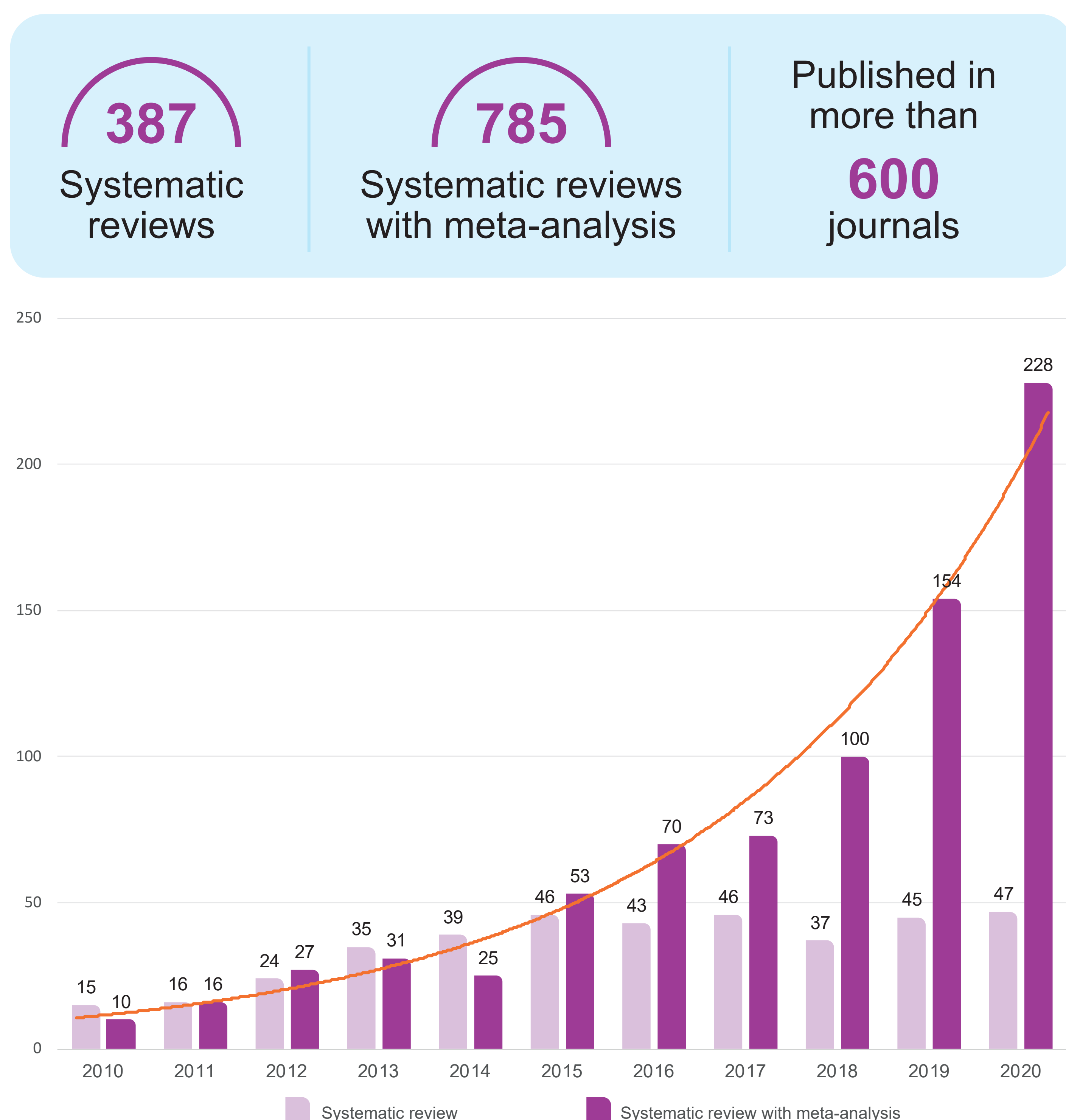


Systematic reviews of prevalence studies need to be reported better

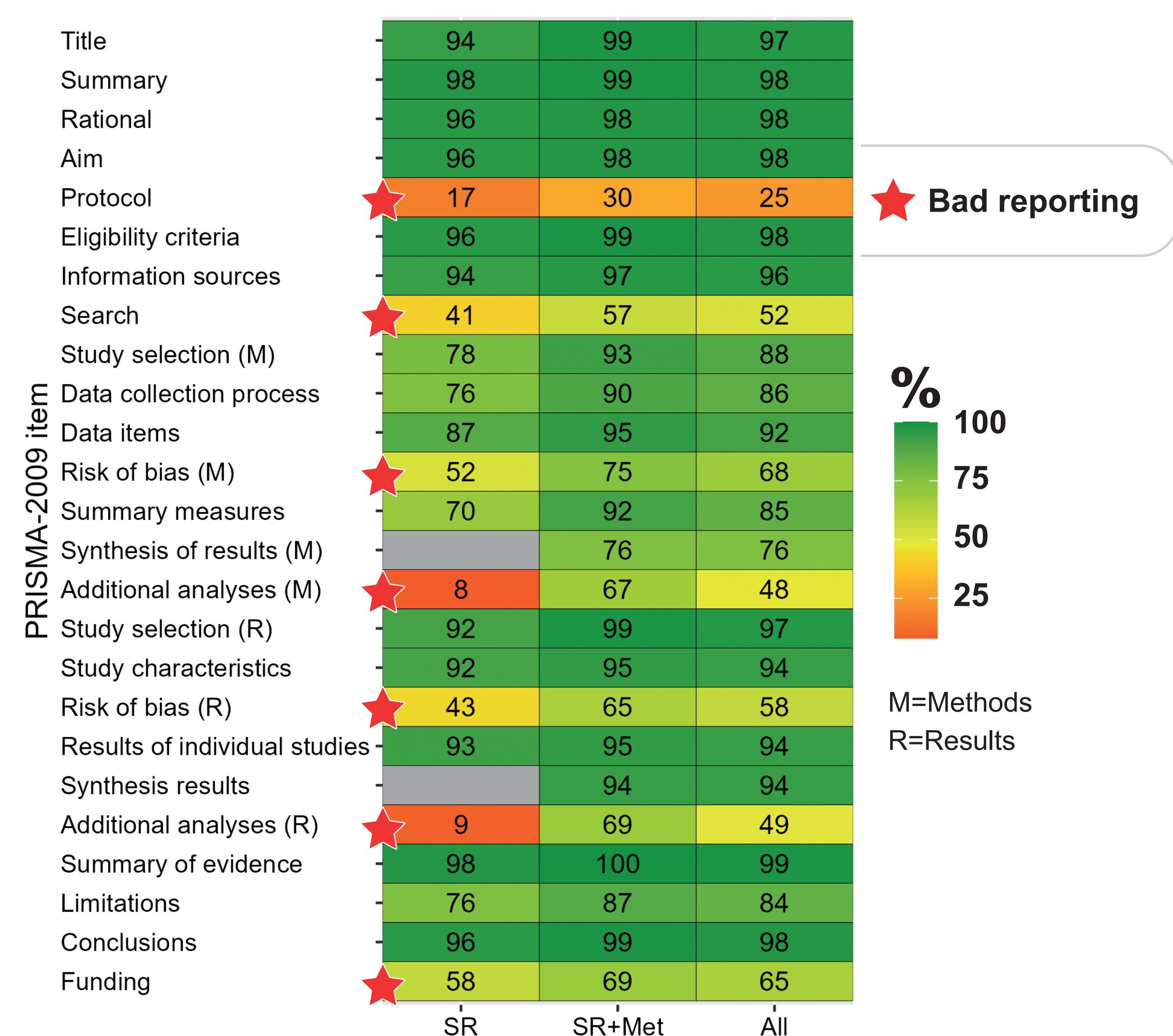
Reporting of systematic reviews that synthesize studies of prevalence: Assessment of 1172 reviews using the PRISMA 2009 guideline

Background: Prevalence studies are a valuable research resource in the assessment of disease burden, health needs and decision-making. They have been used as input for systematic reviews of prevalence.

