

## Short report

# Effectiveness of trauma-focused treatment for patients with psychosis with and without the dissociative subtype of post-traumatic stress disorder

A. van Minnen, B. van der Vleugel, D. van den Berg, P. de Bont, C. de Roos, M. van der Gaag and A. de Jongh

## Summary

This study presents secondary analyses of a recently published trial in which post-traumatic stress disorder (PTSD) patients with psychosis ( $n = 108$ ) underwent 8 sessions of trauma-focused treatment, either prolonged exposure (PE) or eye movement desensitisation and reprocessing (EMDR) therapy. 24.1% fulfilled the criteria for the dissociative subtype, a newly introduced PTSD subtype in DSM-5. Treatment outcome was compared for patients with and without the dissociative subtype of PTSD. Patients with the dissociative subtype of PTSD showed large reductions in clinician-administered PTSD scale (CAPS) score, comparable with patients without the dissociative subtype of PTSD. It is concluded that even in a population with severe mental illness, patients with the dissociative subtype of PTSD do benefit from trauma-focused treatments without a pre-phase of emotion

regulation skill training and should not be excluded from these treatments.

## Declaration of interest

M.v.d.G. and D.v.d.B. receive income for published books on psychotic disorders and for the training of postdoctoral professionals in the treatment of psychotic disorders. A.d.J. receives income for published books on EMDR therapy and for the training of postdoctoral professionals in this method. A.v.M. receives income for published book chapters on PTSD and for the training of postdoctoral professionals in prolonged exposure. C.d.R. receives income for the training of postdoctoral professionals in EMDR therapy.

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In the latest version of the DSM, the DSM-5,<sup>1</sup> a dissociative subtype of post-traumatic stress disorder (PTSD) is included. Patients with this dissociative subtype meet the full criteria for PTSD and, in addition, show persistent or recurrent symptoms of dissociation. These symptoms may take the form of depersonalisation, i.e. experiences of feeling detached from one's body (e.g. like watching yourself from the outside); and/or derealisation, i.e. experiences of unreality of surroundings (e.g. the world around you is experienced as unreal or dreamlike). The addition of this dissociative subtype was partly based on the neurobiological finding that patients with the dissociative subtype of PTSD show midline prefrontal inhibition of limbic regions that are involved in emotion regulation, leading to emotional overmodulation.<sup>2</sup>

With respect to the clinical implications of the addition of the dissociative subtype to the DSM, it was assumed that patients with the dissociative subtype of PTSD, on the basis of these impaired emotion regulation capacities, are not indicated for trauma-focused treatments (TFTs) such as prolonged exposure (PE) or eye movement desensitisation and reprocessing (EMDR) therapy.<sup>3</sup> These TFTs typically activate the fear network and are aimed at emotional processing of trauma-related information within that network. For patients with the dissociative subtype of PTSD, it was assumed that the ability to adequately activate the fear network would be limited owing to emotional overmodulation, and that, as a result, TFT could not be effective.<sup>2</sup> Instead, clinicians were advised to provide these patients with a phase-based treatment approach, in which they learn to better regulate their emotions before they enter TFT.<sup>2</sup> Correspondingly, many clinicians hesitate to provide TFT to individuals with PTSD who have dissociative symptoms.<sup>4</sup> Presumably, this contraindication would apply even more to patients with severe mental illness, for instance, PTSD patients with psychotic disorder such as schizophrenia and schizoaffective disorder. These disorders are

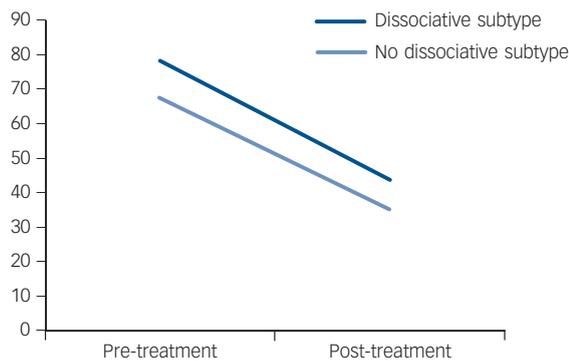
characterised by delusions, hallucinations, disorganised speech, disorganised behaviour and negative symptoms. Although dissociation and psychosis are related and are interactive symptom domains,<sup>5</sup> the typical characteristic of severe impairment in reality testing in psychosis is not a feature of dissociation. Having clinically relevant dissociative symptoms in addition to psychotic symptoms may lead to even more reservations among clinicians regarding the use of TFT in these patients. Thus far, however, there is a lack of clinical studies into the effects of TFT on patients with the dissociative subtype of PTSD in patient populations with severe mental illness.

