



Early intervention for challenging behaviour in intellectual disability

Osama Al-Taher Mahmoud Ahmed ¹, Hamed Mustafa Azab ¹, Yasser Abdel Razek Mohamed ², Taher Abdel Rahim ¹.

1: Department of Psychiatry, Faculty of Medicine, Sohag University, Egypt

2: Department of Psychiatry, Faculty of Medicine, Ain Shams University, Egypt

Abstract:

Background: A complex but frequent issue, challenging conduct among people with intellectual disabilities can be difficult for healthcare providers to diagnose and manage. A behaviour must have been perceived as problematic by another person for it to be classified as challenging behaviour. This means that challenging behaviour is a socially created, dynamic term. As a result, different cultures and environments may have different ideas of what constitutes a challenge. Challenging behaviour can appear as a side effect of mental illness (e.g., self-harm and aggression can be symptoms of depression), it can appear as an out-of-the-ordinary manifestation of a core symptom of a specific disorder (e.g., repetitive skin picking can be a symptom of an underlying obsessive-compulsive disorder), and it can be exacerbated by the symptoms of a mental illness. Some people's problematic behaviour may be caused by a variety of mechanisms.

Conclusion: Psychosocial therapies and medication are two methods for controlling difficult behaviour. In cases where there is no documented psychiatric disorder, non-pharmacological therapies are the first line of treatment for aggression, according to a poll of psychiatrists. Interventions reduced problematic behaviour by at least 80% from baseline levels.

Keywords: Children with intellectual disability, the behavioural assessment, Applied Behavioural Analysis.

Introduction:

A complex but frequent issue, challenging conduct among people with intellectual disabilities can be difficult for healthcare providers to diagnose and manage. All conduct has a reason for existing, a beginning and a meaning, and is thus the result of a person's relationship with their environment. A behaviour must have been perceived as problematic by another person for it to be classified as challenging behaviour. This means that

challenging behaviour is a socially created, dynamic term. As a result, different cultures and environments may have different ideas of what constitutes a challenge. According to clinical definitions, challenging behaviour is any chronic or pervasive maladaptive conduct that has a significant negative impact on the person's quality of life, health, or safety, or any combination of those. The phrase can refer to a variety of actions,

such as physical aggressiveness toward things or people, self-harm, inappropriate sexual behaviour, criminal behaviour (such setting things on fire or stealing), mannerisms, or rituals.⁽¹⁾

If a person's behaviour endangers the lives of others or their physical safety, it may cause them to be excluded from services or community activities, or it may elicit constrictive and painful reactions that are potentially immoral or socially undesirable. Therefore, it is crucial to try to comprehend problematic conduct and, when necessary, limit its incidence. Positive behavioural development should be encouraged, proactive strategies for addressing unmet needs should be implemented, and professionals and careers should respond to challenging behaviour in a way that is socially enabling rather than inhibiting. It's possible for challenging behaviour to be a means of communicating unfulfilled needs.⁽²⁾

Challenging behaviour and mental illness

It is complicated and not quite clear how demanding conduct and mental illness are related.⁽³⁾ People who display problematic behaviour are more likely to have mental illness than those who do not.⁽⁴⁾ Several explanations have been put out as likely reasons why people with intellectual disabilities can have both mental illness and problematic behaviour.⁽⁵⁾ Challenging behaviour can appear as a side effect of mental illness (e.g., self-harm and aggression can be symptoms of depression), it can appear as an out-of-the-ordinary manifestation of a core symptom of a specific disorder (e.g., repetitive skin picking can be a symptom of an underlying obsessive-compulsive disorder), and it can be exacerbated by the symptoms of a mental illness. Some

people's problematic behaviour may be caused by a variety of mechanisms.⁽⁶⁾

Management of challenging behaviour

Psychosocial therapies and medication are two methods for controlling difficult behaviour. In cases where there is no documented psychiatric disorder, non-pharmacological therapies are the first line of treatment for aggression, according to a poll of psychiatrists.⁽⁷⁾

