

Review Article

Prolonged exposure therapy and its implication through telehealth

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ABSTRACT

Patients with post-traumatic stress disorder (PTSD) usually suffer from avoidance symptoms which might intervene against seeking adequate healthcare and medical consultation for their conditions. As a result of the reduced support to these patients, it has been demonstrated that PTSD symptoms usually persist based on the continuous feeling of avoidance among them. Evidence indicates the efficacy of prolonged exposure therapy for PTSD patients that are usually exposed to traumas as anger issues, comorbid depression, guilt, and alcohol overuse conditions. In the present literature review, we have discussed the concept of conducting prolonged exposure therapy for patients with PTSD and the different implications and effectiveness of telehealth in this field. Evidence indicates the effectiveness of prolonged exposure therapy in managing PTSD regarding symptoms reduction of intensity and improvement. Conducting the therapy through telehealth was also reported with favorable outcomes comparable with the outcomes of the in-person interviews with no adverse events. However, drop-outs have been reported to be high among telehealth-mediated sessions, and therefore, serious approaches should be exerted to overcome these issues. Further considerations should also be provided for patients in certain situations as pandemics to enhance the quality of treatment. Finally, further research is still needed to target areas with poor access to telehealth-related modalities, and introduce the modality to the affected populations and urge local health authorities to provide easy accessibility to these patients.

Keywords: Post-traumatic stress disorder, Prolonged exposure therapy, Management, Telehealth

INTRODUCTION

Patient with post-traumatic stress disorder (PTSD) usually suffer from avoidance symptoms which might intervene against seeking adequate healthcare and medical consultation for their conditions. As a result of the reduced support to these patients, it has been demonstrated that PTSD symptoms usually persist based

on the continuous feeling of avoidance among them.¹ Besides, evidence indicates that PTSD not only affects patients but also has a significant impact on families as a result of parenting problems, intimate partner violence, and impaired functions related to the relationships of the affected patients.²⁻⁴ Therefore, conducting management plans for these patients is essential to enhance the quality of life of both the patients and their families.

Evidence indicates the efficacy of prolonged exposure therapy for PTSD patients that are usually exposed to traumas as anger issues, comorbid depression, guilt, and alcohol overuse conditions.⁵⁻¹⁴ Telehealth management has been introduced to the medical field as a significant delivery approach and a follow-up tool that was associated with significant healthcare outcomes. Telehealth was also introduced with prolonged exposure therapy to reduce the symptoms of PTSD, especially when the COVID-19 pandemic has significantly impacted the regular in-person interviews.¹⁵⁻¹⁷ In the present literature review, we aim to discuss the role of prolonged exposure therapy and its implication through telehealth for patients with PTSD.

METHODS

This literature review is based on an extensive literature search Medline, Cochrane, and Embase databases which was performed on 25 September 2021 using the medical subject headings (MeSH) or a combination of all possible related terms, according to the database. To avoid missing potential studies, a further manual search for papers was done through Google Scholar and the reference lists of the initially included papers. All relevant papers were screened for useful information, with no limitations placed on date, language, age of participants, or publication type.

LITERATURE REVIEW

For PTSD patients, conducting prolonged exposure therapeutic modalities has been described in the literature as a behavioral-cognitive, time-limited treatment. It has been demonstrated that the technique is usually conducted for 90 minutes per session with a total of 8-15 sessions.¹⁸ Evidence in the literature also indicates that the modality is usually used in these patients to relieve the feelings of trauma-associated avoidance of situations, behaviors, and thoughts, based on the emotional processing theory.¹ Besides, it also addresses the different concerns of the affected patients regarding the different dangers in the surrounding environment, resulting in a significant complication following trauma. By achieving adequate treatment, the affected patients can significantly process these harmful feelings and overcome these traumatic perceptions, concepts, and experiences. Moreover, the systematic approach of the modality can significantly help the affected patients to be reinvolved in their daily routine with their community and eliminate the feeling of avoidance. The rationale for conducting the therapeutic modality is usually adequately elaborated on in the first session. This session also includes approaches to discussing the approach to manage the situations, feelings, and thoughts that patients might experience following the trauma. The following procedure would be conducted in an interview that is basically designed to process the most distressing trauma-related experiences and their potential effect on the corresponding functions of the affected patients. Retraining patients about

