What do we know about behavioural crises in dementia? A systematic review

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27th Alzheimer Europe Conference
“Care today, cure tomorrow”
Berlin, Germany – 4th October 2017
Dementia-related Behaviours

• Behavioural and Psychological Symptoms of Dementia (BPSD) - common
• Unsettling and distressing
• Diminish quality of life
• Increase caregiver burden
• More care time / higher care costs
• Crises
  • Require external intervention from professionals
  • Reported as a reason for hospital admission / institutionalisation
What are the factors associated with behavioural crises in dementia?

MEDLINE, CINAHL, PsycINFO, EMBASE and AMED databases.
Definition of crisis in dementia care:

“a process where a stressor causes an imbalance requiring an immediate decision to be made which leads to a desired outcome and therefore a resolution of the crisis. If the crisis is not resolved, the cycle continues” (Vroomen, et al., 2013).

Number of records identified through database searching:
- MEDLINE: 1237
- EMBASE: 2545
- CINAHL: 439
- PsycINFO: 1312
- AMED: 11
Total: n = 5546

Additional records identified through lateral searches: [n=2]

Duplicates: [n = 1809]

Records after duplicates removed: [n = 3737]

Titles and abstracts screened: [n = 3737]

Records excluded: [n = 3503]

Articles excluded [n=210]
Reasons:
- Foreign language 16
- Opinion piece 5
- Conference abstract 20
- Review 12
- Not found 6
- Case study 2
- No clear behavioural crisis point 126
- Lack of detail 6
- Protocol 1
- Participants no dementia 2
- Data not isolated 5
- Not focussed on behaviours 9

Full-text articles assessed for eligibility: [n = 234]

Full-text articles assessed as eligible: [n = 24]

Articles and studies included in narrative synthesis: [n = 24 articles/18 studies]
**Study Characteristics n=18**

<table>
<thead>
<tr>
<th>Country</th>
<th>Count</th>
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<tbody>
<tr>
<td>USA</td>
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<tr>
<td>Italy</td>
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<tr>
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<td>Australia</td>
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<td>Canada</td>
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1 Study = 8 European Countries (England, Estonia, Finland, France, Germany, Spain, Sweden, The Netherlands)

**Mix of Study Designs:** Qualitative interviews, Observational studies, Chart reviews, Naturalistic and randomised trials

**Settings:** Community, Long-term care facilities, Specialist dementia or Psychiatric units

**Quality:** 5 strong, 11 moderate and 2 weak
Behaviours at the time of crises (% of studies n=18)

- Agitation/Aggression, 100%
- Wandering/Absconding, 67%
- Sleep/Night-time behaviors, 44%
- Anxiety, 33%
- Apathy/Indifference, 33%
- Elation/Euphoria, 17%
- Motor disturbance, 22%
- Depression/Dysphoria, 39%
- Disinhibition, 33%
- Irritability/Lability, 17%
- Resistance to care, 28%
- Noisiness/Screaming, 17%
- Appetite/Eating, 39%
- Opposition/Combative Behavior, 11%
- Self-neglect, 6%
- Impulsive Behavior, 6%
- Disruptive Behavior, 6%
Behavioural Crises in Dementia (% studies):

- Occur in family homes (72), long-term care institutions (67) and hospitals (28)
- Occur in the moderate and severe stages of dementia
- Occur most frequently in females, but when in males psychiatric care is used
- Lead to admissions to psychiatric units (50), specialist dementia units (17), referrals to community services (17)
- Can lead to multiple admissions over a short period of time (39)
- Can lead to admissions under legal processes (17)
Treatment of crises

• **Non-pharmacological interventions**
  • educating caregivers, counselling, therapies, reducing stimuli

• **Pharmacological interventions**
  • psychotropic medications, medication reviews

• **Medical interventions**
  • reducing pain, promoting nutritional intake and function, physical assessments, multidisciplinary input
Limitations

Search may not have picked up all studies
  - Term 'crisis' not always used
  - Admissions

Not exclude moderate or low quality studies

Problematic synthesis - multiple study designs
<table>
<thead>
<tr>
<th>Conclusions (what we know)</th>
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</thead>
<tbody>
<tr>
<td>• Family homes and care homes</td>
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<tr>
<td>• Aggression and agitation</td>
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<tr>
<td>• Moderate to severe stages of dementia</td>
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<tr>
<td>• Lack of consistency</td>
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<tr>
<td>• Behaviour assessments</td>
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<tr>
<td>• Medical, non-pharmacological and pharmacological approaches</td>
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<tr>
<th>Future Research (what we do not know)</th>
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<tbody>
<tr>
<td>• Preventative factors</td>
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<tr>
<td>• Caregivers or people with dementia or both</td>
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<tr>
<td>• Interventions, models of care and services</td>
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<tr>
<td>• Role of dementia subtypes in behaviour-related crises</td>
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</table>
Thank you

Professor Eneida Mioshi, University of East Anglia
Ms. Julieta Camino, University of East Anglia

Norfolk and Suffolk Primary and Community Care Research Office
Norfolk and Waveney CCGs
References