Psychosocial interventions

The research base for the various psychosocial interventions that have been suggested to manage problematic behaviour in individuals with intellectual disability varies significantly between treatments:

Social interventions

Social therapies for challenging behaviour in people with intellectual impairments may emphasise a number of factors, including level of care, communication, and environment modification. Nidotherapy, for instance, changes the patient's environment (physical, social, and personal) in a methodical way to meet their needs.⁽⁸⁾

Rather of attempting to adapt the individual, the goal is to change the environment. The environment may change in ways that facilitate socialisation, structural improvements, or long-term objectives. Nidotherapy has not yet been proven to be effective in treating troublesome behaviour in those with intellectual disabilities. Instead, then focusing on direct therapy, it emphasises environmental transformation⁽⁹⁾ with those who have intellectual disabilities, active support has been employed as a social intervention technique. Staff members receive counselling on how to persuade clients to engage in activities that will divert

them from problematic behaviour as well as training on creating person-centered activity plans for the persons in their care. A decrease in challenging behaviour⁽¹²⁾, an increase in difficult behaviour^(10, 11), and no effect^(10, 11) were all seen in the experiments (mostly short case studies). Additional research on active support is necessary.⁽¹³⁾

Cognitive-behavioural therapy

Only lately has cognitive-behavioural therapy (CBT) been modified for use with individuals with intellectual disabilities. Its utility as an intervention for difficult behaviour is currently not well supported by methodologically sound studies. A Cochrane evaluation of therapies for violent behaviour in people with intellectual (learning) challenges showed that only four trials met the criteria for inclusion, three of which utilised group-based CBT and one of which used individual CBT with adults.⁽¹⁴⁾ The results were various. Although caregiver and patient estimates of their emotional discomfort, their ability to regulate their anger, and their adaptive functioning indicated improvement, The research were biased and the follow-up times were brief. More recently, a cluster randomised controlled trial of a 12-week group-based cognitive-behavioural anger management programme provided by care workers examined the efficacy of cognitive-behavioural therapy with this clientele. The results showed that whereas perceptions of rage in paid and family contexts both significantly improved, anger as reported by oneself did not change.⁽¹⁵⁾ The study also showed that the intervention may be faithfully carried out by workers who are less qualified. As a result, there is now some limited support for the use of CBT as a treatment for problematic behaviour in

individuals with intellectual disabilities, but more research is required.⁽¹⁵⁾

Mindfulness

The Buddhist discipline of mindfulness is defined as focusing attention on the present moment with openness, acceptance, and inquiry.⁽¹⁶⁾

It can be used instead of or in addition to behavioural therapy and has been used to address a number of therapeutic difficulties. Mindfulness-based interventions have frequently demonstrated potential for altering behaviour.

18 studies that used mindfulness as a stand-alone intervention, a component of acceptance and commitment therapy, or dialectical behaviour therapy were found after a review of the available research⁽¹⁷⁾. The impacts on aggressive behaviour were identified in 10 of these examinations, and each study revealed a reduction in aggression. Other beneficial outcomes included a decline in self-harm and staff injuries, a decline in self-reports of deviant sexual arousal, and a decline in staff use of restraints and medicines to manage aggressive behaviour. Notably, evidence from five of the research under evaluation also points to the possibility of successfully training caregivers to offer mindfulness-based therapies.⁽¹⁷⁾

But none of the trials provided a comparison with a placebo or another control group because they were all open label. For more concrete proof of the effectiveness of mindfulness in the control of problematic behaviour, additional data in the form of randomised controlled studies and larger samples is required.

