Systematic review of recent dementia practice guidelines

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Abstract

Background: dementia is a highly prevalent acquired cognitive disorder that interferes with activities of daily living, relationships and quality of life. Recognition and effective management strategies are necessary to provide comprehensive care for these patients and their families. High-quality clinical practice guidelines can improve the quality and consistency of care in all aspects of dementia diagnosis and management by clarifying interventions supported by sound evidence and by alerting clinicians to interventions without proven benefit.

Objective: we aimed to offer a synthesis of existing practice recommendations for the diagnosis and management of dementia, based upon moderate-to-high quality dementia guidelines.

Methods: we performed a systematic search in EMBASE and MEDLINE as well as the grey literature for guidelines produced between 2008 and 2013.

Results: thirty-nine retrieved practice guidelines were included for quality appraisal by the Appraisal of Guidelines Research and Evaluation II (AGREE-II) tool, performed by two independent reviewers. From the 12 moderate-to-high quality guidelines included, specific practice recommendations for the diagnosis and/or management of any aspect of dementia were extracted for comparison based upon the level of evidence and strength of recommendation.

Conclusion: there was a general agreement between guidelines for many practice recommendations. However, direct comparisons between guidelines were challenging due to variations in grading schemes.

Keywords: dementia, diagnosis, management, clinical practice guideline, older people

Introduction

Dementia is becoming a highly prevalent chronic neurodegenerative disease in the context of a rapidly ageing world population. The prevalence of dementia was 35.6 million peoples worldwide in 2010, and it is expected to affect an estimated 65.7 million people by 2030 [1]. This condition has significant health-care cost and resource utilisation impact, with an estimated global health-care cost equivalent to ~1% of the global gross domestic product [1].

Recognition and assessment of dementia, and the development of effective and comprehensive care plans are important for reducing the disease burden. Clinical practice guidelines are an important tool to assist in the evidence-based diagnosis and management of dementia. A clinical practice guideline is defined by the Institute of Medicine as statements that include recommendations intended to optimise patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options [2]. Many clinical practice guidelines on the diagnosis and management of dementia exist, but they are of variable quality. These guidelines vary not only in their development, but also in the grading systems utilised to assess both the quality of evidence and the strength of recommendations. It can be challenging for practitioners to determine which guidelines are of high quality, which recommendations are consistent among guidelines and, ultimately, how to best integrate guidelines into clinical practice.

To our knowledge, no systematic attempts have been made to compare recommendations from existing dementia
practice guidelines with respect to all aspects related to the
diagnosis and management of this condition. Therefore,
we sought to synthesize existing practice recommendations
by identifying and appraising clinical practice guidelines on
the diagnosis and management of dementia; by extracting
practice recommendations from guidelines appraised to be
of at least moderate quality; and by summarising key
recommendations for which there is agreement among
guidelines.

Methods

Literature search strategy

A systematic search for existing clinical practice guidelines on
dementia diagnosis and/or management was performed in
EMBASE and Medline (Ovid) on 5 April 2013. The follow-
ing search string was used in Ovid, with Medical Subject
Headings (MeSH): ‘Dementia’ [Mesh] with limits: English
language, published between 2008 and 2013; guideline OR
practice guideline OR clinical pathway OR clinical protocol
OR consensus development as publication type. In addition,
we searched the grey literature on 1 May 2013 including web-
sites of organisations that produce guidelines and websites of
relevant organisations and societies including the Alzheimer
Society and the Alzheimer Association. Specifically, a search
strategy using terms including ‘dementia’ and ‘clinical practice
guidelines’ was undertaken via Google and Google Scholar
Internet search engines. Guidelines were also retrieved from
searches in databases including, but not limited to, National
Guidelines Clearinghouse; CMA InfoBase; US Centres for
Disease Control and Prevention task force on Community
Preventive Services and NHS Evidence in Health and Social
Care. Overall, we included guidelines either produced or
updated within the past 5 years, 2008–13. A flowchart of
the search is presented in Figure 1.

