

Medicine optimisation and deprescribing intervention outcomes for older people with dementia or mild cognitive impairment: a systematic review

Drugs & Aging

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Search Strategy

Population	People with dementia or mild cognitive impairment.
Intervention	Studies in any setting and any language that included deprescribing or medicines optimisation (including tapering/dose reduction, stopping or switching drugs). Deprescribing/medicines optimisation as the only intervention or part of an intervention where deprescribing/medicines optimisation accounts for at least 50% of changes.
Comparator	Any, or no, comparator considered.
Outcomes	Safety of deprescribing, clinical outcomes, medication-related outcomes, feasibility of deprescribing, acceptability and cost-related outcomes.

Web of Science Core Collection search strategy

Key term from research topic	Search terms	#
Dementia	TS=(dementia OR Alzheimer*)	1
Mild cognitive impairment	TS=(“mild cognitive impairment” OR MCI)	2
	#1 OR #2	3
Deprescribing	TS=(deprescrib* OR “de-prescrib*” OR deprescription* OR “de-prescription”*)	4
Deprescribing	TS=(medicine NEAR/3 (discont* or withdraw* or stop* or cessation))	5
Medicines optimisation	TS=(“medication review” OR “medicine optim”*)	6
Polypharmacy	TS=(polypharmacy OR “poly-pharmacy” OR polymedication OR “poly-medication”)	7
Inappropriate prescribing	TS=(inappropriate NEAR/3 (prescri* or medic* or polypharmacy))	8
	#4 OR #5 OR #6 OR #7 OR #8	9
	#3 AND #9	10

TS = Topic search field: searches for in title, abstract, author keywords and Keywords Plus®.

* = truncation mark

NEAR/3 = 3-word proximity search

MEDLINE search strategy

Key term from research topic	Search terms	#
Dementia	exp Dementia/	1
Dementia	(dementia OR Alzheimer*).mp	2
Mild cognitive impairment	Cognitive Dysfunction/	3
Mild cognitive impairment	(mild cognitive impairment OR MCI).mp	4
	#1 OR #2 OR #3 OR #4	5
Deprescribing	Deprescriptions/	6
Deprescribing	(deprescrib* OR deprescription* OR de-prescrib* OR de-prescription*).mp	7
Deprescribing	(medicine adj3 (discont* or withdraw* or stop* or cessation)).mp	8
Medicines optimisation	“Drug Utilization Review”/ OR “medication review”/	9
Medicines optimisation	(medication review OR medicine optim*).mp	10
Polypharmacy	Polypharmacy/	11
Polypharmacy	(polypharmacy OR poly-pharmacy OR polymedication OR poly-medication).mp	12
Inappropriate prescribing	Inappropriate Prescribing/	13
Inappropriate prescribing	(inappropriate adj3 (prescri* or medic* or polypharmacy)).mp	14
	#6 OR #7 Or#8 OR #9 OR #10 OR #11 OR #12 OR #13 Or #14	15
	#5 AND #15	16

/ = Mapped to Subject Heading

exp = exploded

mp = title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms

* = truncation mark

adj3 = 3-word proximity search

EMBASE (Classic+Embase 1947+) search strategy

Key term from research topic	Search terms	#
Dementia	exp dementia/	1
Dementia	(dementia OR Alzheimer*).mp	2
Mild cognitive impairment	mild cognitive impairment/	3
Mild cognitive impairment	(mild cognitive impairment OR MCI).mp	4
	#1 OR #2 OR #3 OR #4	5
Deprescribing	deprescription/	6
Deprescribing	(deprescrib* OR deprescription* OR de-prescrib* OR de-prescription*).mp	7
Deprescribing	(medicine adj3 (discont* or withdraw* or stop* or cessation)).mp	8
Medicines optimisation	“drug utilization review”/	9
Medicines optimisation	(medication review OR medicine optim*).mp	10
Polypharmacy	exp polypharmacy/	11
Polypharmacy	(polypharmacy OR poly-pharmacy OR polymedication OR poly-medication).mp	12
Inappropriate prescribing	potentially inappropriate medication/	13
Inappropriate prescribing	(inappropriate adj3 (prescri* or medic* or polypharmacy)).mp	14
	#6 OR #7 Or#8 OR #9 OR #10 OR #11 OR #12 OR #13 OR # 14	15
	#5 AND #15	16

