Research paper

OFFICIAL For Internal Use Only

Eye movement desensitisation and response therapy for people with Autism Spectrum Disorder and Obsessive Compulsive Disorder

The content of this document is OFFICIAL.

Please note:

The research and literature reviews collated by our TAB Research Team are not to be shared external to the Branch. These are for internal TAB use only and are intended to assist our advisors with their reasonable and necessary decision-making.

Delegates have access to a wide variety of comprehensive guidance material. If Delegates require further information on access or planning matters, they are to call the TAPS line for advice.

The Research Team are unable to ensure that the information listed below provides an accurate & up-to-date snapshot of these matters

Research question: Can eye movement desensitisation and response therapy improve the functional capacity of people with autism spectrum disorder and obsessive compulsive disorder?

Date: 01/11/2022

Requestor: S47F -

Endorsed by: S47F - Personal

Researcher: S47F - Personal

Cleared by: S47F - Personal

Review date: n/a

1. Contents

2. Summary

Eye movement desensitisation and response therapy (EMDR) is most often used in the treatment of post-traumatic stress disorder (PTSD), though evidence for its efficacy in other conditions is growing. There is some evidence that EMDR can improve symptoms associated with obsessive compulsive disorder (OCD) and autism spectrum disorder (ASD). However, the evidence base for its efficacy in both conditions is small. There are 3 randomly controlled trials offering preliminary support for the use of EMDR in OCD. There is so far only one non-randomised group trial looking into the efficacy of EMDR for ASD. There are problems with all studies including small samples, high drop out rate and failure to identify what was producing the therapeutic effect.

No clinical guidelines were found which recommend use of EMDR for OCD or ASD.

3. ASD, OCD and trauma

Between 4% and 17% of people with ASD are likely to meet criteria for a diagnosis of OCD (Elliot et al, 2021; Avasthi et al, 2019). One large sample study showed people diagnosed with ASD are twice as likely as the general population to go on to receive a diagnosis of OCD. The same study showed people with a first diagnosis of OCD have a four times higher chance of going on to receive a diagnosis of ASD (Elliot et al, 2021).

In addition, people diagnosed with ASD are more likely to experience traumatic events and show symptoms of trauma than the general population (Volkmar, 2021; Lobregt-van Burren et al, 2019). People presenting with OCD symptoms often do so after a traumatic event. PTSD and OCD also share some symptoms such as intrusive thoughts, anxiety and avoidant behaviour (Talbot, 2021). Those diagnosed with PTSD are at a ten times higher risk of developing OCD compared to those without PTSD (Sarichloo et al, 2020).

4. EMDR for people with OCD

Two reviews (Talbot, 2021; Scelles & Bulnes, 2021) identified 10 papers in total investigating the use of EMDR for OCD published between 2004 and 2020. Seven of the published studies are case studies or case reports with small sample sizes (1 study of 8 people and 6 studies of under 4 people). Three of the published studies are randomly controlled trials with sample sizes between 30 and 60 participants.

There are inconsistencies in and between both reviews. Talbot (2021) reports that randomly controlled trials from Nazari et al (2011) and Marsden et al (2018) had sample sizes of 45 and 29 respectively. Scelles and Bulnes (2021) give the sample sizes as 60 and 55 for the same studies. Nazari et al (2011) report their sample size as 90. Marsden et al (2018) report their sample size as 55. Talbot (2021) states that all studies reviewed found positive results for EMDR on symptoms of OCD. Despite majority overlap in studies reviewed, Scelles and Bulnes (2021) state only half of the studies reviewed found positive results. Talbot (2021) did not describe their review procedure and their paper is published in the Journal of EMDR Practice and Research, which is the journal of the international peak body of EMDR researchers and clinicians. Both reviews note that heterogeneity of treatment protocols limits what can be concluded from the current research.

The first randomly controlled trial into the use of EMDR for OCD compares EMDR with citalopram in 90 OCD patients. They found significant reduction in symptoms for both treatment groups, but the effect was larger for EMDR (Nazari et al, 2011). Marsden et al (2018) compared EMDR with cognitive behavioural therapy (CBT) following the exposure and response prevention (ERP) model and found no significant differences in effects between treatments. Sarichloo et al (2020) compared ERP with ERP + EMDR in 60 patients. They found greater therapeutic effect and higher completion rates for the combined therapy. However, this study specifically recruited for participants with OCD and a history of traumatic life experiences. This is significant as it may be difficult to separate the effects of EMDR on core OCD symptoms from its effects on symptoms of trauma due to negative life experiences of people with mental health conditions such as OCD (Scelles & Bulnes, 2021).