Guideline selection

The titles and abstracts of retrieved citations were reviewed
for relevance related to diagnosis, evaluation and/or man-
agement of dementia, and if deemed relevant, the full
guideline was retrieved. References were excluded if they
were review papers on guidelines, did not contain specific
clinical practice recommendations or focused on pre-
dementia or mild cognitive impairment.

The quality of retrieved practice guidelines was independ-
ently appraised by two reviewers (J.H. and J.N.), using the
standardised AGREE-II instrument [3]. Differences were
resolved through consensus. Each domain within the
AGREE-II instrument was graded, but the overall rating was
used to determine the guideline inclusion. Guidelines achieving
an overall rating of 5 or greater were deemed to be of at
least moderate overall quality and included. Guidelines
achieving a score of 4 were re-reviewed to determine inclu-
sion status. Guidelines with a score of 3 or less were deemed
to be of overall low quality and excluded.
**Recommendation extraction process**

Included guidelines were scrutinised in depth by one reviewer (J.N.) to extract specific practice recommendations. These specific practice recommendations were listed per guideline into summary tables and classified into various categories that included screening, evaluation, diagnosis and management.

**Results**

The broad Medline and EMBASE searches yielded 104,003 and 110,630 citations, respectively, which were reduced by the filters to 61 and 83 references published in English between 2008 and 2013. Once abstracts were reviewed for relevance and duplicate publications removed, 24 guidelines were identified. Among these unique guidelines, some belonged to the same guideline development group (e.g., European Federation of Neurological Sciences (EFNS) [4–6]; Canadian Consensus Conference (CCC) [7–13]) and were therefore consolidated into one overall guideline, yielding a total of 13 unique guideline development groups (GDGs). The grey literature search resulted in retrieval of an additional 19 guidelines, and of those, 16 met inclusion criteria. Some of these latter guidelines had corresponding manuscripts found in the database search, and again these guidelines were consolidated as the composite work of one single GDG. We retrieved guidelines from 27 GDGs (Appendix); 11 from the database search; 2 represented in both the database and grey literature searches; and 14 from the grey literature search. Twelve guidelines scored at least 4 or higher on the AGREE-II instrument and were therefore included (Table 1). From the 12 guidelines, we extracted specific practice recommendations. Tables 2 and 3 outline the different grading systems used by these 12 guidelines.

**Screening**

General screening in patients at average risk of developing cognitive impairment is not recommended [15, 21]. However, those with underlying co-morbidities associated with developing dementia, such as prior stroke, learning disability or Down syndrome, are candidates for screening [15, 21]. Genetic screening is recommended only in individuals at risk of autosomal-dominant dementia [5, 15, 17, 18] after consent has been obtained [5, 17, 18] and genetic counselling provided [5, 17]. Apolipoprotein E (ApoE) genotyping is not recommended [5, 8, 17] (refer to Supplementary data, Table A2 available in Age and Ageing online).

**Cognitive testing**

Eight guidelines address cognitive testing. There is agreement that a cognitive assessment should be performed for those in whom carers describe cognitive decline [4, 5, 14, 15, 18, 19, 23], using a valid, standardised tool. Specific tools recommended vary (refer to Supplementary data, Table A3 available in Age and Ageing online). Six guidelines recommend performing neuropsychological testing, as an adjunct to the standard tools, in mild or questionable cases of dementia [4, 5, 8, 14, 15, 18, 21].

**Co-morbid conditions**

Assessment for and/or management of co-morbid medical conditions and potentially reversible causes of cognitive impairment is recommended [4, 5, 8, 14]. Seven guidelines support ordering complete blood count (CBC), thyroid-stimulating hormone (TSH), electrolytes, calcium, fasting blood glucose and vitamin B12 levels as routine investigations, and six support ordering folate levels [4, 5, 8, 14, 18, 21, 23]. Several guidelines advise syphilis and human

