

Supplementary Material

Burden of Insomnia and Sleep Disturbances and the Impact of Sleep Treatments in Patients with Probable or Possible Alzheimer's Disease: A Structured Literature Review

Supplementary Table 1. Cochrane Library Search Strategy to Identify Data Relating to the Burden of Insomnia in AD (i.e., Epidemiology + QoL + Caregiver + Cost/HCRU) and Treatment Guidelines (Jan 1985-Dec 2004; search conducted 12 March 2020)

S.No.	Query	Items Found	Description
1	[mh "Sleep Initiation and Maintenance Disorders"] (<i>Word variations have been searched</i>)	2319	Search Terms: Insomnia, Sleep Disorders or Sleep Disturbances
2	"Sleep Initiation and Maintenance Disorders" (<i>Word variations have been searched</i>)	2343	
3	"Sleep Initiation Dysfunction" (<i>Word variations have been searched</i>)	0	
4	("Disorders of Initiating and Maintaining Sleep"):ti,ab,kw	39	
5	DIMS (<i>Word variations have been searched</i>)	750	
6	Sleeplessness (<i>Word variations have been searched</i>)	235	
7	"early awakening"	39	
8	[Mh "Insomnia, Fatal Familial"]	0	
9	(insomnia):ti,ab,kw (<i>Word variations have been searched</i>)	10365	
10	insomni*	11086	
11	"Sleep disorders" OR "Sleep disorder" (<i>Word variations have been searched</i>)	7676	
12	"sleep disturbance" OR "sleep disturbances" (<i>Word variations have been searched</i>)	3846	
13	sleep* (<i>Word variations have been searched</i>)	39050	
14	[mh "Sleep Disorders, Circadian Rhythm"]	179	
15	[mh "Sleep Disorders, Intrinsic"]	5428	
16	OR #1-#15 (<i>Word variations have been searched</i>)	45284	
17	[mh "Alzheimer Disease"]	3351	
18	"Alzheimer Disease":ti,ab,kw (<i>Word variations have been searched</i>)	10276	
19	"Alzheimer Disease" (<i>Word variations have been searched</i>)	10862	
20	Alzheimer* (<i>Word variations have been searched</i>)	12523	
21	(Alzheimer):ti,ab,kw (<i>Word variations have been searched</i>)	11155	
22	[mh dementia]	5807	
23	Dementia (<i>Word variations have been searched</i>)	22876	
24	dement* (<i>Word variations have been searched</i>)	23208	
25	OR #17-#24 (<i>Word variations have been searched</i>)	26804	

S.No.	Query	Items Found	Description	
26	#16 AND #25	1635	Insomnia or sleep disorders in Patients with Alzheimer's Disease OR Dementia	
27	[mh epidemiology] OR [mh prevalence] OR [mh incidence]	14337	Search Terms: Epidemiology	
28	(epidemiology OR prevalence OR incidence):ti,ab,kw (Word variations have been searched)	195271		
29	(epidemiology OR prevalence OR incidence) (Word variations have been searched)	210593		
30	[mh mortality] OR [mh death] OR [mh morbidity]	28205		
31	mortality OR Mortalit* OR fatality OR death OR morbidity OR morbidit* (Word variations have been searched)	166253		
32	OR #27-#31 (Word variations have been searched)	325878		
33	[mh "quality of life"]	22705		Search Terms: Quality of Life
34	[mh Quality-Adjusted Life Years]	1190		
35	("Life Quality" OR "quality of life" OR "Health-Related Quality of Life" OR "Health Related Quality of Life" OR HRQoL OR "value of life" OR "quality adjusted life year" OR QALY OR "disability adjusted life year" OR DALY OR utilit*)	124153		
36	health* AND year* AND equivalent* (Word variations have been searched)	10655		
37	OR #33-#36 (Word variations have been searched)	131742		
38	[mh "Health Care Costs"] OR [mh "Drug Utilization"] OR [mh "Direct Service Costs"] OR [mh "Drug Costs"] OR [mh "cost of illness"] OR [mh "Costs and Cost Analysis"] OR [mh economics]	12537	Search Terms: Costs and Caregiver Burden	
39	"Direct Service Costs"	75		
40	(Health Care Cost*) OR (Health cost*) OR (Healthcare Cost*) OR (Medical Care Cost*) OR (Treatment cost*) OR (drug utilization*) OR caregiver* (Word variations have been searched)	79850		
41	"Drug Cost" OR "Economic burden" (Word variations have been searched)	5076		
42	"Caregiver burden" (Word variations have been searched)	1405		
43	"Care-giver burden" (Word variations have been searched)	33		
44	"disease burden" OR "cost of illness" OR "disease cost" OR "illness cost" (Word variations have been searched)	3315		
45	OR #38-#44 (Word variations have been searched)	84456		

S.No.	Query	Items Found	Description
46	econom* OR cost* OR financ* OR expenditure* OR spend* OR spent OR "Hospital cost" OR Health Expenditure* OR Out-of-Pocket Expenditure* OR Direct Expenditure* OR Out-of-Pocket Payment* OR Out of Pocket Payment* OR Out-of-Pocket Cost* OR Out of Pocket Cost* OR Out of Pocket Spending OR Out of Pocket Expenditure* OR Out of Pocket Expens* OR Indirect Expenditure* OR Resource* OR HCRU OR Hospital* OR "physician visit" OR "in-patient" OR inpatient OR "Laboratory cost" OR outpatient OR "out-patient" <i>(Word variations have been searched)</i>	445469	Search Terms: Healthcare Resource Utilization
47	[mh "Hospital Costs"] OR [mh "Health Expenditures"]	801	
48	#46 OR #47 <i>(Word variations have been searched)</i>	445469	
49	#32 OR #37 OR #45 OR #48 <i>(Word variations have been searched)</i>	692648	Burden
50	#26 AND #49 <i>(Word variations have been searched)</i>	1002	Burden of Sleep Disorders in Patients with Dementia
51	#26 AND #49 with Cochrane Library publication date from Jan 1985 to Dec 2004 <i>(Word variations have been searched)</i>	77	Burden of sleep disorders in patients with dementia published between 1985 and 2004
52	[mh "Clinical Protocols"] OR [mh "Practice Guideline"] OR [mh "Practice Guidelines as Topic"] OR [mh "Guidelines as Topic"] OR [mh "Consensus Development Conferences as Topic"] OR [mh Therapeutics]	297865	Search Terms: Treatment Guidelines and Recommendations
53	"Clinical Protocols" OR Clinical Protocol* OR Treatment Protocol* OR "Treatment Protocol" OR Clinical Research Protocol OR "Practice Guideline" OR "Practice Guidelines as Topic" OR Best Practice* OR Guideline OR Treatment guideline* OR treatment recommendation* OR "consensus development conference" OR position statement* OR policy statement* OR practice parameter* OR Therapeutics OR Consensus statement* OR standard* OR guideline* OR Treatment OR treatment pattern* <i>(Word variations have been searched)</i>	964124	
54	Guideline:ti,ab,kw <i>(Word variations have been searched)</i>	39817	
55	OR #52-#54 <i>(Word variations have been searched)</i>	1027052	
56	#26 AND #55 <i>(Word variations have been searched)</i>	1236	

