

B.1 Clinical search literature search strategy

Searches were constructed using a PICO framework where population (P) terms were combined with Intervention (I) and in some cases Comparison (C) terms. Outcomes (O) are rarely used in search strategies for interventions as these concepts may not be well described in title, abstract or indexes and therefore difficult to retrieve. Search filters were applied to the search where appropriate.

Table 8: Database date parameters and filters used

Database	Dates searched	Search filter used
Medline (OVID)	1946 – 6 July 2020	Exclusions Randomised controlled trials Systematic review studies
Embase (OVID)	1974 – 6 July 2020	Exclusions Randomised controlled trials Systematic review studies
The Cochrane Library (Wiley)	Cochrane Reviews to 2020 Issue 7 of 12 CENTRAL to 2020 Issue 7 of 12	None
Epistemonikos (Epistemonikos Foundation)	Inception – 29 November 2018	None

Medline (Ovid) search terms

1.	exp Sleep Apnea Syndromes/
2.	(sleep* adj4 (apn?ea* or hypopn?ea*)).ti,ab.
3.	(sleep* adj4 disorder* adj4 breath*).ti,ab.
4.	(OSAHS or OSA or OSAS).ti,ab.
5.	(obes* adj3 hypoventil*).ti,ab.
6.	pickwick*.ti,ab.
7.	or/1-6
8.	limit 7 to English language
9.	letter/
10.	editorial/
11.	news/

12.	exp historical article/
13.	Anecdotes as Topic/
14.	comment/
15.	case report/
16.	(letter or comment*).ti.
17.	or/9-16
18.	randomized controlled trial/ or random*.ti,ab.
19.	17 not 18
20.	animals/ not humans/
21.	exp Animals, Laboratory/
22.	exp Animal Experimentation/
23.	exp Models, Animal/
24.	exp Rodentia/
25.	(rat or rats or mouse or mice).ti.
26.	or/19-25
27.	8 not 26
28.	Patient compliance/ or patient dropouts/ or treatment refusal/
29.	(discontinu* or abstention or abstain* or stop* or abandon* or uptak* or acclimat* or mainten* or keep*).ti,ab.
30.	(adhere* or adhering or nonadhere* or non-adhere* or non-adhering or complian* or complying or non-complian* or noncomplian* or concordance or capacitance).ti,ab.
31.	or/28-30
32.	((oral or intraoral or intra-oral) adj3 (device* or prothes* or appliance* or splint*)).ti,ab.
33.	(MAD or MADs or MAS or MRS).ti,ab.
34.	((dental or orthodontic* or orthosis or orthotic) adj3 (device* or prothes* or appliance* or splint*)).ti,ab.
35.	(tongue adj3 (device* or prothes* or appliance* or splint* or retain* or reposition* or stabiliz* or stabilis* or advancement or advancing or retention or protruding or protrude or protruded or protrusion or forward or mouthpiece*)).ti,ab.
36.	(mandib* adj3 (device* or prothes* or appliance* or splint* or advancement or advancing or protruding or protrude or protruded or protrusion or reposition* or position*)).ti,ab.
37.	(positive airway* pressure or PAP or CPAP or aPAP or nCPAP or autoCPAP or auto-CPAP or biPAP or BPAP or NBiPAP or NBPAP or NIV).ti,ab.
38.	(positive adj3 pressure adj (therapy or device* or ventilat*)).ti,ab.
39.	or/32-38
40.	27 and 31 and 39
41.	randomized controlled trial.pt.
42.	controlled clinical trial.pt.
43.	randomi#ed.ti,ab.
44.	placebo.ab.
45.	randomly.ti,ab.
46.	Clinical Trials as topic.sh.
47.	trial.ti.
48.	or/41-47
49.	Meta-Analysis/
50.	exp Meta-Analysis as Topic/

51.	(meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
52.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
53.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
54.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
55.	(search* adj4 literature).ab.
56.	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
57.	cochrane.jw.
58.	((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
59.	or/49-58
60.	40 and (48 or 59)

Embase (Ovid) search terms

1.	exp Sleep Disordered Breathing/
2.	(sleep* adj4 (apn?ea* or hypopn?ea*)).ti,ab.
3.	(sleep* adj4 disorder* adj4 breath*).ti,ab.
4.	(OSAHS or OSA or OSAS).ti,ab.
5.	(obes* adj3 hypoventil*).ti,ab.
6.	pickwick*.ti,ab.
7.	or/1-6
8.	limit 7 to English language
9.	letter.pt. or letter/
10.	note.pt.
11.	editorial.pt.
12.	case report/ or case study/
13.	(letter or comment*).ti.
14.	or/9-13
15.	randomized controlled trial/ or random*.ti,ab.
16.	14 not 15
17.	animal/ not human/
18.	nonhuman/
19.	exp Animal Experiment/
20.	exp Experimental Animal/
21.	animal model/
22.	exp Rodent/
23.	(rat or rats or mouse or mice).ti.
24.	or/16-23
25.	8 not 24
26.	patient compliance/ or patient dropout/ or treatment refusal/
27.	(discontin* or abstention or abstain* or stop* or abandon* or uptak* or acclimat* or mainten* or keep*).ti,ab.
28.	(adhere* or adhering or nonadhere* or non-adhere* or non-adhering or complian* or complying or non-complian* or noncomplian* or concordance or capacitance).ti,ab.
29.	or/26-28
30.	((oral or intraoral or intra-oral) adj3 (device* or prothes* or appliance* or splint*)).ti,ab.

