Review of the effectiveness of psychological interventions for challenging behaviour

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THE LINE UP

- Definition of Challenging Behaviour
- Common conditions with Challenging Behaviour
- Turning moments in managing CB for PWLD
- NICE Guidelines on CB Interventions for PWLD
- Research Sources & Information
- PBS definition & concept
- PBS and the evidence of it effectiveness for CB
- Traditional BIs and the evidence of it effectiveness for CB
- Psychotherapy and the evidence of it effectiveness for CB
- Summary
- Questions & Comments
- References
Challenging behaviour

- Defined as behaviours of an intensity, frequency, or duration that threaten the physical safety of the person or others or restrict access to community facilities (Emerson *et al.*, 2001).
Challenging Behaviour

Aggressive behaviours in PWLD serve different functions:

**Functions identified in 981 analyses**

- Escape
- Attention
- Autonomic
- Tangible
- Multiple

Percentage

35
30
25
20
15
10
5
0
Milestones in Mx of CB for PWLD


- The report recognised the need to challenge the myth that PWLD are immune to emotional problems and also unsuitable for PI.
Winterbourne View

- This has led to a **significant** policy development with the main focus on the **reduction of the use of restraint**, and **improved care based on PBS**.
- In terms of **secondary, complementary** evidence base approach to support behaviour change, includes **therapeutic approaches**, **systemic, individual and group PT**.
Literature search– methodology (Evidence & Info Sources)

- PsycINFO Database Record (c) 2016 AP
- Cochrane Database of Systematic Reviews
- EMBASE
- *The British Psychological Society–Divisions of Clinical Psychology*
- RCPsych & International journals/reports/guidelines
- Journal of Cognitive and Behavioral Psychotherapies, Sep 2008
- EBSCOhost in *Journal of Intellectual & Developmental Disability*
- EBSCOhost in *Journal of Experimental Criminology*
- Journal of Behavioral Education,
- International Psychogeriatrics
- Research in Developmental Disabilities, October 2014
- American Journal of Recreation Therapy,
- Academic Journal, CINAHL,
- TIZARD, University of Kent, The leading UK academic group, well known internationally, working with PWLD and community care
Consider personalised interventions for children, young people and adults that are based on behavioural principles and a functional assessment of behaviour, tailored to the range of settings in which they spend time, and consist of:

- clear targeted behaviours with agreed outcomes
- assessment and modification of environmental factors that could trigger or maintain the behaviour (for example, altering task demands for avoidant behaviours)
NICE Guidelines

- addressing staff and family member or carer responses to behaviour that challenges
- a clear schedule of reinforcement of desired behaviour and the capacity to offer reinforcement promptly
- a specified timescale to meet intervention goals (modifying intervention strategies that do not lead to change within a specified time).

- Only offer antipsychotic medication in combination with psychological or other interventions.
Positive Behavioural Support
What is positive behaviour support?

- A framework for developing an understanding of challenging behaviour and for using this understanding to develop effective support
- Personalised,
- Systematic functional assessment/analysis
- Attention to broader context
- Attention to quality of life, avoiding restrictive approaches
How do we understand the behaviour?

I: Functional assessment – Multi-disciplinary – Involving network, Holistic initial assessment;
Use of specific assessment tools to identify triggers;

- Communication difficulties
- Medical reasons
- Underlying MH condition
- Abuse
- Sudden environmental change or Clash between person and environment
- Motivation for CB – escape, sensory, attention, demands, tangible

II: Behavioural report – highlights triggers and motivators for the behaviour, shared with networks
The Time–Intensity Model of Aggressive Incidents
The physiological, emotional & physical path

Kaplan & Wheeler (1983)
Evidence of PBS effectiveness for CB
Although still emerging, (PBS) approaches appear to offer a comprehensive and proactive alternative to traditional behavior management plans in both school settings and other community settings, including residential psychiatric centers and clinical settings.

The purpose of this paper is to introduce the principles of PBS to recreation therapists. In particular, an emerging conceptual framework for developing PBS plans for clients or students with behavior problems is introduced, and concerns and specific strategies for these individuals are discussed.
The efficacy of PBS with the most CB: the evidence and its implications

- Citation: Journal of intellectual & developmental disability, September 2012, LaVigna G.W.; Willis T.J. EBSCOhost in Journal of Intellectual & Developmental Disability

- Many people with LD present with CB which often has serious consequences such as: the prescription of long term medication, in-patient admissions and disruption of normal daily activities.

- Questions have been raised as to PBS effectiveness, costs, and accessibility.
- Outcome of 423 cases were studied.
- This review showed that PBS was effective with both severe and high-rate behaviour problems, was cost-effective, used a methodology that was easily trained and widely disseminated, and worked in institutional settings in which the most difficult problems are thought to be, as well as in the community.
The study is a multi-centre cluster randomised controlled trial involving community intellectual disability services in England and service users with mild to severe intellectual disability and challenging behaviour.