S.No.	Query	Items Found	Description
57	#26 AND #55 <i>with Cochrane Library publication date from Jan 1985 to Dec 2004, (Word variations have been searched)</i>	152	Treatment Guidelines and Recommendations for sleep disorders management in patients with dementia published between 1985 and 2004
58	#OR #51 OR #57	154	Total

Supplementary Table 2. Cochrane Library Search Strategy to Identify Data Relating to the Burden of insomnia in AD (i.e., Epidemiology + QoL + Caregiver + Cost/HCRU) and Treatment Guidelines (Jan 2005–March 2020; search conducted 12 March 2020)

S.No	Query	Items found	Description
1	[mh "Sleep Initiation and Maintenance Disorders"] (Word variations have been searched)	2332	Search Terms: Insomnia, Sleep Disorders or Sleep Disturbances
2	"Sleep Initiation and Maintenance Disorders"	2356	
3	Sleep Initiation Dysfunction:ti,ab,kw (Word variations have been searched)	324	
4	Disorders of Initiating and Maintaining Sleep:ti,ab,kw (Word variations have been searched)	510	
5	DIMS	24	
6	Sleeplessness (Word variations have been searched)	234	
7	"early awakening" (Word variations have been searched)	40	
8	[Mh "Insomnia, Fatal Familial"]	0	
9	(insomnia):ti,ab,kw (Word variations have been searched)	10260	
10	insomni* (Word variations have been searched)	10985	
11	OR #1-#10 (Word variations have been searched)	12603	
12	[mh "Alzheimer Disease"]	3280	Search Terms: Alzheimer's Disease or Dementia
13	"Alzheimer Disease":ti,ab,kw (Word variations have been searched)	9765	
14	"Alzheimer Disease" (Word variations have been searched)	10334	
15	Alzheimer* (Word variations have been searched)	11946	
16	(Alzheimer):ti,ab,kw (Word variations have been searched)	10635	
17	OR #12-#16 (Word variations have been searched)	11946	
18	#11 AND #17 (Word variations have been searched)	248	Insomnia or sleep disorders in Patients with Alzheimer's Disease OR Dementia
19	[mh epidemiology] OR [mh prevalence] OR [mh incidence]	13622	Search Terms: Epidemiology
20	(epidemiology OR prevalence OR incidence):ti,ab,kw (Word variations have been searched)	184651	
21	(epidemiology OR prevalence OR incidence) (Word variations have been searched)	199420	
22	[mh mortality] OR [mh death] OR [mh morbidity]	27189	
23	mortality OR Mortalit* OR fatality OR death OR morbidity OR morbidit* (Word variations have been searched)	158320	
24	OR #19-#23 (Word variations have been searched)	309790	
25	[mh "quality of life"]	22749	
26	[mh "value of life"]	33	
27	[mh Quality-Adjusted Life Years]	1186	

S.No	Query	Items found	Description
28	("quality of life" OR "Health-Related Quality of Life" OR "Life Quality" OR "Health Related Quality of Life" OR HRQoL OR "value of life" OR "quality adjusted life year" OR QALY OR "disability adjusted life year" OR DALY OR utilit*) (Word variations have been searched)	122639	
29	(health* AND year* AND equivalent*):ti,ab,kw (Word variations have been searched)	2590	
30	OR #25-#29 (Word variations have been searched)	124540	
31	[mh "Health Care Costs"] OR [mh "Drug Utilization"] OR [mh "Direct Service Costs"] OR [mh "Drug Costs"] OR [mh "cost of illness"] OR [mh "Costs and Cost Analysis"] OR [mh economics]	12435	Search Terms: Costs and Caregiver Burden
32	"Direct Service Costs"	73	
33	(Health Care Cost*) OR (Health cost*) OR (Healthcare Cost*) OR (Medical Care Cost*) OR (Treatment cost*) OR (drug utilization*) OR (Drug Cost) OR (Economic burden) OR (Caregiver burden) OR (Care-giver burden) OR (disease burden) OR (caregiver) OR (cost of illness) OR (disease cost) OR (illness cost) (Word variations have been searched)	90507	
34	OR #31-#33 (Word variations have been searched)	92483	
35	#24 OR #30 OR #34 (Word variations have been searched)	439877	Search Results for Epidemiology, Cost, Caregiver Burden and Quality of Life
36	#18 AND #35 (Word variations have been searched)	167	Burden of sleep disorders in Patients with Dementia
37	#18 AND #35 with Cochrane Library publication date from Jan 2005 to Sep 2018 (Word variations have been searched)	107	Burden of sleep disorders in Patients with Dementia Published Jan 2005 to Mar 2020 (Search conducted 12 th March)
38	#18 AND #35 with Cochrane Library publication date from Oct 2018 to Feb 2020 (Word variations have been searched)	45	
39	#18 AND #35 with Cochrane Library publication date from Feb 2020 to Mar 2020 (Word variations have been searched)	2	
40	econom* OR cost* OR financ* OR expenditure* OR spend* OR spent OR "Hospital cost" OR Health Expenditure* OR Out-of-Pocket Expenditure* OR Direct Expenditure* OR Out-of-Pocket Payment* OR Out of Pocket Payment* OR Out-of-Pocket Cost* OR Out of Pocket Cost* OR Out of Pocket Spending OR Out of Pocket Expenditure* OR Out of Pocket Expens* OR Indirect Expenditure* OR Resource* OR HCRU OR Hospital* OR "physician visit" OR "in-patient" OR "inpatient" OR "Laboratory cost" (Word variations have been searched)	407537	Search Terms: Healthcare Resource Utilization
41	[mh "Hospital Costs"] OR [mh "Health Expenditures"]	797	
42	#38 OR #39 (Word variations have been searched)	407537	

