Behaviour Research and Therapy 97 (2017) 14–25

Contents lists available at ScienceDirect

Behaviour Research and Therapy

journal homepage: www.elsevier.com/locate/brat

Efficacy of imagery rescripting and imaginal exposure for nightmares: A randomized wait-list controlled trial

Anna E. Kunze [a, b, *], Arnoud Arntz [a], Nexhmedin Morina [c], Merel Kindt [a, d], Jaap Lancee [a]

[a] University of Amsterdam, Nieuwe Achtergracht 129-B, 1018 WS Amsterdam, The Netherlands
[b] LMU Munich, Leopoldstraße 13, 80802 Munich, Germany
[c] University of Münster, Fliednerstraße 21, 48149 Münster, Germany
[d] Amsterdam Brain and Cognition, Nieuwe Achtergracht 129, 1018 WS Amsterdam, The Netherlands

ARTICLE INFO

Article history:
Received 21 February 2017
Received in revised form
12 June 2017
Accepted 14 June 2017
Available online 16 June 2017

Keywords:
Nightmare disorder
Nightmares
Imagery rescripting
Imagery rehearsal therapy
Imaginal exposure
RCT

ABSTRACT

Nightmares can be effectively treated with cognitive-behavioral therapies. Though it remains elusive which therapeutic elements are responsible for the beneficial effects on nightmare symptoms, imagery rescripting (IR) and imaginal exposure (IE) are commonly identified as active treatment components of nightmare therapies. With this randomized controlled trial, we compared IR and IE as individual treatments to a wait-list (WL) condition to determine whether these particular therapeutic elements ameliorate nightmare symptoms. For this purpose, 104 patients with a primary DSM-5 diagnosis of nightmare disorder were randomly assigned to three weekly individual sessions of either IR or IE, or WL. Results showed that compared to WL, both interventions effectively reduced nightmare frequency ($\Delta d_{IR\text{-}WL} = 0.74$; $\Delta d_{IE\text{-}WL} = 0.70$) and distress ($\Delta d_{IR\text{-}WL} = 0.98$; $\Delta d_{IE\text{-}WL} = 1.35$) in a sample that predominantly consisted of idiopathic nightmare sufferers. The effects of IR and IE were comparable to those observed for other psychological nightmare treatments. Initial effects at post-treatment were sustained at 3- and 6-months follow-up, indicating that IR and IE both seem to be efficacious treatment components of nightmare therapies. Additional research is needed to directly compare IR and IE among both idiographic and posttraumatic nightmare sufferers with respect to treatment expectancy, acceptability, and effectiveness.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

Nightmares can be defined as extremely dysphoric dreams that typically involve hazards to an individual's survival, security, or emotional or physical integrity (American Psychiatric Association [APA], 2013). Nightmares usually occur during rapid eye movement sleep and often awake the individual from sleep. Upon awakening, individuals quickly become oriented, alert, and conscious of their surroundings. According to the 5th edition of the Diagnostic and Statistical Manual for Mental Disorders (DSM-5; APA, 2013), individuals with nightmares qualify for the diagnosis 'nightmare disorder' if the experienced nightmares cause substantial daytime suffering and distress.

Approximately 2–5% of the general population report to have one or more nightmares per week (Li, Zhang, Li, & Wing, 2010; Sandman et al., 2013; Schredl, 2010). In psychiatric populations, the prevalence is much higher, with up to 30% of patients suffering from frequent nightmares (Swart, van Schagen, Lancee, & van den Bout, 2013). Recurrent nightmares are often related to considerable suffering and distress (Lancee & Schrijnemaekers, 2013; Nielsen & Levin, 2007; Spoormaker, Schredl, & Bout, 2006), and they are further associated with various forms of psychopathology (Spoormaker & van den Bout, 2005) such as anxiety, depression, posttraumatic stress disorder (PTSD), suicidal ideation, substance abuse (Nielsen & Levin, 2007), and personality disorders (Schredl, 2016).

Cognitive-behavioral therapy is currently the treatment of choice for recurrent nightmares (Lancee, Spoormaker, Krakow, & van den Bout, 2008; Spoormaker & van den Bout, 2005), with imagery rehearsal therapy (IRT) being the most empirically supported treatment format (Augedal, Hansen, Kronhaug, Harvey, & Pallesen, 2013; Hansen, Höfling, Kröner-Borowik, Stangier, & Steil, 2013; Lancee et al., 2008) with moderate (Hansen et al., 2013) to

* Corresponding author. LMU Munich, Leopoldstraße 13, 80802 Munich, Germany.
E-mail address: anna.kunze@psy.lmu.de (A.E. Kunze).

http://dx.doi.org/10.1016/j.brat.2017.06.005
0005-7967/© 2017 Elsevier Ltd. All rights reserved.

large effect sizes (Krakow et al., 2001). In IRT (e.g., Krakow & Zadra, 2006, 2010), patients are asked to change (rescript) the storyline of a particular nightmare into an alternative and less distressing story, and to subsequently rehearse the new nightmare script in their imagination during the day. IRT successfully decreases nightmare frequency and distress (Augedal et al., 2013; Hansen et al., 2013) and improves sleep quality and posttraumatic stress disorder complaints in patients with comorbid PTSD and nightmare disorder (Casement & Swanson, 2012; Krakow et al., 2001). In addition to IRT, exposure techniques are effective in the treatment of nightmares. During exposure for nightmares, patients are confronted with the content of their nightmares in written reports and/or their imagination. Exposure-based nightmare treatments can reduce nightmare frequency and intensity in face-to-face (Cellucci & Lawrence, 1978; Miller & DiPilato, 1983) and self-help formats (Burgess, Gill, & Marks, 1998; Grandi, Fabbri, Panattoni, Gonnella, & Marks, 2006; Lancee, Spoormaker, & van den Bout, 2010).

