivia" OR "Bolivia*" OR "Brazil" OR "Brasil" OR "Brazil*" OR "Brasil*" OR "Chile" OR "Chile*" OR "Colombia" OR "Colombia*" OR "Costa Rica" OR "Costa Ric*" OR "Cuba" OR "Cuba*" OR "Dominican Republic" OR "Dominican Repub*" OR "Dominicana" OR "Dominican*" OR "Ecuador" OR "Ecuador*" OR "El Salvador" OR "El Salvad*" OR "Guatemala" OR "Guatemala*" OR "Haiti" OR "Haiti*" OR "Honduras" OR "Honduras*" OR "Mexico" OR "Mexico*" OR "México" OR "México*" OR "Nicaragua" OR "Nicaragua*" OR "Panama" OR "Panama*" OR "Panamá" OR "Panamá*" OR "Paraguay" OR "Paraguay*" OR "Peru" OR "Peru*" OR "Perú" OR "Perú*" OR "Puerto Rico" OR "Puerto Ric*" OR "Uruguay" OR "Uruguay*" OR "Venezuela" OR "Venezuela*")	88
ProQuest	(("Autism Spectrum Disorder" OR "Autistic disorder" OR "Asperger Syndrome" OR Autis* OR Asperger)) AND ("Prevalence" OR "prevalence" OR "incidence" OR "Epidemiology" OR "Cohort" OR "Observational" OR "survey" OR "cross-sectional") AND ("Argentina" OR "Argentina*" OR "Bolivia" OR "Bolivia*" OR "Brazil" OR "Brasil" OR "Brazil*" OR "Brasil*" OR "Chile" OR "Chile*" OR "Colombia" OR "Colombia*" OR "Costa Rica" OR "Costa Ric*" OR "Cuba" OR "Cuba*" OR "Dominican Republic" OR "Dominican Repub*" OR "Dominicana" OR "Dominican*" OR "Ecuador" OR "Ecuador*" OR "El Salvador" OR "El Salvad*" OR "Guatemala" OR "Guatemala*" OR "Haiti" OR "Haiti*" OR "Honduras" OR "Honduras*" OR "Mexico" OR "Mexico*" OR "México" OR "México*" OR "Nicaragua" OR "Nicaragua*" OR "Panama" OR "Panama*" OR "Panamá" OR "Panamá*" OR "Paraguay" OR "Paraguay*" OR "Peru" OR "Peru*" OR "Perú" OR "Perú*" OR "Puerto Rico" OR "Puerto Ric*" OR "Uruguay" OR "Uruguay*" OR "Venezuela" OR "Venezuela*")	67

Table S5. Diagnostic categories counted as autism spectrum disorder, by classification

Classification	Categories counted as ASD	Codes
DSM-III (1980)	Infantile autism; childhood-onset pervasive developmental disorder; atypical pervasive developmental disorder	299.0x; 299.9x; 299.8x
DSM-IV (1994) / DSM-IV-TR (2000)	Autistic disorder; Asperger's disorder; pervasive developmental disorder not otherwise specified (PDD-NOS, including atypical autism); childhood disintegrative disorder; Rett's disorder (only when the study counted it within ASD)	299.00; 299.80; 299.80; 299.10; 299.80
DSM-5 (2013) / DSM-5-TR (2022)	Autism spectrum disorder	299.00 (ICD-10-CM F84.0)
ICD-9	Infantile autism; disintegrative psychosis; other specified and unspecified pervasive developmental disorders of childhood	299.0; 299.1; 299.8; 299.9
ICD-10	Childhood autism; atypical autism; other childhood disintegrative disorder; Asperger syndrome; other and unspecified pervasive developmental disorders (Rett syndrome only when counted within ASD by the study)	F84.0; F84.1; F84.3; F84.5; F84.8; F84.9 (F84.2)