S.No	Query	Items found	Description
43	#18 AND #40 <i>(Word variations have been searched)</i>	102	Healthcare Resource utilization in dementia patients with sleep disorders
44	#18 AND #41 with Cochrane Library publication date from Jan 2005 to Sep 2018 <i>(Word variations have been searched)</i>	72	Healthcare Resource utilization in dementia patients with sleep disorders published Jan 2005 to Mar 2020 (Search conducted 12 th March)
45	#18 AND #41 with Cochrane Library publication date from Oct 2018 to Feb 2020 <i>(Word variations have been searched)</i>	22	
46	#18 AND #40 with Cochrane Library publication date from Feb 2020 to Mar 2020 <i>(Word variations have been searched)</i>	1	
47	[mh "Clinical Protocols"] OR [mh "Practice Guideline"] OR [mh "Practice Guidelines as Topic"] OR [mh "Guidelines as Topic"] OR [mh "Consensus Development Conferences as Topic"] OR [mh Therapeutics]	296780	Search Terms: Treatment Guidelines and Recommendations
48	"Clinical Protocols" OR (Clinical Protocol*) OR (Treatment Protocol*) OR "Treatment Protocol" OR "Clinical Research Protocol" OR "Practice Guideline" OR "Practice Guidelines as Topic" OR (Best Practice*) OR Guideline OR (Treatment guideline*) OR (treatment recommendation*) OR "consensus development conference" OR (position statement*) OR (policy statement*) OR (practice parameter*) OR Therapeutics OR (Consensus statement*) OR standard* OR guideline* OR Treatment OR (treatment pattern*) <i>(Word variations have been searched)</i>	925712	
49	Guideline:ti,ab,kw <i>(Word variations have been searched)</i>	37298	
50	OR #43-#45 <i>(Word variations have been searched)</i>	990813	
51	#18 AND #46 <i>(Word variations have been searched)</i>	220	
52	#18 AND #48 with Cochrane Library publication date from Jan 2005 to Sep 2018 <i>(Word variations have been searched)</i>	132	Treatment Guidelines and Recommendations in dementia patients with sleep disorders published Jan 2005 to Mar 2020 (Search conducted 12 th March)
53	#18 AND #48 with Cochrane Library publication date from Oct 2018 to Feb 2020 <i>(Word variations have been searched)</i>	70	
54	#18 AND #48 with Cochrane Library publication date from Feb 2020 to Mar 2020 <i>(Word variations have been searched)</i>	2	
55	#37 OR #38 OR #39 OR #44 OR #45 OR #46 OR #52 OR #53 OR #54 <i>(Word variations have been searched)</i>	204	

Supplementary Table 3. Cochrane Library Search Strategy to Identify Data Relating to the Institutionalization of insomnia AD patients (Jan 1985–March 2020; search conducted 12 March 2020)

S.No.	Query	Items Found	Description
1	[mh "Sleep Initiation and Maintenance Disorders"] (Word variations have been searched)	2332	Search Terms: Insomnia, Sleep Disorders or Sleep Disturbances
2	"Sleep Initiation and Maintenance Disorders"	2356	
3	Sleep initiation dysfunction (Word variations have been searched)	685	
4	Disorders of Initiating and Maintaining Sleep (Word variations have been searched)	877	
5	DIMS	24	
6	Sleeplessness (Word variations have been searched)	234	
7	"early awakening" (Word variations have been searched)	41	
8	[Mh "Insomnia, Fatal Familial"]	0	
9	(insomnia):ti,ab,kw (Word variations have been searched)	10260	
10	insomni*	10985	
11	"sleep disorders" OR "sleep disorder" (Word variations have been searched)	7422	
12	"sleep disturbance" OR "sleep disturbances"	3844	
13	Sleep*	38965	
14	[mh "Sleep Disorders, Circadian Rhythm"]	180	
15	[mh "Sleep Disorders, Intrinsic"]	5428	
16	OR #1-#15	45066	
17	[mh "Alzheimer Disease"]	3280	
18	"Alzheimer Disease":ti,ab,kw (Word variations have been searched)	9765	
19	"Alzheimer Disease" (Word variations have been searched)	10334	
20	Alzheimer* (Word variations have been searched)	11946	
21	(Alzheimer):ti,ab,kw (Word variations have been searched)	10635	
22	[mh dementia]	5699	
23	Dementia (Word variations have been searched)	22334	
24	Dement* (Word variations have been searched)	22653	
25	OR #17-#24 (Word variations have been searched)	25991	
26	[mh Institutionalization]	200	Search Terms: Institutionalization
27	Institutionalization OR institutionalisation OR institutionalized OR Institutionalised (Word variations have been searched)	1902	
28	[mh "Nursing Homes"] OR [mh "Health Facilities"] OR [mh "Assisted Living Facilities"] OR [mh "Homes for the Aged"] OR [mh "Intermediate Care Facilities"] OR [mh "Skilled Nursing Facilities"]	13902	
29	"Nursing home" OR "Health Facilities" OR "Homes for the Aged" OR "Assisted Living Facilities" OR "Intermediate Care Facilities" OR "Care home" (Word variations have been searched)	7042	

S.No.	Query	Items Found	Description
30	OR #26-#29 (Word variations have been searched)	20647	
31	[mh "Long-Term Care"]	1107	
32	"long term care" OR "long-term care" OR "extended care" OR "skilled nursing" OR "nursing care" OR Healthcare OR "assisted living" OR "Intermediate Care" (Word variations have been searched)	34227	
33	#31 OR #32 (Word variations have been searched)	34227	
34	Facility OR facilities OR center OR centers OR centre OR centres (Word variations have been searched)	255052	
35	#33 AND #34 (Word variations have been searched)	13715	
36	#30 OR #35	30707	
37	#16 AND #25 AND #36	338	Sleep disorders in AD or Dementia Institutionalized Patients
38	#16 AND #25 AND #36 with Cochrane Library publication date from Jan 1985 to Sep 2018 (Word variations have been searched)	281	Sleep disorders in AD or Dementia Institutionalized Patients
39	#16 AND #25 AND #36 with Cochrane Library publication date from Oct 2018 to Feb 2020 (Word variations have been searched)	59	(published between Jan 1985–March 2020 [search conducted 12 th March])
40	#16 AND #25 AND #36 with Cochrane Library publication date from Feb 2020 to Mar 2020 (Word variations have been searched)	7	
41	#38 OR #39 OR #40	347	Total

Supplementary Table 4. Embase Search Strategy to Identify Data Relating to the Burden of Insomnia in AD (i.e., Epidemiology + QoL + Caregiver + cost/HCRU) and Treatment Guidelines (from Jan 1985- Dec 2004; search conducted 12 March 2020) – *Embase 1974 to 2020 week 08*