breathing exercises are also conducted during this session. In the second session, patients are taught about the commonest reactions that might result secondary to trauma. Evidence also indicates that in this session the psychiatrist usually assigns the 1st in vivo homework of the exposure therapy to these patients aiming at eventually developing an in vivo hierarchy. In the third session, it has been demonstrated that emotional processing of the trauma-related effects is usually done following an imaginal exposure of the memory-related index trauma. After these sessions, the following sessions are usually done based on an agenda and agreement between the patient and the physician. The processes based on which these following sessions are conducted include reviewing the imaginal and in vivo exposure homework, and to conducting a 40 minute-session of imaginal exposure within the session together with interpreting these feelings, and finally assigning further homework to the patient. During the last session, the attending physician should be able to assess whether the patient has progressed or not and review the future planned interventions for any potential relapses, in addition to discussing the plans of maintenance and improvement outcomes. Furthermore, it has been indicated that all of the conducted sessions should be audio-recorded and given to the patient to listen to it now and then as a solid part of the management plan. Further information about the technique and approaches of prolonged exposure therapy have been previously introduced to the literature and were adequately discussed.¹⁸

Among the different studies in the literature, conducting prolonged exposure therapy through telehealth has been associated with many considerations to achieve successful and fruitful treatment outcomes. For instance, before conducting the treatment modality, informed consent should be obtained from the patient, which should discuss in detail the disadvantages and limitations of conducting the exposure therapy through telehealth-related modalities when there are certain considerations for conducting the modality. It has been demonstrated that before conducting exposure therapy through telehealth, a thorough discussion of the guidelines and protocols about maintaining the same efficacy of this approach similar to the office-based one should also be done. This is usually conducted to decrease the distraction when the sessions are conducted, indicate the adherence to the management protocols, and improve psychiatric and physical safety. Evidence regarding the efficacy of conducting prolonged exposure therapy through telehealth has significantly increased within the last decade. Previous studies have indicated the effectiveness of using clinical video teleconferencing for conducting sessions of prolonged exposure therapy.¹⁹⁻²¹ Furthermore, more recent randomized controlled trials also investigated the effectiveness of these modalities. In a randomized controlled trial, Acierno et al reported that the efficacy of conducting telehealth-mediated exposure therapy was similar to or superior to conducting in-person interviews

regarding the significant reduction in symptoms related to PTSD after the modality was conducted for 6-12 months.²² Besides, they also reported that the acquired favorable outcomes were maintained for 6 months following the treatment. Morland et al also conducted another similar trial with three arms of interventions, including home in-person therapy, clinic-based, and home-based clinical video teleconferencing.²³ It has been concluded that the efficacy of the different modalities was not significantly different regarding PTSD symptom reduction. However, it should be noted that the authors indicated that higher drop-out frequencies were associated with both of the telehealth modalities than the in-person approach. In a previous investigation by Gros, Allan et al, it has also been demonstrated that the rates of drop-outs were higher among patients that were recruited to receive clinical video teleconferencing than other patients that were indicated for in-person interviews.²⁴ On the other hand, this was not reported in another investigation by Hernandez-Tejada et al.²⁵ The authors of this investigation reported that among patients that dropped out of treatment, patients within the in-person treatment group had completed less frequent sessions than other patients with the telehealth group.