Case definitions used by the included studies

Study	Case definition	Subcategories within the ASD total
Dekkers 2015 (Ecuador)	DSM-III or DSM-IV diagnosis by a medical authority	Classical autism 13; Asperger syndrome 13; PDD-NOS 30; childhood disintegrative disorder 1; Rett 0
Fombonne 2016 (Mexico)	DSM-IV-TR, confirmed by diagnostic assessment	Asperger syndrome 6; other subcategory counts not extracted
García-Zambrano 2022 (Colombia)	ICD-10 codes in the national health-service registry	ICD-10 pervasive developmental disorder (F84) codes as defined by the study; individual codes not extracted
Montiel-Nava 2008 (Venezuela)	DSM-IV-TR diagnoses in service records	Autism 1.1 per 1,000; PDD-NOS and Asperger syndrome reported combined (0.6 per 1,000); excluded from the Asperger analysis
van Balkom 2009 (Aruba)	DSM-IV symptoms abstracted from clinical records and classified with an algorithm	Autistic disorder 25; Asperger syndrome 2; PDD-NOS 42

Table S6. Reports excluded at full-text assessment (n = 43) and later overlapping report

#	Reference	Reason for exclusion
1	Magallón-Neri E, Vila D, Santiago K, et al. The prevalence of psychiatric disorders and mental health services utilization by parents and relatives living with individuals with autism spectrum disorders in Puerto Rico. J Nerv Ment Dis. 2018;206(4):226-230. doi:10.1097/NMD.0000000000000760	Not focused on individuals with ASD
2	Autism, screening and Santiago, Chile (title as recorded at screening; full citation could not be located)	Prevalence not reported
3	Rocha MM, Rescorla LA, Emerich DR, et al. Behavioural/emotional problems in Brazilian children: findings from parents' reports on the Child Behavior Checklist. Epidemiol Psychiatr Sci. 2012;22(4):329-338. doi:10.1017/S2045796012000637	Prevalence not reported
4	Flores-Rodríguez Y, Roldán Ceballos O, Albores-Gallo L. Assessing autism with DSM-IV and DSM-5 criteria using the Childhood Autism Rating Scale (CARS). Salud Ment. 2022;45(1):3-10. doi:10.17711/SM.0185-3325.2022.002	Prevalence not reported
5	Alckmin-Carvalho F, Teixeira MCTV, Brunoni D, et al. Identificação de sinais precoces de autismo segundo um protocolo de observação estruturada: um estudo de seguimento. Psico. 2014;45(4):502. doi:10.15448/1980-8623.2014.4.15873	Prevalence not reported
6	Becker MM, Wagner MB, Bosa CA, et al. Translation and validation of Autism Diagnostic Interview-Revised (ADI-R) for autism diagnosis in Brazil. Arq Neuropsiquiatr. 2012;70(3):185-90. doi:10.1590/s0004-282x2012000300006	Prevalence not reported
7	González-Andrade F, Báez N. Neurodevelopmental delay in premature Ecuadorian children born weighing less than 1500 g: a follow-up study. Adv Neurodev Disord. 2020;4(2):207-214. doi:10.1007/s41252-019-00144-8	Prevalence not reported
8	Velez van Meerbeke A, Talero-Gutierrez C, Gonzalez-Reyes R. Prevalence of delayed neurodevelopment in children from Bogotá, Colombia, South America. Neuroepidemiology. 2007;29(1-2):74-7. doi:10.1159/000109499	Prevalence not reported