S.No	Query	Items Found	Description
1	exp insomnia/ OR 'insomnia'	72317	Search Terms: Insomnia, Sleep Disorders or Sleep Disturbances
2	'sleep initiation dysfunction'	3	
3	exp sleeplessness/ OR sleeplessness	66199	
4	dims	391	
5	'disorders of initiating and maintaining sleep'	105	
6	'early awakening'	196	
7	exp 'fatal familial insomnia'/ OR 'fatal familial insomnia'	810	
8	Insomnia.ti,ab.	34681	
9	Sleep adj5 disorders	27678	
10	exp 'sleep disorder'/ OR 'sleep disorder'	229975	
11	(exp sleep/ OR sleep) AND disorder.ti,ab.	41596	
12	sleep adj5 disturbance	14814	
13	'sleep disturbance'.ti,ab.	12969	
14	sleep adj5 disturbance	14814	
15	sleep adj5 disorder	74475	
16	exp 'circadian rhythm sleep disorder'/ OR 'circadian rhythm sleep disorder'	1799	Search Terms: Alzheimer's Disease or Dementia
17	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16	252437	
18	exp 'alzheimer disease'/ OR 'alzheimer disease' OR alzheimer* OR ('alzheimer disease'.ab,ti.) OR exp 'dementia'/ OR 'dementia' OR (dementia.ab,ti.)	406632	Search Terms: Epidemiology
19	exp 'epidemiology'/ OR 'epidemiology' OR exp 'prevalence'/ OR 'prevalence' OR (epidemiology.ab,ti.) OR (prevalence.ab,ti.) OR exp 'incidence'/ OR 'incidence' OR exp 'mortality'/ OR 'mortality' OR exp 'fatality'/ OR 'fatality' OR (incidence.ti,ab.) OR (mortality.ab,ti.) OR (fatality.ab,ti.)	4862261	
20	exp 'quality of life'/ OR 'quality of life' OR exp 'life quality'/ OR 'life quality' OR exp 'health-related quality of life'/ OR 'health-related quality of life' OR exp 'health related quality of life'/ OR 'health related quality of life' OR 'hrqol' OR exp 'value of life'/ OR 'value of life' OR exp 'quality adjusted life year'/ OR 'quality adjusted life year' OR exp 'qaly'/ OR 'qaly'	934447	
21	'disability adjusted life'.ti,ab. OR 'daly'.ti,ab. OR 'health year equivalent'.ti,ab. OR 'utility'.ti,ab. OR 'utilities'.ti,ab.	282554	
22	20 or 21	1192263	Search Terms: Costs, Healthcare Resource Utilization and Caregiver Burden
23	exp 'health care cost'/ OR 'health care cost' OR 'health cost' OR 'healthcare cost'	288316	
24	'medical care cost'	240	
25	'treatment cost'	4210	
26	exp 'direct service costs'/ OR 'direct service costs' OR exp 'drug utilization'/ OR 'drug utilization' OR exp 'drug cost'/ OR 'drug cost'	304695	

S.No	Query	Items Found	Description
27	'economic burden' OR exp 'caregiver burden'/ OR 'caregiver burden' OR exp 'cost of illness'/ OR 'cost of illness' OR 'disease cost' OR 'illness cost' OR exp 'cost'/ OR 'cost' OR exp 'hospital cost'/ OR 'hospital cost' OR exp 'health expenditures'/ OR 'health expenditures' OR (direct AND expenditure) OR ('out of' AND 'pocket' AND ('expenditure' OR 'payment' OR 'cost')) OR ('physician visit' OR exp 'in-patient'/ OR 'in-patient' OR exp 'inpatient'/ OR 'inpatient') AND ((exp 'cost'/ OR cost) OR 'laboratory cost')	873593	
28	23 or 24 or 25 or 26 or 27	890965	
29	19 or 22 or 28	6246259	Burden
30	17 and 18 and 29	4516	Burden of sleep disorders in patients with dementia
31	limit 30 to yr="1985 - 2004"	593	Burden of sleep disorders in patients with dementia published between 1985 and 2004
32	exp 'clinical protocol'/ OR 'clinical protocol'	98814	Search Terms: Treatment Guidelines and Recommendations
33	'treatment protocol'	14130	
34	exp 'clinical research protocol'/ OR 'clinical research protocol' OR 'best practice' OR exp 'practice guideline'/ OR 'practice guideline' OR 'treatment guideline' OR 'treatment recommendation'	552009	
35	exp 'consensus development'/ OR 'consensus development' OR exp 'consensus development conferences as topic'/ OR 'consensus development conferences as topic' OR exp 'consensus development conference'/ OR 'consensus development conference' OR 'position statement' OR 'policy statement' OR 'practice parameter' OR 'consensus statement' OR 'treatment pattern'	38230	
36	32 or 33 or 34 or 35	574827	
37	17 and 18 and 36	412	Treatment Guidelines and Recommendations for management of sleep disorders in dementia patients
38	limit 37 to yr="1985 - 2004"	71	Treatment Guidelines and Recommendations for management of sleep disorders in dementia patients published between 1985 and 2004
39	31 OR 38	631	Total

Supplementary Table 5. Embase Search Strategy to Identify Data Relating to the Burden of Insomnia in AD (i.e., Epidemiology + QoL + Caregiver + Cost/HCRU) and Treatment Guidelines (Jan 2005– March 2020; search conducted 12 March 2020)