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**Table 1. GDGs included**

<table>
<thead>
<tr>
<th>GDG</th>
<th>Abbreviation</th>
<th>Country</th>
<th>Year</th>
<th>Dementia diagnosis</th>
<th>Dementia management</th>
<th>No. of references</th>
<th>Systematic search strategy</th>
<th>Grading of evidence</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. British Association for Psychopharmacoology [16]</td>
<td>BAP</td>
<td>UK</td>
<td>2011</td>
<td>N</td>
<td>Y</td>
<td>NN</td>
<td>Y</td>
<td>Y</td>
<td>Y (P)</td>
</tr>
<tr>
<td>6. American College of Medical Genetics [17]</td>
<td>ACMG</td>
<td>USA</td>
<td>2011</td>
<td>Y</td>
<td>N</td>
<td>118</td>
<td>Y</td>
<td>N</td>
<td>NS</td>
</tr>
<tr>
<td>7. Clinical Research Centre for Dementia of South Korea [18]</td>
<td>CRCSK</td>
<td>Korea</td>
<td>2011</td>
<td>Y</td>
<td>Y</td>
<td>NN</td>
<td>N</td>
<td>Y</td>
<td>Y (G)</td>
</tr>
<tr>
<td>11. American College of Physicians [22]</td>
<td>ACP</td>
<td>USA</td>
<td>2008</td>
<td>N</td>
<td>Y</td>
<td>63</td>
<td>Y</td>
<td>Y</td>
<td>Y (NP)</td>
</tr>
<tr>
<td>12. Queensland University of Technology [23]</td>
<td>QUT</td>
<td>Australia</td>
<td>2008</td>
<td>Y</td>
<td>Y</td>
<td>78</td>
<td>N</td>
<td>Y</td>
<td>Y (NP)</td>
</tr>
</tbody>
</table>

Y, Yes; N, No; NN, Not numbered; P, Pharmaceutical; NP, Non-pharmaceutical; G, Governmental; NS, Not stated.
Table 2. Selected recommendations for evaluation of dementia, with consensus from three or more guideline groups

| Cognitive testing | • Perform cognitive assessment when carers describe cognitive decline in a person |
|                  | • Use a standardised tool for cognitive testing, such as MMSE, GPCOG, MOCA |
|                  | • Formal neuropsychological testing can form part of the assessment in mild or questionable cases of dementia |
| Co-morbid conditions | • Assess for and manage potentially reversible conditions contributing to cognitive dysfunction |
|                  | • Tests including CBC, TSH, electrolytes, calcium, fasting blood glucose, vitamin B12 and folate should be performed |
|                  | • HIV and syphilis testing should be done only with a suggestive history |
| Clinical diagnosis | • Make a clinical diagnosis only after completing comprehensive evaluation including history and physical exam |
|                  | • Use internationally agreed consensus criteria for diagnosis such as DSM-IV, NINCDS-ADRDA |
|                  | • Subtype dementia diagnoses are more challenging and should be made by clinicians with experience in the differential diagnoses and familiarity with the international consensus criteria |
| Imaging and specialised tests | • Structural imaging should be performed at least once and can be used to exclude reversible causes |
|                  | • Either CT or MRI can be used, but there are no recommendations to use both modalities in the same patient |
|                  | • Cerebrospinal fluid analysis is not recommended routinely, but it can be considered in atypical presentations |
|                  | • Electroencephalogram is not recommended routinely, but it can be considered in atypical presentations |
|                  | • Genetic studies, including the ApoE marker, are not routinely recommended |

...continues with Table 2 details...

immunodeficiency virus (HIV) testing only if there is a suggestive history [4, 5, 14, 15, 21] (refer to Supplementary data, Table A4 available in Age and Ageing online).

Diagnosis of dementia

There is agreement among the guidelines that international consensus diagnostic criteria should be used in the diagnostic process [8, 14, 16, 21]. Usage of the DSM-IV is recommended by three guideline groups [8, 14, 21], while other diagnostic criteria recommended include the ICD-10 [21] and NINCDS-ADRDA [8, 21]. The diagnosis should be made by clinicians with experience in dementia assessment [14, 15, 21, 23]. Some guideline groups suggest referral to a specialised dementia assessment centre [15] or to specialist clinicians such as geriatricians, geriatric psychiatrists and neurologists [23]. Diagnosing subtype dementia is more complex, with agreement that these diagnoses should be made by clinicians with expertise in the differential diagnoses using international standardised criteria [14, 15, 21, 23] (refer to Supplementary data, Table A5 available in Age and Ageing online).