There is inconsistency in effect sizes between Marsden et al (2018) and Sarichloo et al (2020). Mean scores on the Yale-Brown Obsessive Compulsive Scale for patients receiving just ERP were about 2 points higher pre-treatment in Marsden et al's sample compared to Sarichloo et al's. The difference grew to 10 points post-treatment. This means two groups receiving the same treatment showed dramatically different results.

Sample sizes and drop-out rates of all three randomly controlled trials means more subtle effects of different therapies may not have been picked up (Nazari et al, 2011; Marsden et al, 2018; Sarichloo et al, 2020). In addition, it is possible symptom reduction can be explained by several common factors of CBT, CBT with ERT and EMDR, such as the empathetic therapeutic relationship, putting the patient at ease, enhancing their expectations, motivating them to change their behaviour. CBT, CBT with ERP and EMDR also involve some measure

of exposure to disturbing stimuli, though the mechanism of exposure may be different in the different therapeutic strategies (Marsden et al, 2018).

4.1 OCD treatment guidelines

The Australian OCD Clinicians network recommends following Canadian and UK treatment guidelines (OCD Clinicians Network, n.d.). However, these guidelines were developed in 2014 and 2005 respectively. More recent evidence may affect recommendations. UK's National Institute for Health Care Excellence (NICE) decided to review their guidelines in 2019 and the updating process is currently in progress (NICE, 2005).

Canadian clinical practice guidelines note that CBT on the model of ERP shows equivalent or superior results to pharmacological treatment (usually selective serotonin re-uptake inhibitors (SSRIs)). Some evidence shows combined psychological and pharmacological treatment is equivalent to psychological treatment alone, but superior to pharmacological treatment alone (Katzman et al, 2014).

NICE guidelines recommend CBT with ERP and/or a course of SSRIs for adults with moderate to severe functional impairment as a result of OCD. For children, CBT and ERP involving family or carers is preferred and SSRIs should be only offered if the child or family decline psychological treatment or if psychological treatment is not benefiting the child (NICE, 2005).

More recent Indian clinical practice guidelines emphasise the need for a treatment plan including psychological or pharmacological treatment and psychoeducation regarding OCD, treatment options and potential side-effects of medication (Reddy et al, 2017; Avasthi et al, 2019). For adults, SSRIs are preferred as a first line treatment in Indian due to the availability of clinical psychologists to deliver CBT (Reddy et al, 2017). For children with mild to moderate functional impairment, CBT should be the first-line treatment. For children with severe functional impairment, a combination of CBT and SSRIs should be preferred (Avisthai et al, 2019).

Of the 4 reviewed clinical practice guidelines, none recommend EMDR for treatment of OCD. Only Katzman et al (2014) explicitly advise against EMDR.

5. EMDR for people with ASD

There does not appear to be any existing studies that investigate EMDR as a tool for people with autism separate from their traumatic experiences and symptoms.

A handful of case studies and one group study suggest that EMDR can be modified to work effectively for children and adults with autism who have PTSD or who have experienced traumatic events (Volkmar, 2021; Fisher et al, 2022a; Fisher et al, 2022b). One non-randomised add-on study of 27 participants with autism and a history of trauma showed EMDR could lead to a reduction in symptoms of trauma. It also showed a small but significant reduction in autistic traits as measured by the Social Responsiveness Scale-Adult version. Due to the small effect size, the small sample may not be sufficient to show a conclusive

effect. The authors suggest possible explanations for reduction in autistic traits could be the ASD diagnosis overshadowing the symptoms of trauma or the presence of untreated trauma symptoms exacerbating existing autistic traits (Lobregt-van Burren et al, 2019; Volkmar, 2021).