9	Alva-Diaz C, Huerta-Rosario A, Molina RA, et al. Mental and substance use disorders in Peru: a systematic analysis of the Global Burden of Disease study. J Public Health (Berl). 2022;30(3):629-638. doi:10.1007/s10389-020-01341-9	Prevalence not reported
10	Lejarraga H, Menendez AM, Menzano E, et al. Screening for developmental problems at primary care level: a field programme in San Isidro, Argentina. Paediatr Perinat Epidemiol. 2008;22(2):180-187. doi:10.1111/j.1365-3016.2007.00897.x	Prevalence not reported
11	Naranjo Flórez RA. Caracterización clínica y estado actual de los pacientes con síndrome de Asperger de 0 a 16 años, atendidos en la Fundación Liga Central Contra la Epilepsia y el Hospital de la Misericordia de Bogotá, Colombia. Nova. 2014;12(21):45-55. doi:10.22490/24629448.995	Prevalence not reported
12	Girianelli VR, Tomazelli J, Silva CMFPD, et al. Early diagnosis of autism and other developmental disorders, Brazil, 2013-2019. Rev Saude Publica. 2023;57:21. doi:10.11606/s1518-8787.2023057004710	Prevalence not reported
13	Andia Berazain C, Paz G. Trastorno autista en pacientes de la Caja Nacional de Salud de Cochabamba, enero 2013 al 2015. Rev Cient Cienc Med. 2015;18(1):5-9. LILACS lil-765371	Prevalence not reported
14	Kang L, Liu J, Liu Y, et al. Global, regional, and national disease burden of autism spectrum disorder among children under 5 years from 1990 to 2019: an analysis for the Global Burden of Disease 2019 Study. Asian J Psychiatr. 2023;79:103359. doi:10.1016/j.ajp.2022.103359	Prevalence not reported
15	Guadarrama-Celaya F, Otero-Ojeda GA, Bernardo Pliego-Rivero F, et al. Screening of neurodevelopmental delays in four communities of Mexico and Cuba. Public Health Nurs. 2012;29(2):105-15. doi:10.1111/j.1525-1446.2011.00982.x	Prevalence not reported
16	Castro K, Perry IS, Ferreira GP, et al. Validation of the Brief Autism Mealtime Behavior Inventory (BAMBI) questionnaire. J Autism Dev Disord. 2019;49(6):2536-2544. doi:10.1007/s10803-019-04006-z	Prevalence not reported
17	Machado FP, Palladino RRR, Damasceno LL, et al. Appropriateness of using autism spectrum disorders screening tools in a hearing evaluation service. Folia Phoniatr Logop. 2016;68(2):60-66. doi:10.1159/000446984	Prevalence not reported
18	Schelly D, Jiménez González P, Solís PJ. The diffusion of autism spectrum disorder in Costa Rica: evidence of information spread or environmental effects? Health Place. 2015;35:119-127. doi:10.1016/j.healthplace.2015.07.007	Prevalence not reported
19	de Jesus Torres Pacheco M, Orsati FT, Laurence PG, et al. Low weight, socioeconomics and behavioral issues: examining a population in the Northeast of Brazil. Heliyon. 2019;5(9):e02399. doi:10.1016/j.heliyon.2019.e02399	Prevalence not reported
20	Serra-Pinheiro MA, D'Andrea-Meira I, Angelim AIM, et al. High prevalence of psychiatric comorbidities in children and adolescents at a tertiary epilepsy center. Arq Neuropsiquiatr. 2021;79(6):521-526. doi:10.1590/0004-282X-ANP-2020-0202	Not a general-population sample