Imaging and/or ancillary tests for diagnosing dementia are addressed by nine guideline groups. There is agreement that structural imaging, including computed tomography (CT) or magnetic resonance imaging (MRI), should be performed at least once in the workup [4, 6, 8, 14–16, 18, 21, 23]. Functional imaging is not recommended routinely by the Ministry of Health Malaysia [21] (MOH(M)), while other guideline groups suggest using modalities such as perfusion hexamethylpropyleneamine oxime single-photon emission computed tomography and 2-[18F]fluoro-2-deoxy-D-glucose positron emission tomography when the diagnosis of dementia is uncertain after performing structural imaging, or if differentiating among dementia subtypes is required [5, 6, 15, 16, 18]. Only the EFNS group addresses amyloid imaging, which they do not recommend for routine clinical use [6].

Cerebrospinal fluid analysis [15, 18, 21] and electroencephalogram [5, 15, 21] should not be performed routinely. However, in atypical presentations and select situations, some guideline groups support the use of these tests [4, 5, 15, 16, 18]. Brain biopsy should be utilised only in highly selected circumstances [5, 15, 18]. Genetic tests, including ApoE, are not recommended routinely [14, 17, 18, 21]. Detailed recommendations are given in Supplementary data, Table A6 available in Age and Ageing online.

Disclosing and providing information

It is generally agreed upon that the patient be asked their wishes about knowing the diagnosis, and with whom information can be shared [14, 15, 21]. There is agreement on early and timely disclosure [4, 10, 14], as well as the need to support, discuss, educate and provide information to patients and their families [4, 10, 19, 21, 23] (refer to Supplementary data, Table A7 available in Age and Ageing online).

Non-pharmacologic management

In general, professionals should acquire adequate knowledge and skills, based on the CCC [10] and the British National Institute for Health and Clinical Evidence (NICE) [15] guidelines. Care plans should be formulated, incorporating patients’ values, cultures and specific needs [15, 19, 21]. The CCC [11] and Queensland University of Technology (QUT) [23] groups advise to promote and maintain function and independence. There is agreement that home assessments and related environmental modifications should be conducted [15, 21]. Three guidelines address activities of daily living (ADLs) assessment and management [15, 19, 23]; one consistent recommendation shared by two groups is to conduct assessments and document changes in ADLs [15, 19]. Exercise and recreational activities are encouraged, although there is inconsistency among the guidelines in terms of evidence grading [10, 14, 19]. Cognitive stimulation programs are addressed by four guidelines, but not all guidelines agree that there is sufficient evidence to make recommendations [4, 10, 15, 21]. Three guidelines favour evaluating for and reporting abuse of patients with dementia [15, 19, 23].
Driving is addressed by six guidelines. There is agreement that driving ability should be evaluated at diagnosis, but the grading of the evidence is inconsistent [4, 5, 10, 19, 23]. Three guidelines advise to refer patients to local support services, as part of management [10, 15, 19]. Four guidelines conclude that information should be provided on community and medical resources, but there is inconsistency in evidence grading [4, 5, 14, 15, 23]. The topic of facility-based care is addressed by three guidelines, with differing recommendations [10, 15, 23] (refer to Supplementary data, Table A8 are available in Age and Ageing online).

Pharmacologic management

Cognitive enhancers can be used as an adjunct to non-pharmacologic intervention [14, 21]. Three guidelines suggest discussing the pharmacotherapy decision along with risks, benefits and medication side-effects, based upon the weak evidence or group consensus [10, 14, 22]. In Alzheimer’s dementia, there is agreement for cholinesterase inhibitor use to manage mild–moderate and moderate–severe cases (moderate-to-strong quality evidence) [4, 10, 11, 14–16, 19, 21, 22]. There is disagreement on use of memantine (an N-methyl-D-aspartic acid (NMDA) inhibitor) in mild dementia [10, 14]. However, there is...
agreement that memantine may be beneficial in moderate–severe dementia (strong recommendation based on high-quality evidence) [4, 11, 14, 16]. There are conflicting recommendations to support combining cholinesterase inhibitor therapy with memantine in moderate–severe dementia [10, 11, 16, 21].