This study aims to investigate whether **professionals training in the delivery of PBS** as part of routine practice is clinically and cost effective **compared to treatment as usual** in community LD services.

The teams will be randomly allocated into one of two conditions, either training and support to deliver PBS or treatment as usual.
We will carry out assessments of challenging at six and 12 months.

We will monitor treatment fidelity and we will interview a sample of paid and family carers, service users, staff and managers about what they think of the treatment and how best we can deliver it in routine care.

The main outcome is reduction in challenging behaviour at one year after randomization. We will also carry out a health economic evaluation to examine the costs and consequences of staff training in PBS.

Discussion: The study findings will have significant implications for the delivery of PBS in community based services with the potential for reducing inpatient admissions and out-of-area placements for adults with intellectual disability and challenging behaviour.

Source: PsycInfo Full Text: Available from National Library of Medicine in BMC Psychiatry
SCHOOL-WIDE POSITIVE BEHAVIOUR SUPPORT

Primary Prevention:
School-/Classroom-Wide Systems for All Students, Staff, & Settings

Secondary Prevention:
Specialized Group Systems for Students with At-Risk Behaviour

~80% of Students

~15%

Tertiary Prevention:
Specialized Individualized Systems for Students with High-Risk Behaviour

~5%
Evidence

- Thousands of individual case and small groups studies are completed

- Meta-analyses of these studies which suggest large reductions (typically greater than 50%) in frequency of challenging behaviour

- One RCT in the UK in adults with LD showed 43% reduction in CB after PBS.

- Many RCTS demonstrating school-wide PBS is effective with children in mainstream and special schools
Evidence of effectiveness of alternative BI/Counselling for CB

- American Journal on Mental Retardation (Jul 2006): Didden, Robert; Korzilius, Hubert; van Oorsouw, Wietske; Sturmey, Peter (PsycINFO Database Record (c) 2016 APA, journal abstract)

- Meta Analysis
- 80 articles were examined.
- Conclusion
- It was found that behavioral interventions for challenging behaviors are effective with people with mild mental retardation.
Behavioral family intervention for children with developmental disabilities and behavioral problems

  Journal: Article, EMBASE

- 48 children with NDD participated, 27 randomly allocated to an intervention group and 20 to control group.

- Parents completed measures of parenting style and stress, and independent observers assessed parent–child interactions.

- Result: fewer child behavior problems reported by mothers and independent observers, improved maternal and paternal parenting style, and decreased maternal stress.

- All effects were maintained at 6-month follow-up.
Behavioural and cognitive–behavioural interventions for outwardly-directed aggressive behaviour in PWLD


- Prevalence rates of such behaviors are 3.3% to 36%
- Such behaviours often run a long term course and are a major cause of social exclusion in children and adults.

Result:

- Direct interventions based on cognitive–behavioural methods;
- (modified relaxation, assertiveness training with problem solving, and anger management) appear to have some impact on reduction of aggressive behaviour at the end of treatment and in some studies also at follow up (up to six months).

- Research in Autism Spectrum Disorders, Dec 2013, Kaat, Aaron J.; Lecavalier, Luc, PsycINFO Database Record, (c) 2016APA,

- **On a whole:** one in four children with an ASD meets diagnostic criteria for either oppositional defiant disorder (ODD) or conduct disorder (CD) which are DBDs (Disruptive behavioral disorders).

- 55 peer-reviewed articles reviewed published between 2000 and 2012 on the prevalence, phenomenology, or psychosocial treatments of DBDs in youth with ASDs.

- **Parent training** has been the primary mode of psychosocial treatment and has some support for its efficacy.
Efficacy of behavioral interventions for reducing problem behavior in persons with autism: An update quantitative synthesis of single-subject research

- Citation: Research in Developmental Disabilities, October 2014, Heyvaert M.; Saenen L.; Campbell J.M.; Maes B.; Onghena P. 2014 Elsevier Ltd.

- Challenging behaviors are highly prevalent among persons with autism and bring along major risks for the individual with autism and his/her family.

- 213 studies of different behavioral interventions, representing 358 persons with autism were statistical analysed.

- Overall, it was found that behavioral interventions were on average effective in reducing problem behavior in individuals with autism.
Behavioral interventions for agitation in older adults with dementia

- International Psychogeriatrics, Jun 2006, . (PsycINFO Database, ), journal abstract  Spira, Adam P.; Edelstein, Barry A.

- Older adults with **dementia** commonly exhibit **agitated behavior** that puts them at risk of injury and institutionalization and is associated with caregiver stress.

- These articles described interventions that targeted wandering, disruptive vocalization, physical aggression, other agitated behaviors.

- **Conclusions:**
  - The evidence provided optimism regarding the application of behavioral principles to the management of agitation among older adults with dementia.
Counseling outcomes for youth with oppositional behavior: A meta-analysis.

- Citation: Journal of Counseling & Development, Jan 2014, Erford, Bradley T.; Paul, Lauren E.; Oncken, Conor; Kress, Victoria E.; Erford, Matthew R. 2016 APA, Available from EBSCOhost in Journal of Counseling & Development

- This meta-analysis of clinical trials explored the effectiveness of treatments targeted at oppositional behavior.