S.No.	Query	Items Found	Description
1	exp insomnia/	66126	Search Terms: Insomnia, Sleep Disorders or Sleep Disturbances
2	exp sleep disorder/	230043	
3	exp fatal familial insomnia/	592	
4	(Sleep Initiation Disorders OR Sleep Initiation Dysfunctio* OR Disorders of Maintaining Sleep OR DIMS OR Sleeplessness OR Early Awakening OR Insomni*).ti,ab.	36576	
5	1 or 2 or 3 or 4	235162	
6	exp Alzheimer disease/	196308	Search Terms: Alzheimer's Disease or Dementia
7	("Alzheimer Disease" OR "familial Alzheimer Disease" OR "Alzheimer Disease type" OR "Early-Onset Alzheimer Disease" OR "Alzheimer Disease with Cerebral Amyloid Angiopathy" OR "Alzheimer Disease With Coexisting Amyloid and Prion Pathology" OR Alzheim*).ti,ab.	233666	
8	6 or 7	232497	
9	5 and 8	4669	Insomnia or sleep disorders in Patients with Alzheimer's Disease OR Dementia
10	exp epidemiology/ or exp prevalence/ or exp incidence/ or exp mortality/ or exp fatality/ or exp death/ or exp morbidity/	3801615	Search Terms: Epidemiology
11	(prevalences OR incidences OR mortalit* OR morbidit* OR death).ti,ab.	2128344	
12	10 or 11	4642121	
13	exp "quality of life"/	477549	Search Terms: Quality of Life
14	("Life Quality" OR "Health-Related Quality of Life" OR "Health Related Quality of Life" OR "HRQoL" OR "value of life" OR "quality adjusted life year" OR "QALY" OR "disability adjusted life" OR "DALY" OR (health* AND year* AND equivalent*) OR utilit*).ti,ab.	377938	
15	13 or 14	762269	
16	exp "health care cost"/ or exp "drug cost"/ or exp "cost of illness"/	298336	Search Terms: Costs and Caregiver Burden
17	(Health Care Cost* OR Health Cost* OR Healthcare Cost* OR Medical Care Cost* OR Treatment Cost* OR "Drug Utilization" OR drug utilization* OR "Direct Service Costs" OR Direct Service Cost OR "Drug Cost" OR "Economic burden" OR "Caregiver burden" OR "Care-giver burden").mp.	314045	
18	16 or 17	359853	
19	12 or 15 or 18	5420750	Burden
20	9 and 19	1459	Burden of sleep disorders in patients with dementia
21	limit 20 to yr="2005 - 2018"	1103	Burden of sleep disorders in patients

S.No.	Query	Items Found	Description
22	limit 20 to yr="2019 - Current" (12 th March 2020)	157	with dementia published between Jan 2005–March 2020 (search conducted 12 th March)
23	exp "hospital cost"/ or exp "health care cost"/ or exp economic aspect/ or exp financial management/	1625560	Search Terms: Healthcare Resource Utilization
24	(econom* or cost* or financ* OR expenditure* OR spend* OR spent OR "Health Expenditures" OR Healthcare Expenditure* OR Direct Expenditure* OR Out-of-Pocket Expenditure* OR Out-of-Pocket Payment* OR Out of Pocket Payment* OR Out-of-Pocket Cost* OR Out of Pocket Cost* OR Out of Pocket Spending OR Out of Pocket Expenditure* OR Out of Pocket Expens* OR Indirect Expenditure* OR Resource* OR Indirect Expenditure* OR HCRU OR Hospital* OR "physician visit" OR "in-patient" OR "inpatient" OR "Laboratory cost").mp.	4229292	
25	23 or 24	4713277	
26	9 and 25	832	Healthcare Resource Utilization for SD in patients with Dementia
27	limit 26 to yr="2005 - 2018"	624	Healthcare Resource Utilization for SD in patients with Dementia published Jan 2005–March 2020 (search conducted 12 th March)
28	limit 26 to yr="2019 - Current" (12 th March 2020)	83	
29	exp consensus development/ OR exp consensus/ OR consensus statement.mp. OR exp practice guideline/	597420	Search Terms: Treatment Guidelines and Recommendations
30	(Clinical Protocols OR Clinical Protocol* OR Treatment Protocol* OR Practice Guidelines OR Best Practice* OR treatment guideline* OR treatment recommendation* OR consensus development conference OR consensus development conferences OR position statement* OR policy statement* OR practice parameter* OR Consensus statement* OR standard* OR guideline* OR Treatment pattern* OR benchmarks).ti,ab.	2293892	
31	29 or 30	2602052	
32	9 and 31	464	Treatment Guidelines and Recommendations for sleep disorders in Dementia Patients
33	limit 32 to yr="2005 - 2018"	355	Treatment Guidelines and Recommendations for sleep disorders in

S.No.	Query	Items Found	Description
34	limit 32 to yr="2019 - current" (12 th March 2020)	49	Dementia published Jan 2005–March 2020 (search conducted 12 th March)
35	21 or 22 or 27 or 28 or 33 or 34	1806	Total

Supplementary Table 6. Embase Search Strategy to identify data relating to the Institutionalization of AD Patients with Insomnia (Jan 1985–March 2020; search conducted 12 March 2020)

S.No.	Query	Items Found	Description
1	exp 'insomnia'/ OR 'insomnia'	72584	Search Terms: Insomnia, Sleep Disorders or Sleep Disturbances
2	'sleep initiation dysfunction'	3	
3	exp 'sleeplessness'/ or 'sleeplessness'	66446	
4	dims	392	
5	'disorders of initiating and maintaining sleep'	107	
6	'early awakening'	196	
7	exp 'fatal familial insomnia'/ OR 'fatal familial insomnia'	813	
8	insomnia.ti,ab.	34815	
9	sleep adj5 disorders	27800	
10	exp 'sleep disorder'/ OR 'sleep disorder'	230951	
11	(exp 'sleep'/ OR 'sleep') AND disorder.ab,ti.	41798	
12	sleep adj5 disturbance	14886	
13	'sleep disturbance'.ab,ti.	13034	
14	sleep adj5 disturbance	14886	
15	sleep adj5 disorder	74774	
16	exp 'circadian rhythm sleep disorder'/ OR 'circadian rhythm sleep disorder'	1802	
17	1 or 2 or 3 or 4 or 5 or 6 or 7or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16	253525	
18	exp 'alzheimer disease'/ OR 'alzheimer disease' OR alzheimer* OR ('alzheimer disease'.ab,ti.) OR exp 'dementia'/ OR 'dementia' OR (dementia.ab,ti.)	408576	Search Terms: Alzheimer's Disease or Dementia
19	exp institutionalization/ OR 'institutionalization'	10881	Search Terms: Institutionalization
20	institutionalisation	1138	
21	exp 'institutionalized person'/ OR 'institutionalized person'	406	
22	institutionalised	1911	
23	exp 'nursing home'/ OR 'nursing home' OR exp 'health care facility'/ OR 'health care facility' OR exp 'assisted living facility'/ OR 'assisted living facility' OR exp 'home for the aged'/ OR 'home for the aged' OR exp 'skilled nursing facilities'/ OR 'skilled nursing facilities' OR 'care home'	1501924	
24	(exp 'long term care'/ OR 'long term care' OR exp 'long-term care'/ OR 'long-term care' OR exp 'extended care'/ OR 'extended care' OR 'skilled nursing' OR exp 'nursing care'/ OR 'nursing care' OR exp 'healthcare'/ OR 'healthcare' OR exp 'assisted living'/ OR 'assisted living' OR 'intermediate care') AND (facility OR facilities OR 'center' OR centers OR centre OR centres)	616159	
25	19 or 20 or 21 or 22 or 23 or 24	1869334	
26	17 and 18 and 25	1432	Burden of Insomnia in institutionalized Alzheimer patients
27	limit 26 to yr="1985 - 2018"	1296	Burden of Insomnia in institutionalized