One of the main concerns about conducting exposure therapy through telehealth has mainly been the potential adverse events on the therapeutic relationship. However, strong evidence indicated that conducting treatment through telehealth has significantly been associated with strong and favorable therapeutic outcomes that are similar to the in-person-based approach, in addition to the estimated high rates of satisfaction among the patients and the physicians.^{24,25} In this context, the previous investigation by Morland et al demonstrated that PTSD patients usually prefer conducting prolonged exposure therapy for clinical video teleconferencing than in-person-based approach.²³ Among these patients, most of them also prefer home-based than clinic-based teleconferencing. One of the reported advantages of using telehealth is the easy access to psychoeducational materials and the extensive availability of the different assignments that can help the affected patients that are involved in the prolonged exposure therapy. Easy and frequent follow-up can be planned through these modalities, and frequent reminders about the next session can also be done through specific mobile applications which are widely available among the current generations.²⁶

It should be noted that different safety guidelines should be considered by the providers to maintain adequate outcomes of the telehealth-mediated prolonged exposure therapy. This is usually done because of the unavailability of the different resources that are only available during in-person interviews (such as during emergencies when patients require emergent consultations) because the providers are not usually familiar with the location of the patient where the session takes place. Accordingly, different safety measures have been proposed in the

literature to overcome these concerns.²⁷ For instance, determining the patient's location and making sure that the patient is located within a safe environment should be done by the provider before conducting the session. Considering the availability of backup communications is also vital when considering telehealth because of the potential emergencies that can occur during lost communication and poor connection video conferencing. An emergency support person can also be requested to accompany the patient during the treatment sessions if a clinical indication was supported. Removing the weapons, if potentially present during the room where telehealth is conducted, should also be requested to remove to maintain a safe environment for conducting the therapeutic modality. In cases when the patient refuses to remove the weapon from the room where the session takes place, providers should discuss with them other safe practices and harm-reducing protocols. Evidence furtherly indicates that for patients with high, moderate, and low risk of suicide, video conferencing can be conducted by providing adequate safety measures. In a previous investigation by Gros et al, a case study was conducted to explain how conducting video conferencing was associated with reduced suicidal intents among patients who suffer from PTSD.²⁸ It has been demonstrated that conducting the modality was associated with facilitated reach to the different support systems (including the local authorities, treatment team, and family), which can effectively help patients in these situations.

Different studies have also reported that the efficacy and utilization of prolonged exposure therapy through telehealth has significantly increased during the recent COVID-19 pandemic. Evidence also indicates the wide availability of the different resources that can support the affected patients and enhance the expected outcomes. For instance, many previous investigations indicated that patients with PTSD have more efficient treatment outcomes with telehealth approaches when it has been done with their beloved ones, indicating the favorable effects of social integration for these patients.^{29,30} Enhanced clinical outcomes, decreased drop-outs, and increased engagement during prolonged exposure therapy can be maintained with the support of the family.³¹⁻³⁴ This has been indicated in a previous investigation that included veterans with PTSD and concluded that associating family members in the treatment plans of these patients significantly enhanced the outcomes by making them more liable to complete the treatment plan.³² It should also be noted that there are different considerations to make when conducting telehealth approaches generally and during a pandemic. For instance, evidence shows that imaginal exposure is not likely to be significantly affected during the pandemic. However, more efforts should be exerted by the providers to adequately notice the actions which might indicate the under and/or overexpression of the affected patients, which usually requires additional efforts during telehealth sessions because of the absence of nonverbal cues during

these modalities as compared to the in-person interviews. Rather than the imaging exposure considerations, other approaches should also be considered for the in vivo exposure during the treatment plan. These points have been adequately discussed in previous investigations that also shed more light on the different considerations that should be offered to the affected patients during pandemics.¹⁵⁻¹⁷ Finally, evidence indicates the feasibility and applicability of prolonged exposure therapy through telehealth for patients with PTSD despite the many considerations that should be encountered when conducting such management plans.

CONCLUSION

Evidence indicates the effectiveness of prolonged exposure therapy in the management of PTSD regarding symptoms reduction of intensity and improvement. Conducting the therapy through telehealth was also reported with favorable outcomes that are comparable with the outcomes of the in-person interviews with no adverse events. However, drop-outs have been reported to be high among telehealth-mediated sessions, and therefore, serious approaches should be exerted to overcome these issues. Further considerations should also be provided for patients in certain situations as pandemics to enhance the quality of treatment. Finally, further research is still needed to target areas with poor access to telehealth-related modalities, and introduce the modality to the affected populations and urge local health authorities to provide easy accessibility to these patients.

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