- Findings suggest that counseling is effective in treating oppositional behavior in school-age youth at termination, but the long-term efficacy of such treatment is less stable.
Evidence of Psychotherapy effectiveness for CB
PT in PWLD requires;

I: Service modifications;
Attention to inform consent, Suitability screening, Staff training and supervision.

II: PT models’ adaptations
- In accordance to the levels of cognitive deficits,
- Because reasoning and communication difficulties impacting on the therapeutic process.

NEED FOR;
- simple language, short sentences, short but more sessions,
- supported with non verbal techniques(drawings, pictures and using objects),
- involving carers if needed.
Beail (2001) reported a study on the outcomes of PPT for offenders with ID.

Out of 18 only 13 accepted the therapy, 11 remained offence free at the end of therapy and at the 4 follow ups of 6 months.

The remaining 5 all reoffended within 2 years.
Group interventions are also based on a range of therapeutic models, such as:

- psychodynamic, mindfulness and cognitive behavioural therapies etc.

Oliver-Brannon (2000) compared group based interactive behaviour therapy in a small sample with non-random assignment.

Group participants evidenced greater reduction in target behaviour, increased problem solving skills and earlier return to the community.
Mindfulness and acceptance-based therapies

- **Group-based mindfulness interventions**

- Chilvers et al. (2011) implemented twice weekly, 30 minutes, optional mindfulness group for 15 women with ID in a medium-secure unit over a six month period (approx 44 sessions).

- Over the six month period, aggressive incidents reduced substantially and to a statistically significant extent for this group of 15 women.
The effectiveness of multisystemic therapy (MST): A meta-analysis.

- Clinical Psychology Review, Aug 2014, van der Stouwe, Trudy; Asscher, Jessica J.; Stams, Geert Jan J.M.; Deković, Maja; van der Laan, Peter H.

- (MST) is a well-established intervention for juvenile delinquents and/or adolescents showing social, emotional and behavioral problems.

The outcome:
- MST seems most effective with juveniles under the age of 15, with severe starting conditions.
Evidence-based Complementary and Alternative Medicine, June 2010, Choi A.-N.; Lee M.S.; Lee J.-S. Journal Article

- 48 children were allocated to either a music intervention group or an untreated control group.
- The music intervention group received 50 min of music intervention twice weekly for 15 consecutive weeks.
- The music intervention group showed significant reduction of aggression and improvement of self-esteem compared with the control group.
- These findings suggest that music can reduce aggressive behavior and improve self-esteem in children with highly aggressive behavior.
- Need for a robust RCT.
Solution-focused brief therapy in schools: A review of the outcome literature.

- Children and Youth Services Review, Apr 2009, Kim, Johnny S.; Franklin, Cynthia, (journal abstract) 2016 APAPsycInfo

- The application of (SFBT) with students and in school settings has grown over the past 10 years and has been applied to a number of behavioral and academic problems.

- This review found mixed results but SFBT did show promise as a useful approach in working with at-risk students in a school setting, specifically helping students reduce the intensity of their negative feelings, manage their conduct problems, and externalizing behavioral problems.
Dialectical behavior therapy (DBT) is a promising treatment for reducing anger and violent behavior. It addresses maladaptive behavior by teaching emotion regulation, distress tolerance, interpersonal effectiveness, core mindfulness, and self-management skills.

A total of 21 peer-reviewed articles studying the effects of DBT on anger and aggressive behavior were reviewed. There are nine randomized controlled trials (RCT) assessing DBT to reduce anger and aggressive behavior.

Conclusion: There are potentially clinically significant results when using DBT to treat anger and aggression in various samples.
The consequences of aggressive behavior following ABI have an impact at both an individual and systemic level. In contrast to other ABI sequelae aggressive behavior has been shown to increase over time without appropriate timely interventions.

CONCLUSION:

The findings of the meta-analysis suggest that psychological interventions for aggressive behavior are at least moderately effective at reducing aggressive behavior following ABI.
Summary

- PBS is not a new or old type of therapy, it is a framework to support implementation of better practice.

- PBS is in line with national policy with strong scientific based evidence.

- Other Psychological Interventions still require further robust researches to establish a strong scientific evidence as currently is moderate.

- Psychotherapy applications requires certain adaptations and service modification for PWLD.

- UK research shows that only 2-20% of people in need of PBS actually receive any kind of behavioural support. Oliver et al, 1987; Harris and Russell, 1987; Qureshi, 1994

- 50-60% PWLD with CB will be in receipt of psychotropic medication. Kiernan et al, 1995; Fleming et al, 1996

- 50% or more will be regularly restrained. Emerson 2002

- In relation to PT, UK Department of Health emphasises the need for evidence from routine clinical settings (effectiveness data) to complement the outcomes of RCTs (efficacy data) to inform practice.
Questions and Comments
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THANK YOU