## Method

In this brief report, we want to address this topic by comparing patients with psychosis with and without the dissociative subtype of PTSD, who underwent TFT without any pre-phase of emotion regulation skill training. We performed a secondary analysis of a large randomised clinical trial among PTSD patients with psychosis (for details, see de Bont *et al*<sup>6</sup>), comparing 8 sessions of TFT – either PE ( $n = 53$ ) or EMDR ( $n = 55$ ) therapy – with waiting list ( $n = 47$ ) for PTSD patients with psychosis. In earlier papers, we have reported that TFT was more effective than waiting list in primary (PTSD symptoms)<sup>7</sup> and secondary (psychosis and depression)<sup>8</sup> outcomes, and that TFT did not lead to adverse events or symptom exacerbations in this patient population.<sup>9</sup>

To test the assumptions above, we compared effects of TFT for patients (PE and EMDR combined;  $n = 108$ ) with and without the dissociative subtype of PTSD, as established with items 29 (derealisation) and/or 30 (depersonalisation) (frequency  $\geq 1$  and intensity  $\geq 2$ ) on the clinician-administered PTSD scale (CAPS).<sup>10</sup>

The trial design was approved by the medical ethics committee of the VU University Medical Center and was registered at isrctn.com (ISRCTN79584912).



**Fig. 1** CAPS (clinician-administered post-traumatic stress disorder scale) scores for patients with ( $n = 18$ , 22%) and without ( $n = 64$ , 78.0%) dissociative subtype in completers.

## Results

We found that 24.1% of our population fulfilled the criteria of the dissociative subtype, a proportion comparable with other studies.<sup>3</sup> All patients fulfilled diagnostic criteria for a psychotic disorder (60.2% had schizophrenia and 29.6% schizoaffective disorder) and full diagnostic criteria for PTSD. Most patients had experienced severe childhood trauma. In the PTSD, dissociative subtype group, 7 patients dropped out (26.9%) *v.* 17 patients (20.7%) in the PTSD no-dissociative subtype group ( $\chi^2(1, n = 108) = 5.08, P = 0.59$ ). The following analyses were performed in the subgroup of completers ( $n = 82$ ; post-treatment data were missing for 2 treatment completers). Patients with the dissociative subtype of PTSD showed a similar decrease in PTSD symptoms on the CAPS (within-group Cohen's  $d = 1.63$ ) to that of the patients without the dissociative subtype of PTSD (within-group Cohen's  $d = 1.68$ ), with large reductions observed in both groups (see Fig. 1). Patients with the dissociative subtype of PTSD showed significantly more severe PTSD symptoms at pre-treatment ( $t(80) = -0.29, P = 0.005$ ), whereas at post-treatment, CAPS scores did not significantly differ ( $t(80) = -1.34, P = 1.85$ ).

## Discussion

Our data showed that even in one of the most vulnerable patient populations – patients with a psychotic disorder and PTSD – individuals with the dissociative subtype of PTSD showed large improvements in PTSD symptoms and responded in a similar way to those without the dissociative subtype of PTSD. Our data are in line with several other studies in other patient populations (e.g., Wolf *et al*<sup>11</sup>) and thereby add to the consistent findings that patients with dissociative subtype benefit from TFTs comparably to patients without this subtype. Also, patients with the dissociative subtype of PTSD did not drop out more often than patients without the dissociative subtype of PTSD, suggesting that TFT is not intolerable for PTSD patients with dissociative subtype.