In vascular dementia (VD), several guidelines make a weak recommendation that vascular risk factors should be identified and managed pharmacologically [10, 14, 21]. Only the Ministry of Health Singapore [14] (MOH(S)) guidelines strongly recommend prescribing an acetylcholinesterase inhibitor for VD, whereas CCC [10] recommends specifically donepezil as a treatment option. This practice is discouraged by NICE [15] and the British Association for Psychopharmacology [16] (BAP), and judged by the MOH(S) [14] as having too weak evidence to support for or against its use. MOH(S) [14] also advises to consider an NMDA antagonist in VD, whereas CCC [10] does not support this intervention.

There is agreement that an acetylcholinesterase inhibitor should be prescribed to manage Dementia with Levy Bodies (DLB) (moderate-to-strong quality evidence) [14, 16], and rivastigmine is the agent of choice [5, 21]. Only EFNS addresses whether NMDA antagonists should be used, and the evidence is such that a strong recommendation for or against this agent cannot be made [5].

In frontotemporal dementia (FTD), the guidelines unanimously agree that acetylcholinesterase inhibitor therapy would be harmful [5, 16, 21]. EFNS [5] and MOH(M) [21] address memantine use, which is also not recommended. The EFNS guideline also advises against selective serotonin reuptake inhibitor (SSRI) and dopamine agonist therapy [5] (weak recommendation).

Other pharmacotherapies, including vitamins and supplements, are addressed by multiple guidelines (Supplementary data, Table A9 available in Age and Aging online). Gingko Biloba is not recommended [10, 14, 16, 21]. All guidelines reject treatment with omega-3 [14, 21], folic acid [10, 14, 16, 21], vitamin B12 [10, 14, 16] and vitamin E [4, 10, 14, 21]. They also unanimously recommend against steroids and non-steroidal anti-inflammatory agents [4, 10, 14], acetylsalicylic acid [4, 10], statins [4, 10, 14, 16] and hormone replacement therapy [4, 10, 14, 16].

Evaluation and management of typical behavioural and psychological symptoms of dementia

There was agreement among guideline groups that behavioural and psychological symptoms of dementia (BPSD) should be assessed at diagnosis and at regular intervals thereafter [4, 5, 10, 14, 15, 18, 19, 23]. The guidelines advise to evaluate for precipitants of behaviours that can be intervened upon [10] and to identify and treat delirium [4, 18] (refer to Supplementary data, Table A10 available in Age and Aging online).

In general, non-pharmacologic interventions should be first line, followed by pharmacologic therapies [4, 10, 11, 14, 19]. There is sufficient agreement among the guidelines regarding environmental modification [14, 15, 19]. Music therapy is addressed by four guidelines and recommended by all [10, 14, 15, 21]. Aromatherapy is addressed by four guidelines [10, 14, 15, 21], but only supported by CCC [10] and NICE [15]. Animal-assisted therapy is advocated by NICE [15]. Of the four guidelines that examined massage therapy, three recommend its use [10, 14, 24]. Bright light therapy is evaluated by two guidelines [10, 21], and only the CCC recommends its use based on the low-quality evidence [10]. The use of multisensory stimulation, also referred to as Snoezelen therapy, lacks agreement among the guidelines [10, 11, 14, 15, 21].

Introduction of pharmacotherapy should be done with caution and awareness of side-effects [10, 14, 15]. There is agreement that patients and families should be advised of risks and benefits prior to commencing pharmacotherapy [4, 14, 21]. Antipsychotics can be prescribed to treat severe psychosis and agitation, with strong agreement by the guidelines that atypical agents are preferred [4, 11, 21]. Initial doses should be low with careful titration [4, 10, 15]. Antipsychotics should be reassessed and tapered as early as possible [10, 11, 14, 21]. Antipsychotics are generally not preferred in DLB [10, 15].

