Master of Clinical Science

A systematic review of appropriateness and effectiveness of management strategies used for the Behavioural and Psychological Symptoms of Dementia in the residential care setting.

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Abstract

Background

The incidence of dementia is increasing throughout the world. People with dementia often require residential care. The management of behaviours in residential care is a significant and stressful part of caring for people with dementia. The ability to apply appropriate and effective management strategies to these behaviours is vital to maintain the safety of the person with dementia and the people who live with them and care for them.

Objectives

The aim of this review is to identify and synthesise the best available evidence of the appropriateness and effectiveness of different strategies used to manage the behavioural and psychological symptoms of dementia in the residential care setting.

Inclusion criteria

Types of participants

Adults aged 65 years and older regardless of gender, ethnicity, co-morbidities who reside in a residential care facility. The subjects must have a diagnosis of dementia and exhibit behaviours which require a degree of modification or management so that they can be safely managed in a residential care facility.

Types of interventions/Phenomenon of Interest

Interventions types examined in this review were: Standard behavioural therapies, Alternative therapies, Complementary therapies, Psychotherapies, Environmental factors, Pharmacological interventions.

Types of studies

This comprehensive review considered both qualitative and quantitative studies. Included quantitative studies were randomized control trials, case control and cohort studies. The qualitative studies focused on the experiences of the people with dementia and the people who care for them.

Types of Outcome Measures

There was a wide range of outcome measures in the selected studies. The outcome strategies focused on both prevalence and severity of behaviours to illustrate effectiveness of interventions.
Search Strategy

Both published and unpublished English language studies were considered, from inception of the eight databases searched up to March 2012. A three-step search strategy was utilized in each component of this review.

Methodological quality

20 papers were assessed for methodological quality by two independent reviewers, using standardised Joanna Briggs Institute instruments. Of these papers, two were qualitative and the remaining 18 were quantitative through this process studies were considered to be of moderate to high quality as assessed against the Joanna Briggs critical appraisal tools. No studies were excluded based on methodological quality.

Data Collection and Data Synthesis

Data was extracted using standardized data extraction tools. Meta-analysis of quantitative data was appropriate for two of the studies, it was not attempted on the others due to lack of clinical and statistical heterogeneity; therefore findings are presented as a narrative. Meta-aggregation of qualitative findings was conducted in order to generate synthesised findings.

Results

20 papers were identified for this systematic review. 18 of these papers were quantitative and two were qualitative. These papers described effective and appropriate management of the behavioural and psychological symptoms using a variety of methods, pharmacological and non-pharmacological.

Conclusion

Effectiveness in management of behavioural and psychological symptoms of dementia is dependent on correct diagnosis of the behaviour and the detection of underlying pathology organic or psychiatric. Interventions need to be targeted at the resident and based on the residents lived experiences.
Student declaration

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution to Matt Kowald and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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Signed:

Matt Kowald

Dated: / /2013
# List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABMI</td>
<td>Agitation Behaviour Mapping Instrument</td>
</tr>
<tr>
<td>ACTUARI</td>
<td>Analysis of Cost, Technology and Utilization Assessment and Review Instrument</td>
</tr>
<tr>
<td>BEHAVE-AD</td>
<td>Behaviour Pathology in Alzheimer’s disease Rating Scale</td>
</tr>
<tr>
<td>BPSD</td>
<td>Behavioural and Psychological Symptoms of Dementia</td>
</tr>
<tr>
<td>BMS</td>
<td>Behavior Measurement scale</td>
</tr>
<tr>
<td>CGIC</td>
<td>Clinical global impression of change</td>
</tr>
<tr>
<td>CI</td>
<td>Confidence interval</td>
</tr>
<tr>
<td>CMAI</td>
<td>Cohen Mansfield Agitation Inventory</td>
</tr>
<tr>
<td>CReMS</td>
<td>Comprehensive Review Management System</td>
</tr>
<tr>
<td>EPS</td>
<td>Extra-pyramidal symptoms</td>
</tr>
<tr>
<td>FAST</td>
<td>Functional Activity Staging Test</td>
</tr>
<tr>
<td>GDS</td>
<td>Global Deterioration Scale</td>
</tr>
<tr>
<td>MAI</td>
<td>Medication appropriateness index</td>
</tr>
<tr>
<td>MAKS</td>
<td>Multimodal or multi component therapy</td>
</tr>
<tr>
<td>MASiTARI</td>
<td>Meta Analysis of Statistics Assessment and Review Instrument</td>
</tr>
<tr>
<td>MCMI</td>
<td>Modified Cohen Mansfield Agitation Inventory</td>
</tr>
<tr>
<td>MeSH</td>
<td>Medical subject headings</td>
</tr>
<tr>
<td>MMSE</td>
<td>Mini Mental State Exam</td>
</tr>
<tr>
<td>M-NCAS</td>
<td>Modified Nursing Care Assessment Scale</td>
</tr>
<tr>
<td>NBRS</td>
<td>Neurobehavioral rating scale</td>
</tr>
<tr>
<td>NHBPS</td>
<td>Nursing home behavioral problem score</td>
</tr>
</tbody>
</table>
NOSGER...............Nurses Observation Scale for Geriatric Patients

NOTARI.................Narrative Opinion and Text Assessment and Review Instrument

NPI....................Neuro-Psychiatric Inventory

NPI-NH..................Neuro-psychiatric Inventory Nursing home version

PSMS....................Physical Self Maintenance Scale

QARI .................... Qualitative Assessment and Review Instrument

RACF .................... Residential Aged Care Facility

RUD-FOCA...............Resource Utilization in Dementia – Formal Care

TREA.....................Treatment Routes for Exploring Agitation

UKU......................Udvalag for Kliniske Undersogelser