S.No.	Query	Items Found	Description
28	limit 26 to yr="2019 - Current" (12 th March 2020)	132	Alzheimer patients published from Jan 1985–March 2020 (search conducted 12 th March)
29	27 or 28	1428	Total

Supplementary Table 7. PubMed Search Strategy to Identify Data Relating to the Burden of Insomnia in AD (i.e., Epidemiology + QoL + Caregiver + Cost/HCRU) and Treatment Guidelines (Jan 1985–Dec 2004; search conducted 12 March 2020)

S.No	Query	Items found	Description
#1	"Sleep Initiation and Maintenance Disorders"[MeSH] OR "Sleep Initiation Dysfunctions" OR "Sleep Initiation Dysfunction" OR "Disorders of Initiating and Maintaining Sleep" OR DIMS[tiab] OR Sleeplessness OR "Early Awakening" OR "Insomnia, Fatal Familial"[MeSH] OR Insomnia[tiab] OR insomni* OR "Sleep disorders" OR "Sleep disorder" OR "sleep disturbances" OR "sleep disturbance" OR sleep* OR "Sleep Disorders, Circadian Rhythm"[MeSH] OR "Sleep Disorders, Intrinsic"[MeSH]	226382	Insomnia, Sleep disorders or Sleep disturbances
#2	"Alzheimer Disease"[MeSH] OR "Alzheimer disease, familial, type 3" [Supplementary Concept] OR "Alzheimer disease type 2" [Supplementary Concept] OR "Alzheimer disease type 4" [Supplementary Concept] OR "Alzheimer disease type 1" [Supplementary Concept] OR "Alzheimer Disease 12" [Supplementary Concept] OR "Alzheimer Disease 5" [Supplementary Concept] OR "Alzheimer Disease 10" [Supplementary Concept] OR "Alzheimer Disease 6" [Supplementary Concept] OR "Alzheimer Disease 7" [Supplementary Concept] OR "Alzheimer Disease 11" [Supplementary Concept] OR "Alzheimer Disease 8" [Supplementary Concept] OR "Alzheimer Disease 9" [Supplementary Concept] OR "Alzheimer Disease 16" [Supplementary Concept] OR "Alzheimer Disease 13" [Supplementary Concept] OR "Alzheimer Disease 14" [Supplementary Concept] OR "Alzheimer Disease 15" [Supplementary Concept] OR "Alzheimer Disease, Early-Onset, With Cerebral Amyloid Angiopathy" [Supplementary Concept] OR "Alzheimer Disease, Familial, 1" [Supplementary Concept] OR "Alzheimer Disease, Familial Early-Onset, With Coexisting Amyloid And Prion Pathology" [Supplementary Concept] OR Alzheimer*[tiab] OR Dementia OR Dement* OR "Dementia"[MeSH]	256743	Alzheimer's disease or Dementia
#3	#1 AND #2	5694	Sleep disorders in patients with dementia
#4	((("Epidemiology"[MeSH]) OR ("Prevalence"[MeSH]) OR ("Prevalences") OR Prevalence OR ("Incidence"[MeSH]) OR ("Incidences") OR Incidence OR ("Mortality"[MeSH]) OR (Mortalit*) OR ("Fatality"[tiab]) OR ("death"[tiab]) OR ("Morbidity"[MeSH]) OR (morbidity*)))	4127066	Epidemiology
#5	((("Quality of Life"[MeSH]) OR ("Life Quality") OR ("Health-Related Quality of Life") OR ("Health Related Quality of Life") OR ("HRQoL") OR ("value of life") OR ("quality adjusted life year") OR ("QALY") OR ("disability adjusted life"[tiab]) OR ("DALY"[tiab]) OR (health* AND year* AND equivalent*[tiab]) OR (utilit*[tiab])))	423030	Quality of life

S.No	Query	Items found	Description
#6	("Health Care Costs"[MeSH]) OR (Health Care Cost*) OR (Health Cost*) OR (Healthcare Cost*) OR (Medical Care Cost*) OR (Treatment Cost*) OR ("Drug Utilization"[MeSH]) OR (drug utilization*) OR ("Direct Service Costs"[MeSH]) OR (Direct Service Cost) OR ("Drug Costs"[MeSH]) OR ("Drug Cost") OR ("Economic burden") OR ("Caregiver burden") OR ("Care-giver burden") OR (Caregiver*) OR "Cost of Illness"[MeSH] OR "cost of illness" OR "disease cost" OR "illness cost" OR "Costs and Cost Analysis"[MeSH] OR (econom*) OR (cost*) OR (financ*) OR (expenditure*) OR (spend*) OR (spent) OR ("Hospital Costs"[MeSH]) OR ("Hospital cost") OR ("Health Expenditures"[MeSH]) OR (Health Expenditure*) OR (Direct Expenditure*) OR (Out-of-Pocket Expenditure* OR Out-of-Pocket Payment* OR Out of Pocket Payment* OR Out-of-Pocket Cost* OR Out of Pocket Cost* OR Out of Pocket Spending OR Out of Pocket Expenditure* OR Out of Pocket Expens*) OR (Indirect Expenditure*) OR (Resource*) OR (HCRU) OR (Hospital*) OR ("physician visit") OR ("in-patient" OR "inpatient") OR (out-patient) OR (outpatient) OR ("Laboratory cost")	6310075	Costs and caregiver burden
#7	#4 OR #5 OR #6	9076062	Burden
#8	#3 AND #7	3019	Burden of sleep disorders in patients with dementia
#9	#3 AND #7; Filter: Time period 1985 to 2004	592	Burden of sleep disorders in patients with dementia published between 1985 and 2004
#10	((("Clinical Protocols"[MeSH] OR Clinical Protocol* OR Treatment Protocol* OR Clinical Research Protocol OR "Practice Guidelines as Topic"[MeSH] OR Best Practice* OR "Practice Guideline" [Publication Type] OR treatment guideline* OR treatment recommendation* OR "consensus development conference"[Publication Type] OR "consensus development conferences as topic"[MeSH Terms] OR "consensus development conference" OR position statement* OR policy statement* OR practice parameter* OR Consensus statement* OR standard* OR guideline* OR "Treatment"[tiab] OR "Therapeutics"[MeSH])) OR Treatment pattern*	8891098	Treatment Guidelines and Recommendations
#11	#3 AND #10	2251	Treatment Guidelines and Recommendations for sleep disorders management in patients with dementia