The CCC suggests using benzodiazepines, based upon weak evidence, while there was insufficient evidence to recommend for or against trazodone [11]. Mood stabilizers are strongly discouraged by MOH(S) [14]. There is disagreement about SSRI use in FTD-related BPSD [14, 16, 21].

Trialling acetylcholinesterase inhibitors or NMDA-receptor antagonists for BPSD in Alzheimer's disease is recommended if antipsychotic medications are ineffective. However, there is clear inconsistency among guidelines in the grading of the recommendation [10, 14, 15, 21]. There is a general agreement based on moderate-quality evidence that these agents should be used first line in BPSD associated with DLB [14, 24]. The MOH(S) weakly recommends the use of these cognitive enhancers in BPSD associated with FTD [14], and the one guideline that addressed its use in VD rejects this practice [24].

Evaluation and management of mood and related symptoms

Guidelines recommend evaluating for co-morbid depression [10, 14, 15, 21]. There is no consensus on evaluating for anxiety. The guidelines consistently agree, based on moderate-quality evidence, that cognitive behavioural therapy/psychotherapy should be first-line modalities to manage depression [14, 15, 21]. Reminiscence therapy is weakly recommended by two guidelines [21, 24]. There is agreement that antidepressant medications should be utilised when non-pharmacologic therapy fails or in severe cases [10, 11, 14, 15]. SSRIs are preferred (moderate–strong recommendation) [4, 11, 21]. Tricyclic antidepressant therapy is strongly rejected [4, 10, 15].

Four guidelines address the need to assess patients for pain (weak–moderate recommendation) [14, 15, 21, 23]. A stepped protocol for treating pain is weakly recommended (low-quality evidence) [14, 21]. The CCC recommends sleep hygiene and prescribing benzodiazepines in selected cases [10] (weak evidence).
Caregiver support

There is a strong recommendation by three guideline groups to evaluate caregivers’ needs routinely [10, 15, 21], and similar agreement that multi-component and individualised interventions are required [14, 15, 23]. Cognitive behavioural therapy is recommended, despite significant inconsistencies in grading the level of recommendation [5, 10, 15, 19, 21, 23]. The financial impact of caring for a patient with dementia should be anticipated, and available benefits discussed (weak recommendation) [14, 15, 23]. Two guidelines agree that respite care should be offered [14, 15].

Decision-making and advanced care planning

Valid consent should always be sought [10, 15]. Evaluating for capacity and changes in legal competency over time is recommended by CCC [10] and QUT [23] (weak-quality evidence). Discussing the use of advanced directives and identifying surrogates for medical and legal decision-making should be pursued [4, 19, 21, 23]. Patients should be encouraged to make a lasting power of attorney when decision-making capacity still exists [4, 10, 14, 15, 19].

Palliative care

Five guidelines address issues related to palliative care [14, 15, 19, 21, 23]. There is agreement that practitioners should discuss end-of-life issues with patients and their families [15, 19, 23]. Eating and drinking by mouth is encouraged [15, 21]. Tube feeding should be discouraged [15, 21, 23]. Individualised decisions about cardiopulmonary resuscitation should be made based upon previously expressed patient wishes [15, 21].

Discussion

There is generally adequate guidance on the evaluation and diagnosis of dementia, while the recommendations on the management of this condition often lack depth, consistency and/or consensus. Only half of the guidelines address dementia screening, and in general, it should be limited to select cases where individuals are at risk. ApoE testing is not recommended, which is appropriate as its diagnostic and predictive role remains undefined in the literature [25]. Cognitive testing using a standardised tool has been established and is supported by a number of guidelines. There are a myriad of diagnostic tools, yet limited advice on which of those tools is preferred and in which situations. Furthermore, ≈1 dozen tools are unique to the specific regions from where the guideline development group originates, and the reliability and validity of these tools are unclear.

