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Imagery Rescripting as treatment for complicated PTSD in refugees: A multiple baseline case series study

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ABSTRACT

This study tested the effectiveness of Imagery Rescripting (ImRs) for complicated war-related PTSD in refugees. Ten adult patients in long-term supportive care with a primary diagnosis of war-related PTSD and Posttraumatic Symptom Scale (PSS) score > 20 participated. A concurrent multiple baseline design was used with baseline varying from 6 to 10 weeks, with weekly supportive sessions. After baseline, a 5-week exploration phase followed with weekly sessions during which traumas were explored, without trauma-focused treatment. Then 10 weekly ImRs sessions were given followed by 5-week follow-up without treatment. Participants were randomly assigned to baseline length, and filled out the PSS and the BDI on a weekly basis. Data were analyzed with mixed regression. Results revealed significant linear trends during ImRs (reductions of PSS and BDI scores), but not during the other conditions. The scores during follow-up were stable and significantly lower compared to baseline, with very high effect sizes (Cohen's $d = 2.87$ (PSS) and 1.29 (BDI)). One patient did clearly not respond positively, and revealed that his actual problem was his sexual identity that he couldn't accept. There were no dropouts. In conclusion, results indicate that ImRs is a highly acceptable and effective treatment for this difficult group of patients.

During the last decade there has been an increasing interest in Imagery Rescripting (ImRs) as a treatment or treatment ingredient for a variety of disorders, including PTSD and other anxiety disorders, depression, eating disorders, sleep problems and personality disorders. In ImRs, the patient imagines the (start of a) traumatic (or otherwise negative) experience, and then imagines an intervention that changes the course of events so that a more satisfying outcome is achieved. In original applications often the full trauma was imagined, before rescripting started. For instance, Arntz, Tiesema, and Kindt (2007; also Kindt, Buck, Arntz, & Soeter, 2007) added ImRs to Imaginal Exposure (IE), assuming that it would be ineffective to avoid exposure to the complete trauma memory. Although this study found the combination of IE and ImRs to be better tolerable (significantly less dropout) and more effective in non-fear emotions like shame, guilt, anger, and anger control than IE alone, attempts to apply the technique to highly complex cases necessitated changes in the application of ImRs. Often, these patients refused to relive the full trauma, or dissociated, or ran away. We therefore tried out to start rescripting already during events preceding the actual trauma, so that the patient imagined to be rescued from the trauma and did not have to imagine all the horrible details and feelings of helplessness, shame and guilt associated with the trauma proper. As a side effect, one ImRs often takes no more than 10–15 min; in contrast to the minimal 60 min that was used in the early Arntz et al. (2007) study, and 2–4 ImRs exercises can be done during one session. Clinical observations indicated good effects and high acceptability of the new procedure. Interestingly, this new procedure matches well with new insights from fundamental research, that stress the importance that the event triggering retrieval of the memory should contain new (hence, unexpected) information to bring about a reconsolidation of the memory in a different form (Finnie & Nader, 2012). The new procedure is now described in protocols (Arntz, 2011; 2012; Arntz & van Genderen, 2009), but has not been tested as treatment for complex PTSD.

One form of complicated PTSD is war-related PTSD in refugees. These patients are often considered to be very fragile, and usually have many current social problems that contribute to psychological dysfunction, such as unemployment; loss of social status (e.g., education not recognized in the host country); social

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isolation; boredom; uncertainty about their legal status (or having experienced that for a prolonged time); complicated bereavement; having no partner; and fears about their relatives that didn't flee. Also contributing to complexity is that their traumas are usually multiple and horrible, and that these refugees might have been both victims and perpetrators.

Only a few studies specifically tested PTSD treatments in refugees (see for a review Crumlish & O'Rourke, 2010). Without proper treatment, long-term natural course perspectives for refugees who suffer from the aftermaths of traumas are poor, especially when problems don't recede in the first years of arrival in the host country (Vaage et al., 2010). Various treatments for PTSD have been tested in refugees, but the methodological quality of the trials is, according to a systematic review, generally low (Crumlish & O'Rourke, 2010). Nevertheless, the authors concluded that there is evidence for effectiveness of narrative exposure therapy and cognitive-behavioral therapy. Effect sizes vary considerably, as do proportions with remitted PTSD. From the Crumlish and O'Rourke (2010) review, we calculated a mean remission rate between 40 and 50% (depending on completers vs ITT analyzes), with a range of 0–71% (ITT: 0–59%) for the most effective treatments, CBT and narrative exposure therapy.