31.	(MAD or MADs or MAS or MRS).ti,ab.
32.	((dental or orthodontic* or orthosis or orthotic) adj3 (device* or prosthesis* or appliance* or splint*)).ti,ab.
33.	(tongue adj3 (device* or prosthesis* or appliance* or splint* or retain* or reposition* or stabilize* or stabilis* or advancement or advancing or retention or protruding or protrude or protruded or protrusion or forward or mouthpiece*)).ti,ab.
34.	(mandib* adj3 (device* or prosthesis* or appliance* or splint* or advancement or advancing or protruding or protrude or protruded or protrusion or reposition* or position*)).ti,ab.
35.	(positive airway* pressure or PAP or CPAP or aPAP or nCPAP or autoCPAP or auto-CPAP or biPAP or BPAP or NBiPAP or NBPAP or NIV).ti,ab.
36.	(positive adj3 pressure adj (therapy or device* or ventilat*)).ti,ab.
37.	or/30-36
38.	25 and 29 and 37
39.	random*.ti,ab.
40.	factorial*.ti,ab.
41.	(crossover* or cross over*).ti,ab.
42.	((doubl* or singl*) adj blind*).ti,ab.
43.	(assign* or allocat* or volunteer* or placebo*).ti,ab.
44.	crossover procedure/
45.	single blind procedure/
46.	randomized controlled trial/
47.	double blind procedure/
48.	or/39-47
49.	systematic review/
50.	meta-analysis/
51.	(meta analy* or metanaly* or metaanaly* or meta regression).ti,ab.
52.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
53.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
54.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
55.	(search* adj4 literature).ab.
56.	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
57.	cochrane.jw.
58.	((multiple treatment* or indirect or mixed) adj2 comparison*).ti,ab.
59.	or/49-58
60.	38 and (48 or 59)

Cochrane Library (Wiley) search terms

#1.	MeSH descriptor: [Sleep Apnea Syndromes] explode all trees
#2.	(sleep* near/4 (apnea* or apnoea* or hypopnea* or hypopnoea*)):ti,ab
#3.	(sleep* near/4 disorder* near/4 breath*):ti,ab
#4.	(OSAHS or OSA or OSAS):ti,ab
#5.	(obes* near/3 hypoventil*):ti,ab
#6.	pickwick*:ti,ab
#7.	(OR #1-#6)

#8.	MeSH descriptor: [Patient Compliance] this term only
#9.	MeSH descriptor: [Patient Dropouts] this term only
#10.	MeSH descriptor: [Treatment Refusal] this term only
#11.	(discontin [*] or abstention or abstain [*] or stop [*] or abandon [*] or uptak [*] or acclimat [*] or mainten [*] or keep [*]):ti,ab
#12.	(adhere [*] or adhering or nonadhere [*] or non-adhere [*] or non-adhering or complian [*] or complying or non-complian [*] or noncomplian [*] or concordance or capacitance):ti,ab
#13.	(OR #8-#12)
#14.	((oral or intraoral or intra-oral) near/3 (device [*] or prosthes [*] or appliance [*] or splint [*])):ti,ab
#15.	(MAD or MADs or MAS or MRS):ti,ab
#16.	((dental or orthodontic [*] or orthosis or orthotic) near/3 (device [*] or prosthes [*] or appliance [*] or splint [*])):ti,ab
#17.	(tongue near/3 (device [*] or prosthes [*] or appliance [*] or splint [*] or retain [*] or reposition [*] or stabiliz [*] or stabilis [*] or advancement or advancing or retention or protruding or protrude or protruded or protrusion or forward or mouthpiece)):ti,ab
#18.	(mandib [*] near/3 (device [*] or prosthes [*] or appliance [*] or splint [*] or advancement or advancing or protruding or protrude or protruded or protrusion or reposition [*] or position [*])):ti,ab
#19.	(positive airway [*] pressure or PAP or CPAP or aPAP or nCPAP or autoCPAP or auto-CPAP or biPAP or BPAP or NBiPAP or NBPAP or NIV):ti,ab
#20.	(positive near/3 pressure near/1 (therapy or device [*] or ventilat [*])):ti,ab
#21.	(OR #14-#20)
#22.	#7 AND #13 AND #21

Epistemonikos search terms

1.	((title:((sleep apnea syndromes) OR (sleep [*] AND (apn?ea [*] OR hypopn?ea [*])) OR (sleep [*] AND (apn?ea [*] OR hypopn?ea [*])) OR (sleep [*] AND (disorder [*] OR breath [*])) OR (OSAHS OR OSA OR OSAS) OR (obes [*] AND hypoventil [*]) OR pickwick [*]) OR abstract:((sleep apnea syndromes) OR (sleep [*] AND (apn?ea [*] OR hypopn?ea [*])) OR (sleep [*] AND (apn?ea [*] OR hypopn?ea [*])) OR (sleep [*] AND (disorder [*] OR breath [*])) OR (OSAHS OR OSA OR OSAS) OR (obes [*] AND hypoventil [*]) OR pickwick [*])))
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