Performing imaging at least once is well supported by the guidelines. CT or MRI are options, and there is no specific guidance on the preferred modality. One study found insufficient evidence to suggest that MRI is superior to CT in identifying cerebrovascular changes in autopsy-confirmed and clinical cohorts of VD, Alzheimer’s dementia and mixed dementia [26]. Only a few guidelines address the role of functional imaging, with variable strength of recommendations to pursue this investigation in cases of questionable diagnoses. This technology requires further research into its value in diagnosing dementia.

Several guideline groups address disclosure and information provision, with agreement on the value of open communication, early disclosure, education and support. However, due to lack of evidence for these practices, the recommendations are generally weak.

Over two-thirds of the guideline groups discussed non-pharmacologic management strategies for various aspects of dementia care. There are a myriad of recommendations that lack consistency among the guideline groups, and overall, the recommendations are generally weak and/or based upon low-quality evidence. This makes it challenging for caregivers to determine what approach to take.

In terms of pharmacological management for cognitive symptoms of dementia, the strongest recommendations for cholinesterase inhibitors are for Alzheimer’s dementia and DLB. Memantine is also strongly recommended for moderate–severe Alzheimer’s dementia. However, the impact of these medications on cognition and global functioning is modest and there are varying opinions regarding their cost-effectiveness [24].

Guidance on the pharmacologic management of BPSD supports judicious use of atypical antipsychotics, but guidelines do not elaborate on specific indications, doses and titration, nor on discontinuation regimens. Although tapering is generally recommended, there is no mention of potential harms of abrupt discontinuation of antipsychotics. A recent study suggests that abrupt discontinuation of these agents in the population affected by BPSD may actually be feasible [27]. There is lack of advice on physical restraints, which are still used to manage disruptive behaviours caused by dementia despite no evidence of benefit and the potential for harm [28]. Cognitive behavioural therapy or psychotherapy is recommended by several guidelines to manage mood disorder, although the sustained benefits of this therapy in those with dementia are unclear.

Approximately half of the guideline groups address advanced care planning, and all of these guidelines support this intervention; however, the strength of the recommendations is variable. Although dementia is a progressive and terminal disease, palliation is addressed by only one-third of the guideline groups and there is a lack of clarity and consistency among the recommendations. The end-of-life care guideline by Alzheimer Europe was examined, but ultimately excluded from our review as it did not achieve an AGREE-II score of 4 or higher based on the information available about its development [29]. There is a need for more research on end-of-life planning and care so that more evidence-based recommendations can be made.

Our study has some limitations. While a comprehensive literature search was performed, it is possible that not all existing clinical practice guidelines were identified. Restricting our search to English language documents likely also limited...
the number of guidelines available for inclusion in our study. The AGREE-II instrument that we applied assesses overall guideline quality, based largely on the development process, but does not address the quality of the specific recommendations in the guidelines. Additionally, some guidelines are extremely focused such that the recommendations cannot be compared with the general recommendations from other broader guidelines. Finally, we included guidelines dated from 2008 to 2013 to limit this review to the most recent evidence-based recommendations. However, during this time span, divergent recommendations may have occurred based on differences in available evidence and its interpretations. However, overall, there was general agreement for many of the recommendations.

Conclusion

In conclusion, there are several evidence-based practice guidelines for the diagnosis and management of dementia. Although direct comparisons are challenging due to variations in grading schemes, most guidelines agree on many key recommendations that can help guide clinical practice.

Key points

- There is generally adequate guidance on the evaluation and diagnosis of dementia.
- Recommendations on the management of dementia often lack depth, consistency and/or consensus.
- Most guidelines agree on many key recommendations that can help guide clinical practice.

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Conflicts of interest

None declared.

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Authors’ contributions

Study conception and design: all authors. Acquisition of data: J.N. Interpretation of results: all authors. Drafted manuscript: all authors. Critically revised the manuscript: all authors. Final approval of manuscript: all authors.

Supplementary data

Supplementary data mentioned in the text are available to subscribers in Age and Ageing online.

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