21	Samogy-Costa CI, Varella-Branco E, Monfardini F, et al. A Brazilian cohort of individuals with Phelan-McDermid syndrome: genotype-phenotype correlation and identification of an atypical case. J Neurodev Disord. 2019;11(1):13. doi:10.1186/s11689-019-9273-1	Not a general-population sample
22	Talero-Gutiérrez C, Rodríguez M, De La Rosa D, et al. Caracterización de niños y adolescentes con trastornos del espectro autista en una institución de Bogotá, Colombia. Neurología. 2012;27(2):90-96. doi:10.1016/j.nrl.2011.03.005	Not a general-population sample
23	McInnes LA, Nakamine A, Pilorge M, et al. A large-scale survey of the novel 15q24 microdeletion syndrome in autism spectrum disorders identifies an atypical deletion that narrows the critical region. Mol Autism. 2010;1(1):5. doi:10.1186/2040-2392-1-5	Not a general-population sample
24	Ribeiro TC, Farhat LC, Casella EB, et al. Brazilian Portuguese Childhood Autism Spectrum Test: an investigation of the factor structure of autistic traits in school-aged children from Brazil. Braz J Psychiatry. 2022;44(6):650-654. doi:10.47626/1516-4446-2022-2688	Not a general-population sample
25	Jure R, Pogonza R, Rapin I. Autism spectrum disorders (ASD) in blind children: very high prevalence, potentially better outlook. J Autism Dev Disord. 2016;46(3):749-59. doi:10.1007/s10803-015-2612-5	Not a general-population sample
26	Cardona Cardona ML, Escobar Gómez I, Sánchez Acosta D, Carvajal-Castrillón J. Caracterización clínica de niños, niñas y adolescentes atendidos en una unidad de neuropsicología de Medellín, Colombia. Rev Chil Neuropsicol. 2019;14(2):40-44. LILACS biblio-1102372	Not a general-population sample
27	Cuesta-Gómez JL, Manzone LA, Posada-De-La-Paz M. Modified checklist for autism in toddlers cross-cultural adaptation for Argentina. Int J Dev Disabil. 2016;62(2):117-123. doi:10.1179/2047387715Y.0000000006	Not a general-population sample
28	Paula CS, Ribeiro SH, Fombonne E, et al. Brief report: prevalence of pervasive developmental disorder in Brazil: a pilot study. J Autism Dev Disord. 2011;41(12):1738-42. doi:10.1007/s10803-011-1200-6	Denominator limited to screened children
29	Puga C, Pagotto V, Giunta D, et al. Prevalence and incidence of disability based on the Unique Certificate of Disability at a teaching hospital in the Metropolitan Area of Buenos Aires [in Spanish]. Arch Argent Pediatr. 2019;117(3):183-187. doi:10.5546/aap.2019.eng.183	Not a general-population sample
30	Blumenfeld A, Carrizo Olalla J, D'Angelo SI, et al. Language development delay in 24-month-old children at a health care center of the City of Buenos Aires [in Spanish]. Arch Argent Pediatr. 2018;116(4):242-247. doi:10.5546/aap.2018.eng.242	Not a general-population sample
31	Salum GA, Leite LDS, Dos Santos SJE, et al. Prevalence and trends of mental disorders requiring inpatient care in the city of Porto Alegre. Trends Psychiatry Psychother. 2020;42(1):86-91. doi:10.1590/2237-6089-2018-0115	Not a general-population sample
32	Briley PM, Merlo S, Ellis C. Sex differences in childhood stuttering and coexisting developmental disorders. J Dev Phys Disabil. 2022;34(3):505-527. doi:10.1007/s10882-021-09811-y	Not a general-population sample
33	Castaldelli-Maia JM, Bhugra D. Analysis of global prevalence of mental and substance use disorders within countries: focus on sociodemographic characteristics and income levels. Int Rev Psychiatry. 2022;34(1):6-15. doi:10.1080/09540261.2022.2040450	No LAC-specific data
34	Ouellette-Kuntz H, Coo H, Lloyd JE, et al. Trends in special education code assignment for autism: implications for prevalence estimates. J Autism Dev Disord. 2007;37(10):1941-8. doi:10.1007/s10803-006-0326-4	No LAC-specific data
35	Roman-Urrestarazu A, Yáñez C, López-Garí C, et al. Autism screening and conditional cash transfers in Chile: using the Quantitative Checklist (Q-CHAT) for early autism detection in a low resource setting. Autism. 2021;25(4):932-945. doi:10.1177/1362361320972277	Screening instruments only; DSM or ICD criteria not used
36	do Egito JHT, Ferreira GMR, Gonçalves MI, et al. Brief report: factor analysis of the Brazilian version of the Adult Autism Spectrum Quotient. J Autism Dev Disord. 2018;48(5):1847-1853. doi:10.1007/s10803-017-3424-6	Screening instruments only; DSM or ICD criteria not used
37	Torales J, Kadhum M, Zárate G, et al. Wellbeing and mental health among medical students in Paraguay. Int Rev Psychiatry. 2019;31(7-8):598-602. doi:10.1080/09540261.2019.1667172	Screening instruments only; DSM or ICD criteria not used
38	Coelho-Medeiros ME, Bronstein J, Aedo K, et al. Validación del M-CHAT-R/F como instrumento de tamizaje para detección precoz en niños con trastorno del espectro autista. Rev Chil Pediatr. 2019;90(5). doi:10.32641/rchped.v90i5.703	Screening instruments only; DSM or ICD criteria not used
39	Alcaraz Beltrán DK, Araujo Jiménez EA. Síndrome de Asperger y función ejecutiva: estudio en población preescolar en México. Acta Investig Psicol. 2021;11(2):95-104. doi:10.22201/fpsi.20074719e.2021.2.385	Screening instruments only; DSM or ICD criteria not used
40	Bandim JM, Ventura LO, Miller MT, et al. Autism and Möbius sequence: an exploratory study of children in northeastern Brazil. Arq Neuropsiquiatr. 2003;61(2A):181-5. doi:10.1590/s0004-282x2003000200004	Screening instruments only; DSM or ICD criteria not used
41	Yáñez C, Maira P, Elgueta C, et al. Prevalence estimation of autism spectrum disorders in Chilean urban population [in Spanish]. Andes Pediatr. 2021;92(4):519-525. doi:10.32641/andespediatr.v92i4.2503	Screening instruments only; DSM or ICD criteria not used

