Personalising Interventions for Behavioral and Psychological Symptoms of Dementia - BPSD

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BPSD: Person Centered Perspectives

- Concept needs updating (Wolverson et al 2019; 2021;2022)
- Treatment Target? Agitation, Aggression, Distress, Psychosis (NICE Guideline 97, 2018)
- Measurement with valid instruments, needs updating i.e. ADL / Cognition/NPI used in Pharma studies not always relevant e.g. NPI-NH may over attribute BPSD incidence by overlooking triggers (the focus of psychosocial studies) for behavioural changes (Smith et al 2020); vs Psychosocial study outcomes QoL; psychological / social well-being (Moniz-Cook et al 2008; Clarke et al 2020);
- Carer 'work' should be included in the paradigm





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'Person Centered'

- Individualized formula-led; Case Specific (Holle et al 2017; Bird & Moniz-Cook 2008)
- Caregiver training on its own is not effective (Spector et al 2013; Abraha et al 2017)
- Most BPSD interventions are 'Preventive' i.e. suppress / reduce development of BPSD e.g.
 Cochrane review Moniz-Cook et al 2012; vs. 'Treatment' for clinically significant BPSD harder in large scale studies (Moniz-Cook et al 2017)
- Personalized Care (i.e. 'Personalized Medicine') algorithms for 'rational decision support' emerging as feasible for practice e.g. McCabe et al 2015; Halek et al 2017;

Moniz-Cook & Rewston 2020)





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Theoretical Approaches

- Unmet Need NBD (Algase et al. 1996; Cohen-Mansfield, 2000)
- Progressively Lowered Stress Threshold PLST (Hall & Buckwalter, 1987)
- Behavioural Approaches: Behaviour Analysis / Functional Analysis 'Antecedents Behaviour Consequences' ABC (Teri et al 1998; Moniz-Cook et al 2001;2012) / Cognitive Behavioural Approaches (James, 2014)





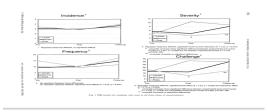


A B C analysis: treating BPSD

Same behaviour 'aggressive resistance' different cause(s); same cause/distal antecedent 'belief/superstition' different behaviour

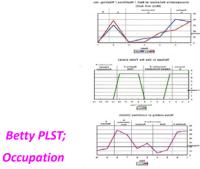
Staff training; care plans

84 people in 3 care homes



Moniz-Cook et al 1998, Intern. J . Geriat. Psych.

'Aggressive Resistance'



Moniz-Cook et al 2003, Intern. J. Clini Psych & Psych

Functional Analysis, Superstition

Jack 'Unlucky Green'

'Bad Luck'

Fear of 'black pants'



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Moniz-Cook et al 2001, Intern. J. Geriat. Psych.





Prevention: the evidence

Functional Analysis-Based including 'ABC'



13 Family care
3 Care home
2 Assisted
Living/Hospital

| | Intervention | | | Control | | | Std. Mean Difference | | Std. Mean Difference |
|-----------------------------------|--------------|-----------|---------|-----------------------|---------|---------|----------------------|----------------------|-----------------------------|
| Study or Subgroup | Mean | SD | Total | Mean | SD | Total | Weight | IV, Fixed, 95% CI | IV, Fixed, 95% CI |
| 1.2.1 Family Care | | | | | | | | | |
| Farran 2004 | -1.14 | 13.9 | 124 | -1.89 | 13.4 | 111 | 15.3% | 0.05 [-0.20, 0.31] | |
| Gitlin 2010 | -0.52 | 19.03 | 117 | -0.4 | 17.7 | 122 | 15.6% | -0.01 [-0.26, 0.25] | |
| Gormley 2001 | -2.5 | 5.23 | 34 | -0.2 | 5.35 | 28 | 3.9% | -0.43 [-0.94, 0.08] | |
| Huang 2003 | -7.54 | 49.56 | 24 | 2.25 | 32.38 | 24 | 3.1% | -0.23 [-0.80, 0.34] | |
| Losada-Baltar 2004 | 4.7 | 21.84 | 15 | 0 | 26.87 | 4 | 0.8% | 0.20 [-0.91, 1.30] | |
| Moniz-Cook 2008 | 3.57 | 22.19 | 30 | 4.17 | 29.5 | 31 | 4.0% | -0.02 [-0.52, 0.48] | |
| Teri 2000 | -0.08 | 0.54 | 41 | -0.1 | 0.52 | 36 | 5.0% | 0.04 [-0.41, 0.49] | |
| Teri 2003 | -0.4 | 2.41 | 67 | -0.2 | 2.59 | 72 | 9.1% | -0.08 [-0.41, 0.25] | |
| Teri 2005 | -1 | 2.4 | 42 | -0.1 | 2.36 | 41 | 5.3% | -0.37 [-0.81, 0.06] | |
| Zarit 1987 | 2.05 | 29.8 | 44 | -0.99 | 28.48 | 39 | 5.4% | 0.10 [-0.33, 0.53] | |
| Subtotal (95% CI) | | | 538 | | | 508 | 67.6% | -0.05 [-0.17, 0.07] | • |
| Heterogeneity: Chi ² = | 6.31, df | = 9 (P = | 0.71); | $I^2 = 0\%$ | | | | | |
| Test for overall effect: | Z = 0.85 | (P = 0. | 40) | | | | | | |
| 1.2.2 Residential Car | re | | | | | | | | |
| Chenoweth 2009 | -1 | 22.84 | 101 | 7.6 | 27.65 | 70 | 10.7% | -0.34 [-0.65, -0.04] | |
| Fossey 2006 | 1.21 | 23.88 | 172 | 4.57 | 22.95 | 162 | 21.8% | -0.14 [-0.36, 0.07] | |
| Subtotal (95% CI) | | | 273 | | | 232 | 32.4% | -0.21 [-0.39, -0.03] | • |
| Heterogeneity: Chi2 = | 1.10, df | = 1 (P = | 0.29); | l ² = 9% | | | | | |
| Test for overall effect: | Z = 2.33 | B (P = 0. | 02) | | | | | | |
| Total (95% CI) | | | 811 | | | 740 | 100.0% | -0.10 [-0.20, -0.00] | • |
| Heterogeneity: Chi ² = | 9.46 df | = 11 (P | = 0.58) | : I ² = 09 | 6 | | | | - 1. 1. 1. 1. 1. |
| Test for overall effect: | | | | ,. 0, | - | | | | -0.5 -0.25 0 0.25 0.5 |
| Toot for cubaroup diffe | | | | - 1 /D - | - 0.15) | 12 - 51 | 10/. | | Intervention Control |