Results



Completeness of reporting PRISMA 2009



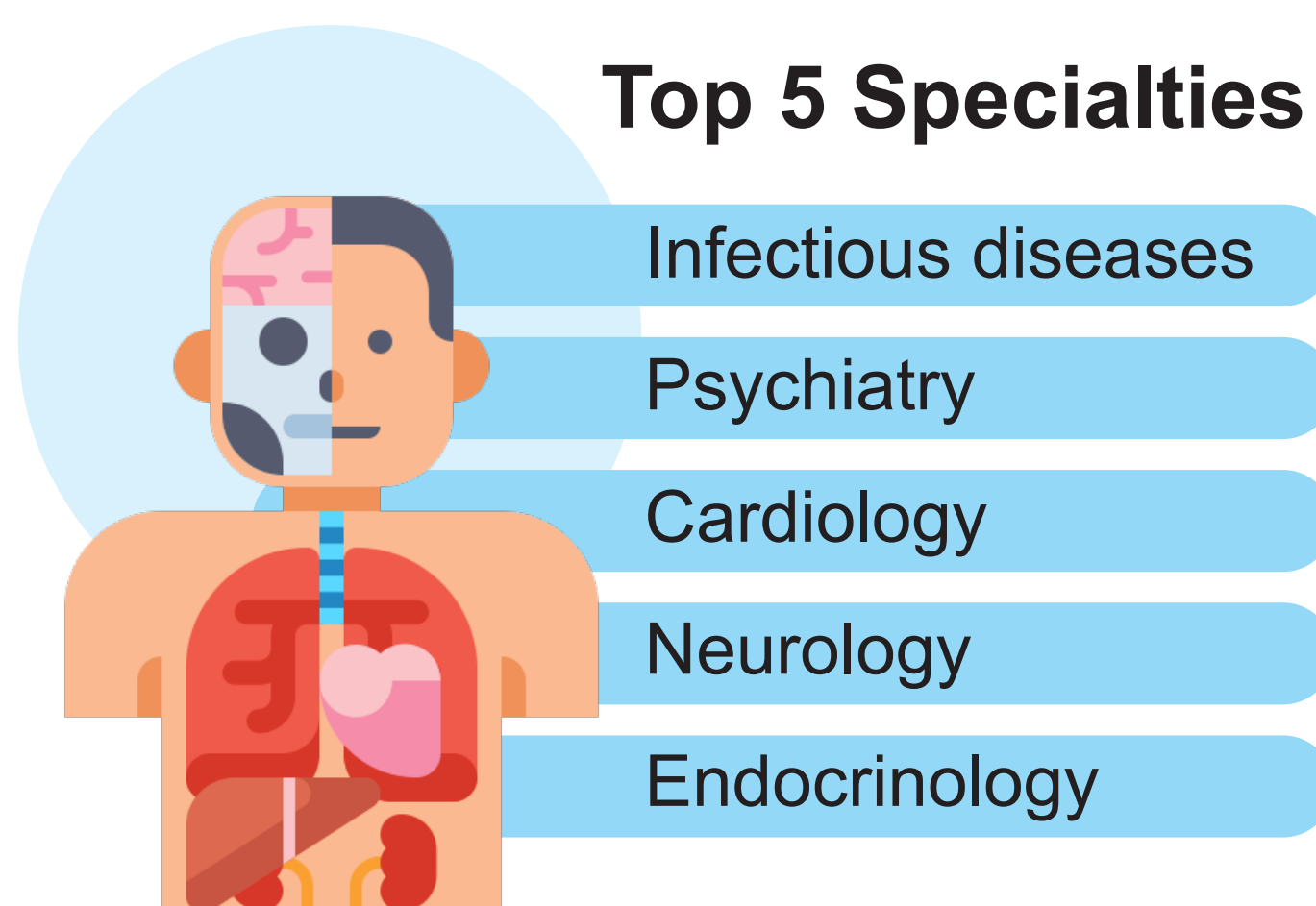
Factors associated with completeness of reporting

- Systematic reviews published more recently and with more authors were, on average, more compliant with the PRISMA 2009 checklist.
- Systematic reviews that included a meta-analysis, used a guideline, and were published in an open access journal were positively correlated with the level of compliance to the PRISMA 2009 checklist.