42	Yáñez C, Maira P, Elgueta C, et al. Estimación de la prevalencia de trastorno del espectro autista en población urbana chilena. Andes Pediatr. 2021;92(4):519-525. doi:10.32641/andespediatr.v92i4.2503 (duplicate record of #41: Spanish-language entry of the same article)	Screening instruments only; DSM or ICD criteria not used
43	Eugenin MI, Moore R, Martinez-Gutierrez J, Perez CA, Valenzuela PM. Screening for autism in Santiago Chile: community perspectives. Int J Child Adolesc Health. 2015;8(4):439-448	Screening instruments only; DSM or ICD criteria not used
–	García-Zambrano S, Pinto-Ocampo RH. How many autistic children are there in Colombia? A nationwide examination of autism through health system data. J Autism Dev Disord. 2026;56(1):401–409. doi:10.1007/s10803-024-06534-9	Identified in the 2026 update; same national registry and population as an included study (García-Zambrano 2022); not added to avoid double counting

Table S7. Risk of bias of included studies (JBI Critical Appraisal Checklist for Studies Reporting Prevalence Data)

Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Yes	Overall risk of bias
Dekkers 2015	Y	N	Y	Y	Y	N	U	Y	Y	6/9	Moderate
Fombonne 2016	N	N	Y	Y	Y	Y	U	Y	N	5/9	Moderate
García-Zambrano 2022	Y	Y	Y	Y	Y	N	N	Y	Y	7/9	Low
Montiel-Nava 2008	N	N	Y	Y	N	Y	N	Y	U	4/9	Moderate
van Balkom 2009	Y	Y	Y	Y	N	Y	U	Y	Y	7/9	Low

Q1 Was the sample frame appropriate to address the target population? Q2 Were study participants recruited in an appropriate way? Q3 Was the sample size adequate? Q4 Were the study subjects and setting described in detail? Q5 Was data analysis conducted with sufficient coverage of the identified sample? Q6 Were valid methods used for the identification of the condition? Q7 Was the condition measured in a standard, reliable way for all participants? Q8 Was there appropriate statistical analysis? Q9 Was the response rate adequate, and if not, was the low response rate managed appropriately? Y, yes; N, no; U, unclear. Overall judgement by number of "yes" ratings: 7–9 low, 4–6 moderate, 0–3 high risk of bias, following Wang et al. (Prevalence of cannabis use around the world: a systematic review and meta-analysis, 2000–2024; PMC11196877).

Figure S1. Prevalence of autism spectrum disorder per 1,000, by sex (prespecified). Sex-specific data were available from two of the five studies; no combined total is shown.

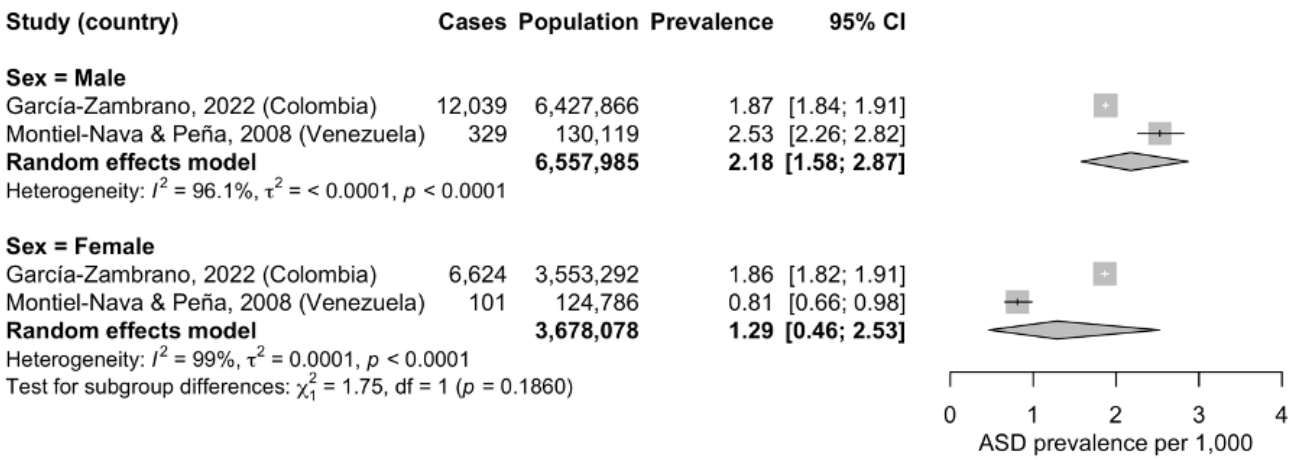

Figure S2. Prevalence of historical Asperger syndrome per 10,000, by study and country (post hoc). The Venezuelan study was excluded because it reported Asperger syndrome and PDD-NOS combined.