Applied behavioural analysis and positive behavioural support

The field of applied behavioural analysis essentially entails employing the conc-

epts of reinforcement and extinction to methodically address problematic behaviour. Since its inception in the 1960s, a sizable body of work has shown the value of applied behavioural analysis, in the Journal of Applied Behaviour Analysis alone, there are almost 600 papers. In one of the more recent studies, it was discovered that using it in conjunction with traditional treatment by a specialist behaviour therapy team resulted in a significant drop in challenging behaviour as measured by the Aberrant Behaviour Checklist, and that this positive change was maintained at 2-year follow-up.^(18, 19)

Initially, various non-aversive and aversive techniques were used in applied behavioural analysis, but as criticism grew, the aversive techniques were dropped. The focus of applied behavioural analysis shifted toward the individual and values in the 1980s. Techniques like "positive behavioural support," a method that is constantly changing, reflect this.⁽²⁰⁾ Positive behavioural support includes determining the motivation behind the challenging conduct and developing a support strategy that promotes the acquisition of new abilities to lessen the need for the behaviour on the part of the client. Its emphasis is on tailored therapies that are founded on a thorough knowledge of the person and the motivations behind the behaviour^(20, 21). The therapies' main goal is to help the individual acquire the necessary social, communication, and behavioural skills to switch from the problematic behaviour to one that is more suitable and functionally similar.

⁽²¹⁾ It discourages the employment of negative and encouraging techniques instead of aversive ones like punishment (such as barring the person from participating activities). By giving them

access to new situations and enabling them to engage in constructive social interactions, the main goal is to improve the person's quality of life.⁽²⁰⁾ A variety of mediators, from family members to support staff, can provide positive behavioural assistance, but they will need training and need to be well organised and supported.⁽¹⁾

An analysis of 109 publications examining interventions for positive behavioural support Carr (1999) came to the conclusion that 68% of interventions reduced problematic behaviour by at least 80% and 52% by at least 90% from baseline levels. The impact of around two-thirds of the therapies persisted for one to 24 months.⁽²²⁾ Evidence was also discovered about the characteristics that affect efficacy. Interventions were more successful when they were carried out by a person's normal employment rather than by outside specialised providers for single behaviours compared to combinations of behaviours. Positive behavioural support is successful in both institutional and community settings, according to LaVigna & Willis' (2012) analysis. They contend that it is affordable and adaptable to different degrees of challenging behaviour severity and frequency.⁽²³⁾

Pharmacotherapy

Drugs may reduce emotional reactivity, irritability, impulsivity, and other types of dysregulation; behavioural therapies, however, focus on improving adaptive abilities and changing unhelpful social behaviours.⁽²⁴⁾

Additionally, medication-induced improvements in regulation may enhance a child's capacity to gain from behavioural therapies. The behavioural data gathered to assess the behavioural intervention could also be utilised to assess the effects of drugs if behavioural and pharmaco-

ologic therapies are combined. Measuring results in a systematic manner (e.g., using the Aberrant Behaviour Checklist) can assist assess outcomes and negative effects whether medicine is used alone or in conjunction with behavioural therapies.⁽²⁵⁾

Conclusion:

Psychosocial therapies and medication are two methods for controlling difficult behaviour. In cases where there is no documented psychiatric disorder, non-pharmacological therapies are the first line of treatment for aggression, according to a poll of psychiatrists. Interventions reduced problematic behaviour by at least 80% from baseline levels.