S.No	Query	Items found	Description
#12	#3 AND #10; Filter: Time period 1985 to 2004	572	Treatment Guidelines and Recommendations for sleep disorders management in patients with dementia published between 1985 and 2004
#13	#9 OR #12	856	Total

Supplementary Table 8. PubMed Search Strategy to Identify Data Relating to the Burden of Insomnia in AD (i.e., Epidemiology + QoL + Caregiver + Cost/HCRU) and Treatment Guidelines (Jan 2005–March 2020; search conducted 12 March 2020)

S.No.	Query	Items found	Results
#1	((("Sleep Initiation and Maintenance Disorders"[MeSH] OR "Sleep Initiation Dysfunctions" OR "Sleep Initiation Dysfunction" OR "Disorders of Initiating and Maintaining Sleep" OR DIMS[tiab] OR Sleeplessness OR "Early Awakening")) OR (("Insomnia, Fatal Familial"[MeSH] OR Insomnia[tiab])) OR (insomni*))	25798	Insomnia/sleep disturbances
#2	((("Alzheimer Disease"[MeSH] OR "Alzheimer disease, familial, type 3" [Supplementary Concept] OR "Alzheimer disease type 2" [Supplementary Concept] OR "Alzheimer disease type 4" [Supplementary Concept] OR "Alzheimer disease type 1" [Supplementary Concept] OR "Alzheimer Disease 12" [Supplementary Concept] OR "Alzheimer Disease 5" [Supplementary Concept] OR "Alzheimer Disease 10" [Supplementary Concept] OR "Alzheimer Disease 6" [Supplementary Concept] OR "Alzheimer Disease 7" [Supplementary Concept] OR "Alzheimer Disease 11" [Supplementary Concept] OR "Alzheimer Disease 8" [Supplementary Concept] OR "Alzheimer Disease 9" [Supplementary Concept] OR "Alzheimer Disease 16" [Supplementary Concept] OR "Alzheimer Disease 13" [Supplementary Concept]) OR ("Alzheimer Disease 14" [Supplementary Concept] OR "Alzheimer Disease 15" [Supplementary Concept] OR "Alzheimer Disease, Early-Onset, With Cerebral Amyloid Angiopathy" [Supplementary Concept] OR "Alzheimer Disease, Familial, 1" [Supplementary Concept] OR "Alzheimer Disease, Familial Early-Onset, With Coexisting Amyloid And Prion Pathology" [Supplementary Concept] OR Alzheimer[tiab] OR Alzheimers[tiab]))	102181	Alzheimer's disease
#3	#1 AND #2	234	Insomnia in Patients with Alzheimer's Disease
#4	((("Epidemiology"[MeSH]) OR ("Prevalence"[MeSH]) OR ("Prevalences") OR ("Incidence"[MeSH]) OR ("Incidences") OR ("Mortality"[MeSH]) OR (Mortalit*) OR ("Fatality"[tiab]) OR ("death"[tiab]) OR ("Morbidity"[MeSH]) OR (morbidity*))	2349279	
#5	((("Quality of Life"[MeSH]) OR ("Life Quality") OR ("Health-Related Quality of Life") OR ("Health Related Quality of Life") OR ("HRQoL") OR ("value of life") OR ("quality adjusted life year") OR ("QALY") OR ("disability adjusted life"[tiab]) OR ("DALY"[tiab]) OR (health* AND year* AND equivalent*[tiab]) OR (utilit*[tiab]))	424753	
#6	((("Health Care Costs"[MeSH]) OR (Health Care Cost*) OR (Health Cost*) OR (Healthcare Cost*) OR (Medical Care Cost*) OR (Treatment Cost*) OR ("Drug Utilization"[MeSH]) OR (drug utilization*) OR ("Direct Service Costs"[MeSH]) OR (Direct Service Cost) OR ("Drug Costs"[MeSH]) OR ("Drug Cost") OR ("Economic burden") OR ("Caregiver burden") OR ("Care-giver burden") OR (Caregiver*))	197678	

S.No.	Query	Items found	Results
#7	#4 or #5 or #6	2856893	Burden
#8	#3 and #7	75	Burden of Insomnia in Patients with Alzheimer's Disease
#9	(#3 and #7) Filter: Time period 2005/01/01 to 2018/09/30	48	Burden of Insomnia in Patients with Alzheimer's Disease, published between Jan 2005 and March 2020
#10	(#16 and #20) Filter: Time period 2018/10/01 to 2020/03/12	3	
#11	((((econom*) OR (cost*) OR (financ*) OR (expenditure*) OR (spend*) OR (spent) OR ("Hospital Costs"[MeSH]) OR ("Hospital cost" OR "Health Expenditures"[MeSH]) OR (Health Expenditure*) OR (Direct Expenditure*) OR (Out-of-Pocket Expenditure* OR Out-of-Pocket Payment* OR Out of Pocket Payment* OR Out-of-Pocket Cost* OR Out of Pocket Cost* OR Out of Pocket Spending OR Out of Pocket Expenditure* OR Out of Pocket Expens* OR Indirect Expenditure*) OR (Resource*) OR (Indirect Expenditure*) OR (HCRU) OR (Hospital*) OR ("physician visit") OR ("in-patient" OR "inpatient") OR ("Laboratory cost"))))	6128447	Healthcare Resource Utilization
#12	(#3 and #11)	80	HCRU in Patients with Alzheimer's Disease
#13	(#16 and #24) Filter: Time period 2005/01/01 to 2018/09/30	51	HCRU in Patients with Alzheimer's Disease, published between Jan 2005 and March 2020
#14	(#16 and #24) Filter: Time period 2018/10/01 to 2020/03/12	7	
#15	((("Clinical Protocols"[MeSH] OR Clinical Protocol* OR Treatment Protocol* OR Clinical Re Protocol OR "Practice Guidelines as Topic"[MeSH] OR Best Practice* OR "Practice Guideline" [Publication Type] OR treatment guideline* OR treatment recommendation* OR "consensus development conference"[Publication Type] OR "consensus development conferences as topic"[MeSH Terms] OR "consensus development conference" OR position statement* OR policy statement* OR practice parameter* OR Consensus statement* OR standard* OR guideline* OR "Treatment"[tiab] OR "Therapeutics"[MeSH])) OR Treatment pattern*	8888016	Treatment Guidelines and Patterns
#16	(#3 and #15)	135	Treatment Guidelines and Patterns in Patients with Alzheimer's Disease
#17	(#16 and #28) Filter: Time period 2005/01/01 to 2018/09/30	80	Treatment Guidelines and Patterns in Patients with Alzheimer's Disease, published between Jan 2005 and March 2020
#18	(#16 and #28) Filter: Time period 2018/10/01 to 2020/03/12	4	
#19	#9 or #10 or #13 or #14 or #17 or #18	119	Total