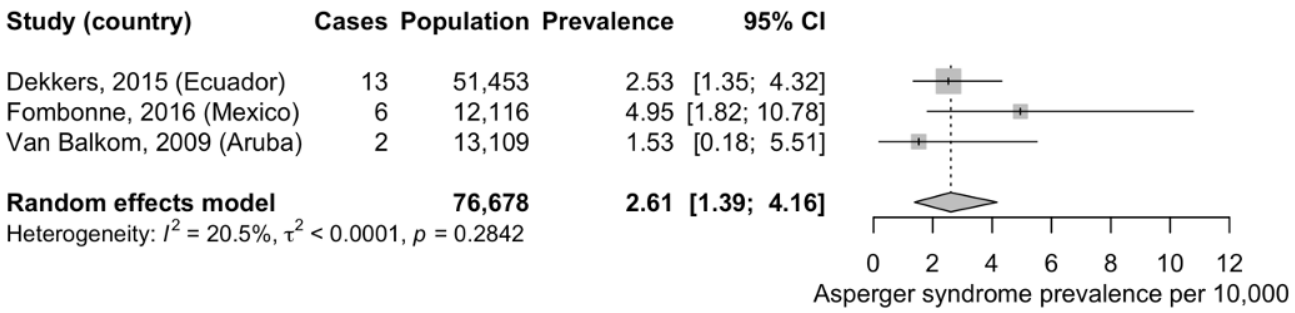

Figure S3. Prevalence of autism spectrum disorder per 1,000, by case-identification method (post hoc).

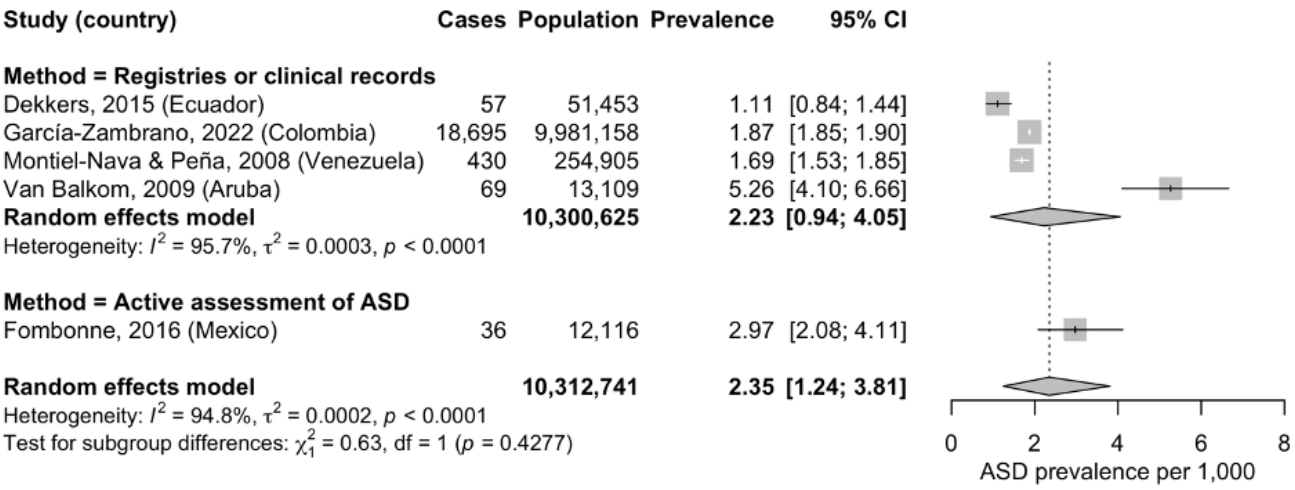

Figure S4. Prevalence of autism spectrum disorder per 1,000, by geographic coverage (exploratory). All forest plots: random-effects model (restricted maximum likelihood), Freeman–Tukey double-arcsine transformation; T^2 on the transformed scale.