6. References

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Avasthi, A., Sharma, A., & Grover, S. (2019). Clinical practice guidelines for the management of obsessive-compulsive disorder in children and adolescents. *Indian Journal of Psychiatry*, *61*(Suppl 2), 306–316. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_554_18

Elliott, S. J., Marshall, D., Morley, K., Uphoff, E., Kumar, M., & Meader, N. (2021). Behavioural and cognitive behavioural therapy for obsessive compulsive disorder (OCD) in individuals with autism spectrum disorder (ASD). *Cochrane Database of Systematic Reviews*, *9*(9), CD013173. https://doi.org/10.1002/14651858.CD013173.pub2

Fisher, N., van Diest, C., Leoni, M., & Spain, D. (2022a). Using EMDR with autistic individuals: A Delphi survey with EMDR therapists. *Autism: The International Journal of Research and Practice*, 13623613221080254. https://doi.org/10.1177/13623613221080254

Fisher, N., Patel, H., van Diest, C., & Spain, D. (2022b). Using eye movement desensitisation and reprocessing (EMDR) with autistic individuals: A qualitative interview study with EMDR therapists. Psychology and Psychotherapy: Theory, Research and Practice, 00, 1– 19. https://doi.org/10.1111/papt.12419

Katzman, M. A., Bleau, P., Blier, P., Chokka, P., Kjernisted, K., Van Ameringen, M., Canadian Anxiety Guidelines Initiative Group on behalf of the Anxiety Disorders Association of Canada/Association Canadienne des troubles anxieux and McGill University, Antony, M. M., Bouchard, S., Brunet, A., Flament, M., Grigoriadis, S., Mendlowitz, S., O'Connor, K., Rabheru, K., Richter, P. M. A., Robichaud, M., & Walker, J. R. (2014). Canadian clinical practice guidelines for the management of anxiety, posttraumatic stress and obsessive-compulsive disorders. *BMC Psychiatry*, *14 Suppl 1*, S1. https://doi.org/10.1186/1471-244X-14-S1-S1

Lobregt-van Buuren, E., Sizoo, B., Mevissen, L., & de Jongh, A. (2019). Eye movement desensitization and reprocessing (EMDR) therapy as a feasible and potential effective treatment for adults with autism spectrum disorder (ASD) and a history of adverse events. *Journal of Autism and Developmental Disorders*, *49*(1), 151–164. https://doi.org/10.1007/s10803-018-3687-6

Marsden, Z., Lovell, K., Blore, D., Ali, S., & Delgadillo, J. (2018). A randomized controlled trial comparing EMDR and CBT for obsessive-compulsive disorder. *Clinical Psychology & Psychotherapy*, *25*(1), e10–e18. https://doi.org/10.1002/cpp.2120

National Institute for Health and Care Excellence. (2005). *Obsessive-compulsive disorder and body dysmorphic disorder: treatment* (CG31). https://www.nice.org.uk/guidance/cg31

Nazari, H., Nahid Momeni, Mojgan Jariani & Mohammad Javad Tarrahi. (2011). Comparison of eye movement desensitization and reprocessing with citalopram in treatment of obsessive–compulsive disorder. *International Journal of Psychiatry in Clinical Practice*, *15*(4), 270-274, doi10.3109/13651501.2011.590210

OCD Clinicians Network. (n.d). *Treatment Guidelines*. http://www.ocd.org.au/clinicians/treatment-guidelines

Reddy, Y. C. J., Sudhir, P. M., Manjula, M., Arumugham, S. S., & Narayanaswamy, J. C. (2017). Clinical practice guidelines for cognitive-behavioral therapies in anxiety disorders and obsessive-compulsive and related disorders. *Indian Journal of Psychiatry*, *59*, 74-90. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_773_19

Sarichloo, M. E., Taremian, F., Dolatshahee, B., & Haji Seyed Javadi, S. A. (2020). Effectiveness of exposure/response prevention plus eye movement desensitization and reprocessing in reducing anxiety and obsessive-compulsive symptoms associated with stressful life experiences: A randomized controlled trial. *Iranian Journal of Psychiatry and Behavioral Sciences*, *14*(3). https://doi.org/10.5812/ijpbs.101535

Scelles, C., & Bulnes, L. C. (2021). EMDR as treatment option for conditions other than PTSD: A systematic review. *Frontiers in Psychology*, *12*, 644369. https://doi.org/10.3389/fpsyg.2021.644369

Talbot, D. (2021). Examination of initial evidence for EMDR as treatment for obsessive-compulsive disorder. *Journal of EMDR Practice and Research*, *15*(3), 167-173. https://doi.org/10.1891/EMDR-D-21-00004

Volkmar, F. R. (Ed.). (2021). *Encyclopedia of autism spectrum disorders*. Springer International Publishing.