References

1. **Royal College of Psychiatrists.** Challenging Behaviour: A Unified Approach (College Report CR144) (2007). Royal College of Psychiatrists.
2. **Emerson E, Einfield S.** Challenging Behaviour: Analysis and Intervention in People with Learning Difficulties (3rd edn) (2001) Cambridge University Press.
3. **Thakker Y, Bamidele K, Ali A, et al.** Mental health and challenging behaviour: an overview of research and practice. *Advances in Mental Health and Intellectual Disabilities*, (2012) 6: 249–58.
4. **Moss S, Emerson E, Kiernan C, et al.** Psychiatric symptoms in adults with learning disability and challenging behaviour. *British Journal of Psychiatry*, (2000) 177: 452–6.
5. **Emerson C.** Challenging Behaviour: Analysis and Intervention in People with Learning Difficulties. (1995) Cambridge University Press.
6. **Emerson E, Kiernan C, Alborz A, et al.** The prevalence of challenging behaviours: a total population study. *Research in Developmental Disabilities*, (2001) 22: 77–93.
7. **Unwin GL, Deb S.** The use of medication for the management of behavior problems among adults with intellectual disability: a clinician's consensus survey. *American Journal on Mental Retardation*, (2008) 113: 19–31.
8. **Tyrer P, Bajaj P.** Nidotherapy: making the environment do the therapeutic work. *Advances in Psychiatric Treatment*, (2005) 11: 232–8.
9. **Tyrer P, Kramo K.** Nidotherapy in practice. *Journal of Mental Health*, (2007)16: 117–29.
10. **Jones E, Felce D, Lowe K, et al.** Evaluation of the dissemination of active support training and training trainers. *Journal of Applied Research in Intellectual Disabilities*, (2001)14: 79–99.
11. **Stancliffe RJ, Jones E, Mansell J, et al.** Active support: a critical review and commentary. *Journal of Intellectual and Developmental Disability*, (2008) 33: 196–214.
12. **Toogood S, Drury G, Gilsenan K, et al.** Establishing a context to reduce challenging behavior using procedures from active support: a clinical case example. *Tizard Learning Disability Review*, (2009) 14: 29–36.
13. **Bradshaw J, McGill P, Stretton R, et al.** Implementation and evaluation of active support. *Journal of Applied Research in Intellectual Disabilities*, (2004)17: 139–48.
14. **Hassiotis AA.** Behavioral and cognitive-behavioral interventions for outwardly-directed aggressive behavior in people with learning disabilities. *Cochrane Database of Systematic Reviews*, issue 3: (2008) CD003406.
15. **Willner P, Rose J, Jahoda A, et al.** A cluster randomized controlled trial of a manualised cognitive behavioral anger management intervention delivered by supervised lay therapists to people with intellectual disabilities. *Health Technology Assessment*, (2013)17 (21): 1–173.

16. **Bishop S, Lau M, Shapiro S, et al.** Mindfulness: a proposed operational definition. *Clinical Psychology: Science and Practice*, (2004)11: 230–41
17. **Harper S, Webb T, Rayner K.** The effectiveness of mindfulness based interventions for supporting people with intellectual disabilities: a narrative review. *Behavior Modification*, (2013) 37: 431–53.
18. **Hassiotis A, Robotham D, Canagasabay A, et al.** Randomized, single-blind, controlled trial of a specialist behaviour therapy team for challenging behaviour in adults with intellectual disabilities. *American Journal of Psychiatry*, (2009)166: 1278–85.
19. **Hassiotis A, Canagasabay A, Robotham D, et al.** Applied behavior analysis and standard treatment in intellectual disability: 2-year outcomes. *British Journal of Psychiatry*, (2011)198: 490–1.
20. **Carr EG, Dunlap G, Horner RH, et al.** Positive behavior support: evolution of an applied science. *Journal of Positive Behavior Interventions*, (2002) 4: 4–16.
21. **Allen D, James W, Evans J, et al.** Positive behavioural support: definition, current status and future directions. *Tizard Learning Disability Review*, (2005) 10 (2): 4–11.
22. **Carr EG, Horner RH, Turnbull AP, et al.** Positive Behavior Support for People with Developmental Disabilities: A Research Synthesis. (1999) American Association on Mental Retardation.
23. **LaVigna GW, Willis TJ.** The efficacy of positive behavioural support with the most challenging behaviour: the evidence and its implications. *Journal of Intellectual & Developmental Disability*, (2012) 37: 185–95.
24. **Hagopian LP, Fisher WW, Sullivan MT, et al.** Effectiveness of functional communication training with and without extinction and punishment: a summary of 21 inpatient cases. *J Appl Behav Anal.* (1998); 31(2):211–35. [PubMed: 9652101].
25. **Almai AM, Hauptman AJ.** Growing up with autism: Incorporating behavioral management and medication to manage self-injurious behavior. In: Hauptman A, Salpekar J, editors. *Pediatric neuropsychiatry*. Cham (Switzerland): Springer; (2019). p. 93–105.