**GRADE Evidence Profile: Reviews examining the effectiveness of interventions behavioural and psychological symptoms of dementia (BPSD)**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quality assessment** | | | | | | | **Effect** | **Quality** |
| **No of studies** | **Design** | **Risk  of bias** | **Inconsistency** | **Indirectness** | **Imprecision** | **Other considerations** |
| **Aromatherapy** | | | | | | | | |
| 1 | randomised trial | serious20 | Serious inconsistency21 | no serious indirectness | Serious2 | None detected |  |  VERY LOW |
| **Exercise** | | | | | | | | |
| 1 | randomised trial | serious1 | no serious inconsistency | no serious indirectness | serious2 | serious3 |  |  VERY LOW4 |
| **Dyadic caregiver interventions** | | | | | | | | |
| 8 | randomised trials | serious 17 | serious inconsistency18 | no serious indirectness | no serious imprecision | None detected |  |  LOW |
| **Music** | | | | | | | | |
| 7 | randomised trials | serious8 | no serious inconsistency | serious12 | no serious imprecision | None detected |  |  LOW |
| **Cognitive stimulation** | | | | | | | | |
| 3 | randomised trials | serious9 | no serious inconsistency | no serious indirectness | serious2 | None detected |  |  LOW |
| **Functional analysis-based interventions (Moniz Cook)** | | | | | | | | |
| 12 | randomised trials | serious10 | no serious inconsistency | no serious indirectness | no serious imprecision | None detected |  |   MODERATE |
| **Melatonin** | | | | | | | | |
| 2 | randomised trials | no serious risk of bias | no serious inconsistency | no serious indirectness | serious2 | None detected |  |   MODERATE |
| **Mood stabilisers (divalproex)** | | | | | | | | |
| 2 | randomised trials | serious13 | no serious inconsistency | no serious indirectness | serious2 | None detected |  |  LOW |
| **Reminiscence therapy** | | | | | | | | |
| 3 | randomised trials | serious22 | serious inconsistency18 | no serious indirectness | serious2 | None detected |  |  VERY LOW |
| **Psychological therapy** | | | | | | | | |
| 2 | randomised trial | no serious risk of bias | no serious inconsistency | no serious indirectness | serious2 | None detected |  |   MODERATE |
| **Pain** | | | | | | | | |
| 1 | randomised trial | serious 11 | no serious inconsistency | no serious indirectness | serious2 | None detected |  |  LOW |
| **Antidepressants for depression (sertraline)** | | | | | | | | |
| 1 | randomised trial | serious 14 | no serious inconsistency | no serious indirectness | very serious15 | None detected |  |  VERY LOW |
| **Antidepressants for agitation and psychosis (sertraline)** | | | | | | | | |
| 1 | randomised trial | serious 14 | no serious inconsistency | no serious indirectness | serious2 | None detected |  |  LOW |
| **Antipsychotics** | | | | | | | | |
| 11 | randomised trials | no serious risk of bias | no serious inconsistency | no serious indirectness | no serious imprecision | None detected |  |   HIGH |
| **Donepezil** | | | | | | | | |
| 3 | randomised trials | no serious risk of bias | no serious inconsistency | no serious indirectness | no serious imprecision | None detected |  |   HIGH23 |
| **Galantamine** | | | | | | | | |
| 2 | randomised trials | no serious risk of bias | no serious inconsistency | no serious indirectness | no serious imprecision | None detected |  |   HIGH23 |
| **Rivastigmine** | | | | | | | | |
| 1 | randomised trials | no serious risk of bias | no serious inconsistency | no serious indirectness | no serious imprecision | None detected |  |   HIGH23 |
| **Memantine** | | | | | | | | |
| 5 | randomised trials | no serious risk of bias | no serious inconsistency | no serious indirectness | no serious imprecision | None detected |  |   HIGH23 |

1 *Forbes reported Rolland 2007 at high risk of performance and detection bias as was not blinded  
2 Total sample size <400  
3 Publication bias (Forbes reported that 5 studies measured neuropsychiatric outcomes but only one provided usable data)  
4 Assessment as per Forbes et al 2015  
8Risk of bias relates to lack of blinding, lack of ITT analysis   
9Risk of bias relates to random sequence generation and allocation concealment in 2/3 studies as well as blinding (performance and detection bias) in 1/3 studies  
10 Unclear allocation concealment in 42% of studies, unclear of high risk of performance bias in 33% of studies, unclear blinding of outcome assessors in 25% of studies, unclear selective reporting in 25% of studies and unclear or high risk of other biases in 50% of studies.*

*11 Scored yes for ¾ questions on Mixed Methods Appraisal Tool for quantitative randomised controlled trials*

*12 4/11 trials used agitation outcomes rather than global BPSD measures*

*13 Unclear sequence generation and allocation concealment in 1 study, unclear blinding in one study.*

*14 Unclear allocation concealment, blinding of outcome assessment and high risk of bias due to attrition*

*15 Total sample size <50*

*16 Considered low quality RCT by review authors*

*17 Unclear risk of bias for comparability of groups at baseline, blinding of outcome assessors and attrition bias for 2 studies*

*18 Authors report data not pooled due to heterogeneity*

*20 Unclear allocation concealment in 2 studies, unclear attrition in 1 study, unclear bias due to lack of adjustment for clustering in published data in 1 study  
21 Results highly heterogeneous (I2 =89%)  
22 Randomisation unclear (1 study), ‘fixed allocation’ (1 largest study);Blinding not possible*

*23Assessment as per Tan et al 2014*