The aim of the present study was to assess the effectiveness of ImRs as a treatment for war-related PTSD in refugees. As an initial test, we used a concurrent multiple baseline design with 10 patients with PTSD that reported levels of PTSD and depression on a weekly basis. By randomizing patients over five conditions of baseline length, we separated time from the consecutive conditions, so that the effects of treatment could be distinguished from that of time per se. We compared 10 sessions of ImRs to baseline. We also tested the effects of a 5 week exploration period, thus assessing whether expressing understanding and empathy for the traumas explains treatment effects. A 5 week follow-up period was used to assess the stability of the effects. Treatments were provided by the second author, a junior therapist, after one day of training in ImRs. This means that the current study is also important in view of implementation possibilities.

The reasons for choosing the concurrent multiple baseline design include the following. Although usually conceived as the gold standard, the randomized controlled trial (RCT) has limitations in its practicality, external validity, and costs (Hawkins, Sanson-Fisher, Shakeshaft, D'Este, & Green, 2007; Onghena, 2005; Onghena & Edgington, 2005). Like an RCT, a concurrent multiple baseline design can demonstrate that a change has occurred, that the change is the result of the intervention – and not of time, and that the change is significant (Hawkins et al., 2007; Onghena, 2005; Onghena & Edgington, 2005). Practical advantages over RCTs are that the design requires fewer participants (also an ethical advantage), and that participants act as their own controls – increasing power. An initial evaluation of a treatment is often done in an open trial. Compared to the open trial, the concurrent multiple baseline design has many advantages, as it is a true experiment (by the experimental manipulation of time when treatment starts), so that more causal inferences can be drawn than from an open trial, that offers little possibilities to control for time effects and attention. By adding an exploration phase in our design, and by the fact that during the baseline phase the usual supportive treatment is given, we controlled for nonspecific factors like attention and talking about traumas, further increasing the experimental control over testing the effects of ImRs. However, it should be realized that multiple baseline designs are not suitable for direct comparison of two or more active treatments that have strong lasting effects. For such studies, between-group designs are needed (i.e., RCTs). Moreover, multiple baseline designs are more suited for problems that are stabilized (so that there is no large time effect during baseline) than for problems with natural recovery. As it was not our aim in this phase of research to compare ImRs to another potentially powerful treatment, and we wanted to test ImRs in patients with chronic PTSD despite being in usual care, the concurrent multiple baseline design was a good option.

Methods

Participants

Participants were 10 patients from the mental health care institute Osperon in den Bosch, the Netherlands. This institute is specialized in the supportive care for refugees, but felt a necessity to offer trauma-focused treatments for patients suffering from PTSD and needing processing of their traumatic experiences. Inclusion criteria were: (1) primary diagnosis of PTSD as assessed with the SCDI-1, resulting from war-related traumas; (2) a score of >20 on the PSS at screening, (3) age 18–65; (4) ability to communicate with therapist with or without interpreter; (5) willingness to participate in the study (signed informed consent). Exclusion criteria were: (1) life-time psychosis (though psychotic features along depression were allowed) or bipolar disorder type 1; (2) IQ < 80; (3) acute suicide risk; (4) substance dependence; (5) start of new medication within 3 months before start of the study (medication used for longer periods could be continued; stopping medication during the study was allowed). No other evidence based treatment of PTSD was allowed during the study. To increase external validity we didn't require that participants could speak, write or read Dutch. Assessments and treatments were done in the language of their preference, if necessary with help of professional translators. The 10 participants were recruited from 22 patients screened for participation, of whom 4 were excluded because of a PSS score <20, and 8 because another diagnosis was primary. Fig. 1 presents the patient flow. Table 1 gives an overview of the characteristics of the participants. The study protocol was approved by the ethical committee of the Faculty of Psychology and Neurosciences of Maastricht University.

Procedure

Patients in regular supportive care but not improving enough from that care with a clinical diagnosis of PTSD due to war-related traumas were approached by the second author. A full SCID-1 was applied to assess Axis-1 disorders. In case of a suspicion of low IQ, a full intelligence test was applied (turned out to be not necessary). Potential participants were fully informed about the study both verbally and by written information, and gave written consent if they agreed to participate, which they all did. After 10 participants were included, they were randomized to baseline length (2 participants per length) by the following procedure, executed by an independent person in the presence of institute's psychiatrist and the second author. Each name was written on a separate piece of paper and folded up so that the name was invisible. The 10 papers were put in a bin and stirred by the independent person. Next the independent person drew two papers, and the participants named on the papers were assigned to the longest baseline. The next two drawn participants were assigned to the second longest baseline, etc., until there were two left who were assigned to the shortest baseline condition. The patient was not informed about the allocated baseline length (treatment as usual continued), and the therapist just started with the exploration phase when indicated by the outcome of the randomization.

Instruments

The Dutch SCID-1 was used to assess axis-1 disorders (van Groenestijn, Akkerhuis, Kupka, Schneider, & Nolen, 1999).