Our study needs replication in this specific patient population, especially because symptoms of psychosis and dissociation are highly related<sup>5</sup>, and more sophisticated measures of dissociative subtype could be used in future studies. Despite these limitations, however, our data strongly indicate that there is no need to withhold patients with the dissociative subtype of PTSD from TFT, or to add a pre-phase of emotion regulation skills for patients with this subtype. Together with the many recent and consistent findings that patients with the dissociative subtype of PTSD respond equally well to regular TFT as do patients

without the dissociative subtype of PTSD (e.g. Wolf *et al*<sup>11</sup>), this study showed that patients with the dissociative subtype of PTSD do not need a different treatment (see also De Jongh *et al*<sup>12</sup> for a similar discussion). For clinicians, it may be valuable to know that, in contrast to their clinical view,<sup>4</sup> patients with the dissociative subtype of PTSD can be effectively and safely treated with prolonged exposure therapy or EMDR therapy, using standard treatment protocols without preparatory emotion regulation skill training.

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## References

- American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (5th edn) (DSM-V)*. APA, 2013.
- Lanius RA, Vermetten E, Loewenstein RJ, Brand B, Schmahl C, Bremner JD, et al. Emotion modulation in PTSD: clinical and neurobiological evidence for a dissociative subtype. *Am J Psychiatry* 2010; **167**: 640–7.
- Lanius RA, Brand B, Vermetten E, Frewen PA, Spiegel D. The dissociative subtype of posttraumatic stress disorder: rationale, clinical and neurobiological evidence, and implications. *Depress Anxiety* 2012; **29**: 701–8.
- Becker CB, Zayfert C, Anderson, E. A survey of psychologists' attitudes towards and utilization of exposure therapy for PTSD. *Behav Res Ther* 2004; **42**: 277–92.
- O'Driscoll C, Laing J, Mason O. Cognitive emotion regulation strategies, alexithymia and dissociation in schizophrenia, a review and meta-analysis. *Clin Psychol Rev* 2014; **34**: 482–95.
- de Bont PA, van den Berg DP, van der Vleugel BM, de Roos C, Mulder CL, Becker ES, et al. A multi-site single blind clinical study to compare the effects of prolonged exposure, eye movement desensitization and reprocessing and waiting list on patients with a current diagnosis of psychosis and co morbid post traumatic stress disorder: study protocol for the randomized controlled trial Treating Trauma in Psychosis. *Trials* 2013; **14**: 151.
- van den Berg DP, de Bont PA, van der Vleugel BM, de Roos C, de Jongh A, Van Minnen A, et al. Prolonged exposure vs eye movement desensitization and reprocessing vs waiting list for posttraumatic stress disorder in patients with a psychotic disorder: a randomized clinical trial. *JAMA Psychiatry* 2015; **72**: 259–67.
- de Bont P. Prolonged exposure and EMDR for PTSD versus a PTSD waiting list condition: effects on symptoms of psychosis, depression and social functioning in patients with chronic psychotic disorders. *Psychol Med* 14 Jun 2016 (doi: 10.1017/S0033291716001094).
- van den Berg DP, de Bont PA, van der Vleugel BM, de Roos C, de Jongh A, van Minnen, et al. Trauma-focused treatment in PTSD patients with psychosis: symptom exacerbation, adverse events, and revictimization. *Schizophr Bull* 2016; **42**: 693–702.
- Blake DD, Weathers FW, Nagy LM, Kaloupek DG, Gusman FD, Charney DS, et al. The development of a clinician-administered PTSD scale. *J Trauma Stress* 1995; **8**: 75–90.
- Wolf EJ, Lunney CA, Schnurr PP. The influence of the dissociative subtype of posttraumatic stress disorder on treatment efficacy in female veterans and active duty service members. *J Consult Clin Psychol* 2016; **84**: 95–101.
- De Jongh A, Resick PA, Zoellner LA, van Minnen A, Lee CW, Monson CM, et al. Critical analysis of the current treatment guidelines for complex PTSD in adults. *Depress Anxiety* 2016; **33**: 359–69.

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