Moniz-Cook et al 2012

掌◎童�� UNIVERSITY OF HULL WHELD Person Centered Care – Care Home
 Programme including 2 RCTs - 2012 -2020 – not necessarily including 'ABC' approach (Ballard, C., Orrell, M., Moniz-Cook, E. et al 2020) - see 17 publications in Reference list

Structured training and 9 month support/coaching intervention for care staff PCC - focus on good quality interpersonal / social interaction

- Effective in improving quality of life; reducing agitation / overall BPSD
- Lower overall costs for resident care than TAU
- iWHELD online (Covid adapted) https://wheld.org/
- WHELD into Practice





Understanding the System

- Care Homes: Staff anxiety and inaccessible supervision predict BPSD management difficulty; High BPSD not always = to high BPSD management difficulty (Moniz-Cook et al 2000)
- Some care homes respond better than others (Moniz-Cook 2017); e.g. intervention can be compromised during managerial instability (Kelley et al 2021)
- Care Home 'Readiness' needs prior evaluation: Good assessment tools available (Keenan et al 2020; Bunn et al 2020)
- Translating evidence into community services depends on local resources and skills (Teri et al 2020)
- Sustainability: Person-centred provision, sensitive to members' diversity and social needs; robust local community health and care services support; and timely access to external dementia experts (Morton et al 2021; Surr et al 2019)

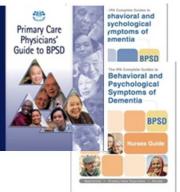




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BPSD Practice: first line non- pharmacological treatment - so many guides!

IPA Guides



DICE (Kales et al)

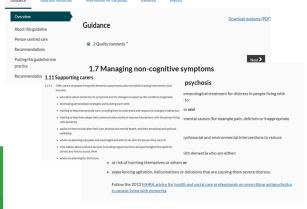


Optimising treatment and care for people with behavioural and osychological symptoms of dementia A best practice guide for health and social care professionals How to use this guide Prevention Westful westing 11 Speeds retroversions Antipopythology prescription 13 Meeting needs and reducing distress General Professional State of the professiona

NICE Guideline 97

Dementia: assessment, management and support for people living with dementia and their carers

NICE guideline [NG97] Published: 20 June 2018



BPS Stepped Care (Brechin et al)







Non-Pharmacological Treatment: Practitioner Perspectives

- Professionals (all disciplines n = 378) still mostly access pharmacological treatments for BPSD
- Lack clarity for implementing into practice e.g. NICE 2018 (Gray et al 2022)
- Professionals (all disciplines n = 378) agree that formulations remain key for alternatives to pharmacological treatments (James et al 2021 a)
- Lack of detail: DICE, BPS & NHS England 'Stepped Care' approaches do not specify 'how' to formulate personalized behaviour support plans; DICE unclear about how the information it gathers is integrated and prioritized (James et al 2022)
- Some Guides not available to all practitioners e.g. IPA guides







Practical Resources

Online Free access course:

Functional Analysis-based intervention for BPSD (Moniz-Cook 2017 published; updated 2020)

- · Normalizing emotion and behaviour
- Video based training in observed communicative behaviour
- Video based training in case specific formulation and behaviour support plans for BPSD (10 cases of increasing complexity);
- Behaviour support plans cover
- (i) Health needs
- (ii) Psychosocial needs of the person living with dementia and
- (iii) needs of the family caregiver / care home staff



https://www.dementiahull.co.uk/behaviours.html

Free access to materials & toolkits:

- Training videos;
- Training Animations Ian James e.g. Using the Newcastle Model: a Family Guide (James, I.A. & Birtles, H. 2020)
- Setting specific caregiver report instruments for the recognition of BPSD

Family care RMBPC (Teri et al 1992);

Care Homes CBS (Moniz-Cook et al 2001)

https://www.dementiahull.co.uk/toolkits.html







What is known

Evidence:

Functional Analysis/case specific (Dyer et al 2018)
Personalised Social Interaction is key (Ballard et al)

Caregivers 'agents of change':

Mechanisms of how to apply formulation-led interventions require more consideration (James et al 2020)

They need access to skilled dementia expertise (Surr et al 2019)

 Setting specific materials need tailoring to care settings i.e. home / family care; nursing care homes; inpatient units; acute hospital (Abraha 2017; James and Moniz-Cook 2018)

Current Gaps

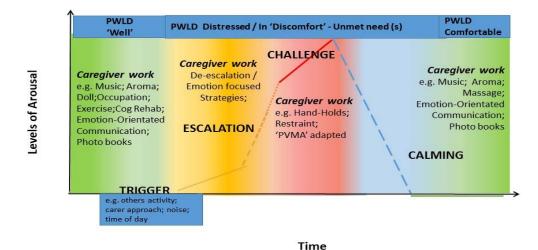
- How to help caregivers to deal with distress in people living with a dementia?
- How to translate evidence into practice? e.g. Community specialists fail to recognise BPSD (Manthorpe et al 2018)







Treating distress: intervening in the arousal sequence



Adapted from Positive Behaviour Support (PBS) approaches







Skills for preventing and treating distress

- Functional analysis of 'symptoms' key unmet needs, important to the person for their wellbeing (e.g. James et al Fig 1)
- Interactive de-escalation strategies carer keeps check of their own language, emotion and behaviour whilst interacting with the person to meet need (James, et al 2021 b)
- Person Centered & Restraint Interventions during resistance of essential personal care i.e. 'aggressive resistance' (Crooks et al 2021)



Unmet needs for company > mood and psychotic symptoms in people living at home (Michelet et al 2021)

Fig 1 needs to aid evaluation





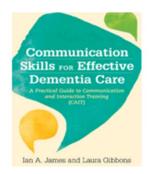




Caregiver Communication

Ian James (Newcastle, UK)

- Treating 'Behaviours that Challenge' Communication & Interaction Training CAIT Manual (James and Gibbons 2019)
- Online with 2 workbooks













Thank You for listening Additional information available after this slide

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What Next?

- Practice Guide: Update *Psychological Approaches in Managing Psychological and Behavioural Distress in People with Dementia* Brechin et al 2013; British Psychological Society (James et al 2022)
- Instruments for measuring outcomes need to be reviewed e.g.
- Person-centered assessment of apathy & resistance to care (Mast et al Alz & Dem Transl Res. & Clin Interv.)
- NPI-NH ?over attribute incidence of BPSD by overlooking triggers for behavioural changes (Smith et al 2020)
- Measurement of caregiver experience needs improvement
- Building on assets: When BPSD becomes fun! a creative arts project (people diagnosed with dementia and families meet at the Butterflies Groups) https://www.butterflies.org.uk/about-us Wellcome funded civic engagement project (Wolverson et al)





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Distress: personal vulnerabilities

Cognitive personality Interpersonal 'styles' (Beck 1983) risk factors for poor mental health adjustment to dementia

- Residents living in care homes; behaviour observation BPSD /proxy (family) completed their personality style using an for this instrument (Hilton & Moniz –Cook, 2006)
- Older people and their family member memory clinic; self report personality style and mood (Harrison, Clarke & Moniz-Cook in prep.)

Care homes: Some residents struggle more than others (James et al 2017; Moniz-Cook et al 2017)

- Residents living in 63 UK care homes (n= 2185) Prevalence BPSD 87.5%; 40% had > 10 BPSD; where a latent structure of behavioural clusters was found e.g. those with reported 'dangerous behaviour' had a high probability of also displaying: lack of self-care, aggressive resistance, verbal aggression, perseveration, restlessness and shouting
- Staff supporting some residents require ongoing external expertise to deliver behaviour support plans







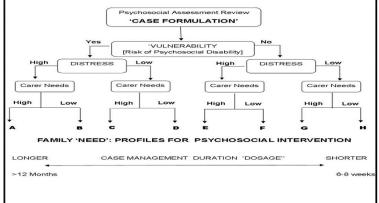
Personalized care: algorithms

- Assessment protocols validated for case specific interventions for BPSD (McCabe, M.P. et al 2015;
 Halek et al 2017)
- Memory Clinic Psycho-diagnostics: family-based assessment protocol (Moniz-Cook 2008)

Targeting case management and support at the start: 8 family profiles (Moniz-Cook & Rewston 2020,

Ch. 2)











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