Supplementary Table 9. PubMed Search Strategy to Identify Data Relating to Institutionalization of AD patients with Insomnia (Jan 1985–March 2020; search conducted 12 March 2020)

S.No	Query	Items found	Results
#1	"Sleep Initiation and Maintenance Disorders"[MeSH] OR "Sleep Initiation Dysfunctions" OR "Sleep Initiation Dysfunction" OR "Disorders of Initiating and Maintaining Sleep" OR DIMS OR Sleeplessness OR "Early Awakening" OR "Insomnia, Fatal Familial"[MeSH] OR Insomnia OR insomni* OR "Sleep disorders" OR "Sleep disorder" OR "sleep disturbances" OR "sleep disturbance" OR sleep* OR sleep OR "Sleep Disorders, Circadian Rhythm"[MeSH] OR "Sleep Disorders, Intrinsic"[MeSH]	231195	Insomnia, Sleep disorders and Sleep disturbances
#2	"Alzheimer Disease"[MeSH] OR "Alzheimer disease, familial, type 3" [Supplementary Concept] OR "Alzheimer disease type 2" [Supplementary Concept] OR "Alzheimer disease type 4" [Supplementary Concept] OR "Alzheimer disease type 1" [Supplementary Concept] OR "Alzheimer Disease 12" [Supplementary Concept] OR "Alzheimer Disease 5" [Supplementary Concept] OR "Alzheimer Disease 10" [Supplementary Concept] OR "Alzheimer Disease 6" [Supplementary Concept] OR "Alzheimer Disease 7" [Supplementary Concept] OR "Alzheimer Disease 11" [Supplementary Concept] OR "Alzheimer Disease 8" [Supplementary Concept] OR "Alzheimer Disease 9" [Supplementary Concept] OR "Alzheimer Disease 16" [Supplementary Concept] OR "Alzheimer Disease 13" [Supplementary Concept] OR "Alzheimer Disease 14" [Supplementary Concept] OR "Alzheimer Disease 15" [Supplementary Concept] OR "Alzheimer Disease, Early-Onset, With Cerebral Amyloid Angiopathy" [Supplementary Concept] OR "Alzheimer Disease, Familial, 1" [Supplementary Concept] OR "Alzheimer Disease, Familial Early-Onset, With Coexisting Amyloid And Prion Pathology" [Supplementary Concept] OR Alzheimer OR Alzheimer*[tiab] OR Dementia OR Dement* OR "Dementia"[MeSH]	258913	Alzheimer's disease and Dementia
#3	("Institutionalization"[MeSH] OR institutionalization OR institutionalisation OR Institutionalized OR Institutionalised OR "Nursing Homes"[MeSH] OR "Nursing home" OR "Health Facilities"[MeSH] OR "Assisted Living Facilities"[MeSH] OR "Homes for the Aged"[MeSH] OR "Intermediate Care Facilities"[MeSH] OR "Skilled Nursing Facilities"[MeSH] OR "Care home") OR (("long term care" OR "long-term care" OR "extended care" OR "skilled nursing" OR "nursing care" OR "assisted living" OR "Intermediate Care") AND (facility OR facilities OR center OR centers OR centre OR centres))	808579	Institutionalization
#4	#1 and #2 and #3	432	Sleep disorders in AD or dementia institutionalized patients
#5	(#33 AND #34 AND #35) Filter: Time period 1985/01/01 to 2018/09/30	392	Published between Jan 1985–March 2020
#6	(#33 AND #34 AND #35) Filter: Time period 2018/10/01 to 2020/03/12	41	
#7	#5 OR #6	426	Total

Supplementary Table 10. PICOS criteria used to inform the inclusion/exclusion of publications for the structured literature review

	Inclusion	Exclusion
Population	<ul style="list-style-type: none"> > AD, ADD* or MCI patients with insomnia > Including: insomnia, insomnia disorder, chronic insomnia, insomnia symptoms, comorbid insomnia > AD/ADD/MCI patients with insomnia and other specified sleep disorders/disturbances > AD/ADD/MCI patients with sleep disorders or sleep disturbances or sleep dysfunctions (where specific sleep disorder/disturbance is not reported) > Including sleep initiation and maintenance disorders, and early awakening, disruption to sleep-wake cycle, nocturnal awakenings > Age: any 	<ul style="list-style-type: none"> > Dementia population without AD (e.g., vascular dementia, frontotemporal dementia, mixed dementia) > Sleep disorders other than insomnia such as hypersomnia, parasomnia, excessive daytime sleepiness, restless leg syndrome, obstructive sleep apnea, jet lag, narcolepsy, rapid eye movement and sleep behavior disorder
Intervention	> Any	> N/A
Comparator	> Any	> N/A
Outcomes	<ul style="list-style-type: none"> > Epidemiology: prevalence, incidence, mortality > Humanistic burden: <ul style="list-style-type: none"> - QoL, functional status, cognitive function, daytime impairment, impact on daily living - Nighttime/daytime behaviors, including nighttime wanderings, (and endangerment), rummaging, hoarding > Economic burden: <ul style="list-style-type: none"> - Direct costs; healthcare resource utilization - Indirect costs - Costs of non-treatment > Institutionalization/care-requirements <ul style="list-style-type: none"> - Nursing home; assisted living; long-term care facility > Caregiver burden: caregiver distress, productivity loss, caregiver QoL (including anxiety, depression, insomnia among caregivers) > Treatment guidelines and patterns, care pathways, diagnosis 	
Study design	<ul style="list-style-type: none"> > Randomized controlled trials, prospective observational studies, retrospective observational studies, cross-sectional studies > Full text articles, conference abstracts, reports > English language, studies in humans > Time period: 1985 to March 12th, 2020 	<ul style="list-style-type: none"> > Publications that do not require peer review including opinion articles, letters, commentaries, editorials, book chapters > Non-English studies, studies in animals > Studies published before 1985

AD, Alzheimer's disease; ADD, Alzheimer's disease dementia; MCI, mild cognitive impairment; QoL, quality of life.

*ADD was included in addition to AD to ensure that all relevant papers were captured.