/ = Mapped to Subject Heading

exp = exploded

mp = title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word

* = truncation mark

adj3 = 3-word proximity search

PsycINFO search strategy

Key term from research topic	Search terms	#
Dementia	exp DE "Dementia"	1
Dementia	DE "Alzheimer's Disease"	2
Dementia	dementia OR Alzheimer*	3
Mild cognitive impairment	DE "Mild Cognitive Impairment"	4
Mild cognitive impairment	mild cognitive impairment OR MCI	5
	#1 OR #2 OR #3 OR #4 OR #5	6
Deprescribing	deprescrib* OR deprescription* OR "de-prescrib*" OR "de-prescription*"	7
Deprescribing	medicine N3 (discont* OR withdraw* OR stop* OR cessation)	8
Medicines optimisation	"medication review" OR "medicine optim*"	9
Polypharmacy	polypharmacy OR "poly-pharmacy" OR polymedication OR "poly-medication"	10
Inappropriate prescribing	inappropriate N3 (prescri* OR medic* OR polypharmacy)	11
	#7 Or#8 OR #9 OR #10 OR #11	12
	#6 AND #12	13

DE = subjects [exact]

exp = exploded

N3 = 3-word proximity search

* = truncation mark

CINAHL Plus search strategy

Key term from research topic	Search terms	#
Dementia	(MH "Dementia+")	1
Dementia	dementia OR Alzheimer*	2
Mild cognitive impairment	(MH "Mild Cognitive Impairment")	3
Mild cognitive impairment	"mild cognitive impairment" OR MCI	4
	#1 OR #2 OR #3 OR #4	5
Deprescribing	deprescrib* OR deprescription* OR "de-prescrib*" OR "de-prescription*"	6
Deprescribing	medicine N3 (discont* OR withdraw* OR stop* OR cessation)	7
Medicines optimisation	(MH "Medication Review")	8
Medicines optimisation	"medication review" OR "medicine optim*"	9
Polypharmacy	(MH "Polypharmacy+")	10
Polypharmacy	polypharmacy OR "poly-pharmacy" OR polymedication OR "poly-medication"	11
Inappropriate prescribing	(MH "Inappropriate Prescribing")	12
Inappropriate prescribing	inappropriate N3 (prescri* OR medic* OR polypharmacy)	13
	#6 OR #7 Or#8 OR #9 OR #10 OR #11 OR #12 OR #13	14
	#5 AND #14	15

MH = Exact subject heading

+ = subject heading exploded

* = truncation mark

N3 = 3-word proximity search

Cochrane library

Key term from research topic	Search terms	#
Dementia	MesH descriptor: [Dementia] explode all trees	1
Dementia	(dementia or Alzheimer*):ti,ab,kw	2
Mild cognitive impairment	MesH descriptor: [Cognitive Dysfunction] this term only	3
Mild cognitive impairment	("mild cognitive impairment" OR MCI):ti,ab,kw	4
	#1 OR #2 OR #3 OR #4	5
Deprescribing	MesH descriptor: [Deprescriptions] this term only	6
Deprescribing	(deprescrib* or deprescription* or "de-prescrib*" or "de-prescription*"):ti,ab,kw	7
Deprescribing	(medicine NEAR/3 (discont* or withdraw* or stop* or cessation)):ti,ab,kw	8
Medicines optimisation	("medication review" or "medicine optim*"):ti,ab,kw	9
Polypharmacy	MesH descriptor: [Polypharmacy] this term only	10
Polypharmacy	(polypharmacy OR "poly-pharmacy" OR polymedication OR "poly-medication"):ti,ab,kw	11
Inappropriate prescribing	MesH descriptor: [Inappropriate Prescribing] this term only	12
Inappropriate prescribing	(inappropriate NEAR/3 (prescri* or medic* or polypharmacy)):ti,ab,kw	13
	#6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13	14
	#5 AND #14	15

MesH = Exact subject heading

ti = title

ab = abstract

kw = keyword

* = truncation mark

NEAR/3 = 3-word proximity search