Web-based Self-help Interventions for Adjustment Disorder

Q. **What are web-based self-help interventions?**

A. E-mental health is a field that utilizes technology, including the internet, smartphones, and other networked mobile devices to provide mental health services. Research in this field has grown rapidly in recent decades, mirroring innovations in information and communication technology. Evidence indicates that e-interventions may be effective approaches for the treatment of a number of psychological health conditions (Rogers, Lemmen, Kramer, Mann, & Chopra, 2017), and have some advantages over traditional in-person interventions including increased confidentiality, flexibility, accessibility, reach, and cost-effectiveness (Amstadter, Broman-Fulks, Zinzow, Ruggiero, & Cercone, 2009; Andersson & Titov, 2014; Barak & Grohol, 2011; Mojtabai et al., 2011). Disadvantages of e-interventions may include low adherence (Christensen, Griffiths, & Farrer, 2009) and need for computer literacy (Andersson & Titov, 2014). Web-based self-help interventions, either guided or unguided, is one type of e-intervention.

Q. **What is the theoretical model underlying web-based self-help interventions for adjustment disorder?**

A. A diagnosis of adjustment disorder is made when the experience of clinically significant emotional or behavioral symptoms is greater than would normally be expected in response to a stressor, and the symptoms are not the result of another disorder such as posttraumatic stress disorder, major depressive disorder, or generalized anxiety disorder (American Psychiatric Association [APA], 2013). The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) specifies that adjustment disorder symptoms do not last longer than six months after the stressor is removed (APA, 2013). Because adjustment disorder is characterized as a subthreshold, self-resolving disorder, low-intensity treatments such as web-based self-help interventions that are accessible and cost-effective may be more appropriate than traditional, longer-term psychological or pharmacological interventions (Bachem & Casey, 2018; Maercker, Bachem, Lorenz, Moser, & Berger, 2015).

Q. **Are web-based self-help interventions recommended as a front-line treatment for adjustment disorder in the Military Health System (MHS)?**

A. There is no Department of Veterans Affairs (VA)/Department of Defense (DoD) clinical practice guideline (CPG) on the treatment of adjustment disorder.

The MHS relies on the VA/DoD CPGs to inform best clinical practices. However, in the absence of an official VA/DoD recommendation, clinicians should look to CPGs published by other recognized organizations, and may rely on knowledge of the literature and clinical judgement.

Q. **Do other organizations with CPGs for the treatment of adjustment disorder recommend web-based self-help interventions?**

A. No CPGs on the treatment of adjustment disorder were identified.

Q. **Do other authoritative reviews recommend web-based self-help interventions as a front-line treatment for adjustment disorder?**

A. **No.** Other authoritative reviews have not substantiated the use of web-based self-help interventions for adjustment disorder.

Several other recognized organizations conduct systematic reviews and evidence syntheses on psychological health topics using similar grading systems as the VA/DoD CPGs. These include the Agency for Healthcare Research and Quality (AHRQ) and Cochrane.

- AHRQ: No reports on adjustment disorder were identified.
- Cochrane: A 2012 systematic review of interventions to facilitate return to work in adults with adjustment disorder did not include any studies of web-based self-help interventions (Arends et al., 2012).

Q. **Is there any recent research on web-based self-help interventions as treatment for adjustment disorder?**

A. A March 2019 literature search identified three web-based self-help interventions for adjustment disorder evaluated in four randomized controlled trials (RCTs). The Brief Adjustment Disorder Intervention (BADI), an unguided internet-based modular intervention, was compared to a waitlist control group in a trial of 284 participants (Eimontas, Rimsaite, Gegieckaite, Zelviene, & Kazlauskas, 2018). The study showed some promising results, but analyses were done on the "completer" sample (defined as participants who completed the follow-up assessment and completed at least one intervention exercise), and there were high dropout rates in the study. Additionally, inclusion was based on exposure to a significant life-stressor and a high level of self-reported adjustment disorder symptoms, and not on a clinician diagnosis of adjustment disorder. BADI was also evaluated in another RCT comparing BADI with and without therapist support (Eimontas et al., 2018). In this trial of 1077 participants, adding therapist support to BADI did not significantly improve outcomes.

In the third trial, 100 adults diagnosed with chronic stress were randomly assigned to internet-based cognitive behavioral therapy (CBT) or a waitlist control group (Lindsater et al., 2018). In this study, chronic stress was operationalized as adjustment disorder or exhaustion disorder and the primary outcome was level of perceived stress. Participants in the internet-based CBT group made significant improvements in level of perceived stress compared to the control group, but the mixed sample and lack of an adjustment disorder-specific outcome measure makes it difficult to draw conclusions about the efficacy of this intervention as a treatment for adjustment disorder.

"EMMA's World," a virtual reality self-help program designed for use alongside face-to-face treatment (Banos et al., 2009), was compared to CBT in a small, pilot trial of 39 participants (Banos et al., 2011). The study included participants with a mix of stress-related disorders, including PTSD (N=10), pathological grief (N=16), and adjustment disorder (N=13). In this study, the intervention group received CBT enhanced with "EMMA's World," while the control group received CBT without the use of the virtual environment. Due to the fact that the study used a mixed sample, and that "EMMA's World" was not evaluated as a stand-alone treatment, conclusions cannot be made about the efficacy of "EMMA's World" as a self-help treatment for adjustment disorder.

Another web-based self-help intervention for adjustment disorder, Adjustment Disorders Online, is currently being evaluated in an ongoing RCT (Rachyla et al., 2018). This study compares an internet-delivered CBT program to a waitlist control group.

Q. **What conclusions can be drawn about the use of web-based self-help interventions as a treatment for adjustment disorder in the MHS?**

A. A number of web-based self-help interventions for adjustment disorder have been developed in recent years, and are beginning to be evaluated in RCTs. The evidence base for these treatments is emerging, with most of the identified RCTs published only in the last few years. Overall, little high quality research on any treatment for adjustment disorder has been done. As with RCTs on adjustment disorder in general, RCTs on web-based self-help interventions for adjustment disorder suffer from methodological issues around the definition and measurement of adjustment disorder. Future trials should include participants with a diagnosis of adjustment disorder according to DSM-V or the International Classification of Disease, Eleventh Revision (ICD-11), and should include outcome measures specific to adjustment disorder. In the absence of an established body of evidence, clinicians should carefully evaluate the results of any available research and rely on clinical judgment. By definition, the symptoms of adjustment disorder do not persist for greater than six months following termination of the stressor or its consequences (APA, 2013) and a large proportion of adjustment disorders resolve on their own. Web-based self-help interventions may be appropriate low-intensity interventions for this population. Clinicians should consider several factors when choosing a treatment for their patient, such as symptom profile, availability, and patient preference that might influence treatment engagement and retention.

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