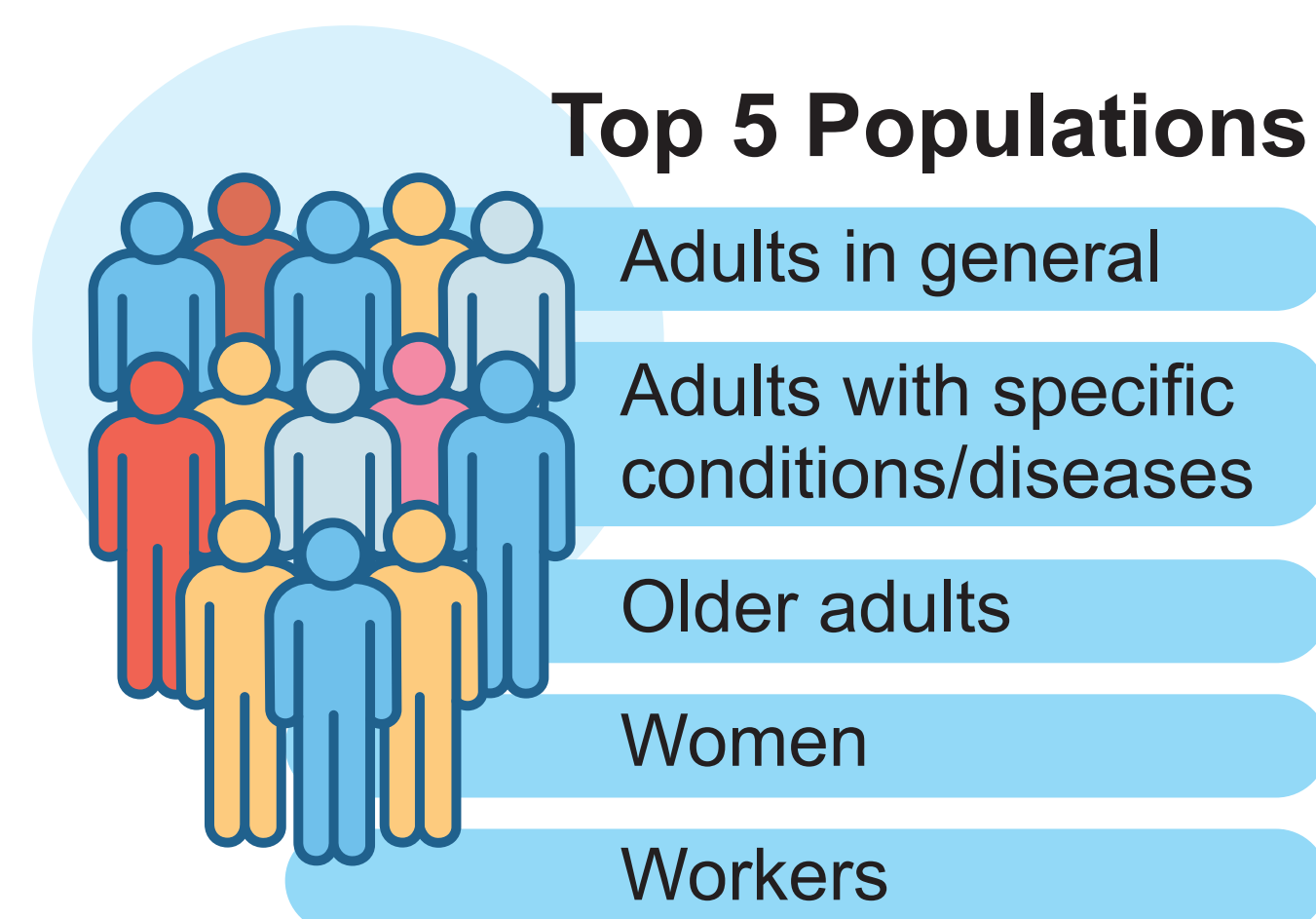
Variable	Coefficient ^a	Confidence Interval (95%)
Year	0.71	(0.46 - 0.96)
Impact Factor	0.06	(0.02 - 0.10)
Open access journal ^b	1.5	(0.12 - 3.0)
Number of authors	0.39	(0.16 - 0.62)
Number of studies included	0.00	(0.00 - 0.01)
Report the use of guidelines to conduct systematic reviews ^{c,d}	7.2	(5.8 - 8.6)
Authors conducted a meta-analysis ^e	12	(10 - 13)
Medical field ^f		
Psychiatry	0.77	(-1.2 - 2.7)
Infectious Diseases	-0.35	(-2.3, 1.6)
Neurology	0.14	(-2.6 - 2.9)
Cardiology	0.58	(-2.0, 3.1)
Endocrinology	-0.45	(-3.3 - 2.3)
Surgery	-1.7	(-4.5 - 1.2)
Behaviours	-0.06	(-3.7, 3.6)

^a Results from multivariable regression analysis. The model includes all the variables on the table.
^b Reference category: Not open access.
^c Authors reported compliance to PRISMA, MOOSE, Cochrane, or other guidelines.
^d Reference category: Author did not use guidelines for conducting their review
^e Reference category: Systematic review without meta-analysis
^f Reference category: Other medical fields

Top 5 Specialties



Top 5 Populations



Methods

- We conducted a systematic review of systematic reviews of studies of prevalence in adult populations published between 2010 and 2020.
- We evaluated the completeness of reporting applying the PRISMA 2009 checklist.
- We did a descriptive analysis and a linear regression analyses to assess the relationship between the compliance to PRISMA and relevant variables.

Discussion: Our review shows the need to provide specific guidance for reporting systematic reviews of prevalence studies. In particular, guidance for developing and registering a protocol of systematic reviews of prevalence studies and tools to assess risk of bias in the studies are needed.

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