Given that rescripting and exposure are central elements of various therapeutic protocols, they have been recognized as the active treatment components of nightmare therapy (Hansen et al., 2013). However, identifying the active ingredients of existing nightmare treatments poses a methodological challenge, because the most widely used formats of IRT and IE for nightmares consist of multiple components (Hansen et al., 2013). For example, rescripting-based treatment protocols such as IRT (Krakow & Zadra, 2006, 2010) and exposure-based protocols (e.g., Burgess et al., 1998; Lancee et al., 2010) both comprise treatment elements such as extensive psycho-education about sleep and nightmares, relaxation and safe-place exercises, and nightmare journals. In particular cases, rescripting and exposure are even directly combined (e.g., Exposure, Relaxation, and Rescripting Therapy (ERRT); Davis & Wright, 2006, 2007; Long et al., 2011). Knowledge about the therapeutic role of rescripting and exposure in nightmare treatments is currently limited and empirical data are lacking (Hansen et al., 2013). In an effort to extend this knowledge base, Pruiksma et al. (2016) recently showed that ERRT is not more effective with rescripting and exposure as it is without these treatment components. The results demonstrate that even though most nightmare treatments rely on the therapeutic efficacy of rescripting and/or exposure (at least from a theoretical perspective), it remains unclear whether rescripting and exposure are in fact active treatment components of nightmare therapies, or whether other aspects of nightmare treatments might be responsible for ameliorating nightmare symptoms.

With the present study, we aimed to investigate the isolated therapeutic efficacy of rescripting- and exposure-based treatments for idiopathic and posttraumatic nightmares. In order to dissect their therapeutic effects as stand-alone treatment elements, we intended to demonstrate their superiority to no-treatment separately. For this purpose, we developed two treatment protocols, which exclusively consist of either imagery rescripting (IR) or imaginal exposure (IE). In a randomized controlled trial, we examined the efficacy of three weekly individual sessions of IE and IR compared to a wait-list (WL) control group. In line with previous findings (Augedal et al., 2013; Hansen et al., 2013), we hypothesized that both treatments would effectively decrease nightmare symptoms (i.e., nightmare frequency and distress) from pre- to post-treatment assessment, when compared to WL. Secondary outcomes included sleep disturbances and PTSD related symptoms, which have previously been shown to be ameliorated by nightmare treatments (Casement & Swanson, 2012). Given that dysfunctional beliefs are known to play an important role in sleep disorders (Lancee, Eisma, van Straten, & Kamphuis, 2015), we also measured dysfunctional beliefs about nightmares. We further tested whether treatment gains of IR and IE would be maintained at 3- and 6-months follow-up.

2. Method and materials

2.1. Trial design

The data presented in the current report stem from a single-center randomized wait-list controlled trial (RCT) with three parallel groups. One hundred and four participants suffering from nightmare disorder were randomly allocated to one of three conditions: IR, IE, or WL. Patients in the two active treatment conditions received three weekly 60 min individual treatment sessions, and participants in the WL condition received one of the active treatments (by random assignment) after a 4-week waiting period. The data presented here concern the acute (i.e., pre- vs. post-assessment) outcomes of IR and IE therapy compared to WL, as well as their 3- and 6-months follow-up efficacy. The study was registered at the Netherlands Trial Register (NTR4951), and the Ethics Review Board of the University of Amsterdam (UvA) approved the research protocol (2014-CP-3794). For a detailed description of the trial design, see Kunze, Lancee, Morina, Kindt, and Arntz (2016).

2.2. Participants

Based on our hypothesis that both active treatments (i.e., IR and IE) should decrease nightmare symptoms from pre -to post-treatment assessment when compared to no treatment, a sample-size calculation (two-sided, power = 80%, alpha = 0.05; G*Power3.1) with a medium to large effect size for individual nightmare therapy ($d = 0.74$; Augedal et al., 2013) indicated that 30 participants per condition would suffice to detect statistically significant differences between each of the two treatment conditions and the WL condition (IR vs. WL and IE vs. WL) at post-assessment.[1] Based on this estimate, 104 adult patients with a principal DSM-5 diagnosis of idiopathic and/or posttraumatic nightmare disorder (APA, 2013) were included in the study. Inclusion criteria further involved: one or more nightmare(s) per week, recurrent (emotional) nightmare theme, and sufficient knowledge of the Dutch language. Exclusion criteria were: a current diagnosis of alcohol and/or drug abuse or dependency, PTSD resulting from protracted and recurring trauma (type 2 trauma), a current diagnosis of psychotic disorder, CBT-based psychotherapy for nightmare symptoms in the preceding 12 months, and instable medication intake. Other forms of comorbidity and medication intake were not a reason for exclusion. If applicable, participants were asked to keep their medication intake stable during and at least 4 weeks before treatment.

2.3. Procedure

Participants were recruited by means of online advertisements (i.e., Facebook, Twitter, public websites), and local newspaper announcements. Potential participants visited the information website where they received additional information about the trial. Interested participants filled out an online consent form and preliminary online screener, which assessed basic

[1] It bears mentioning that the present trial was not aimed at establishing superiority of or equivalence between IR and IE (see Kunze et al., 2016). It was therefore not sufficiently powered to detect differences between the two active treatments. However, given that a comparison of treatment vs. WL was not possible at follow-up due to the study design, potential differences between IR and IE concerning their long-term effects were explored. Note, however, that all exploratory analyses were likely to be underpowered.

Download English Version:

https://daneshyari.com/en/article/5038153

Download Persian Version:

https://daneshyari.com/article/5038153

Daneshyari.com