Practical guidelines for online Narrative Exposure Therapy (e-NET) – a short-term treatment for posttraumatic stress disorder adapted for remote delivery

Elisa Kaltenbach a,b, Patrick J. McGrath a,c, Maggie Schauer b,d, Elisabeth Kais e b,d, Anselm Crombach b,d and Katy Robjant b

© Centre for Research in Family Health, IWK Health Centre, Halifax, Canada; Vivo International, Konstanz, Germany; Department of Psychiatry, Dalhousie University, Halifax, Canada; Department of Psychology, University of Konstanz, Konstanz, Germany

ABSTRACT
Background: Online therapy has become increasingly desirable and available in recent years, with the current COVID-19 pandemic acting as a catalyst to develop further protocols enabling therapists to conduct online treatment safely and efficaciously. Offering online treatment potentially means that treatments are available to clients who would otherwise have no access, closing the gap in the provision of mental health services worldwide.

Objective: This paper focuses on practical guidelines using online Narrative Exposure Therapy (e-NET). It aims to be an addition to the general manual of NET to enable therapists to deliver online treatment. The face-to-face version of NET is a well-known short-term and evidence-based treatment for posttraumatic stress disorder; e-NET is currently being tested in several additional trials.

Methods: The differences between NET and e-NET are elaborated and depicted in detail.

Results: Difficulties encountered in e-NET delivery, e.g. confidentiality, dealing with interruptions, comorbid symptoms among others, are similar to those that occur during face to face interventions but the solutions have to be adapted. Dissociation is often regarded as a challenge in face-to-face treatment, and requires particular attention within the online setting. Therefore, tools for addressing dissociation in this particular setting are presented.

Conclusions: These practical guidelines show the advantages as well as the challenges therapists face when conducting e-NET. They aim to empower therapists working with trauma clients to conduct e-NET confidently and safely.

Guías prácticas para la Terapia de Exposición Narrativa online (e-NET en sus siglas en inglés) – un tratamiento de corto plazo para el trastorno de estrés postraumático adaptado para atención remota

Antecedentes: La terapia online se ha vuelto deseable y disponible de forma crecientemente recientemente, con la actual pandemia del COVID-19 actuando como un catalizador para desarrollar protocolos permitiendo a los terapeutas a aplicar tratamiento online de forma segura y eficaz. Ofrecer tratamiento online significa que potencialmente los tratamientos están disponibles para los clientes que no tendrían acceso de otra forma, reduciendo la brecha en la provisión de los servicios de salud mental alrededor del mundo.

Objetivo: Este artículo se centra en las guías prácticas usando la Terapia de Exposición Narrativa online (e-NET). Este busca ser una adición al manual general de NET para facilitar que los terapeutas entreguen tratamiento online. La versión presencial del NET es un tratamiento bien conocido basado en la evidencia y de corto plazo para el tratamiento del trastorno de estrés postraumático; e-NET está actualmente siendo evaluado en varios ensayos adicionales.

Métodos: Las diferencias entre NET y e-NET están elaboradas y se describen en detalle.

Resultados: Las diferencias encontradas en la entrega del e-NET, por ej. Confidencialidad, manejo de interrupciones, síntomas comorbidos, entre otros, son similares a aquellos que ocurren durante las intervenciones presenciales, pero las soluciones tienen que ser adaptadas. La disociación es frecuentemente mencionada como un desafío en el tratamiento presencial, y requiere de particular atención con el contexto online. Por lo tanto, se presentan herramientas para abordar la disociación en este contexto particular.

Conclusiones: Estas guías practicas muestran las ventajas como también los desafíos que los terapeutas enfrentan cuando aplican e-NET. Ellas buscan empoderar a los terapeutas para el trabajo con clientes que han experimentado trauma para implementar e-NET de forma confidencial y segura.
1. Introduction

Online treatments for posttraumatic stress disorder (PTSD) have increased over recent years. Evidence has repeatedly shown that online psychotherapeutic treatments result in similar outcomes as face-to-face treatments (Andersson & Titov, 2014; Morland et al., 2020). However, implementing online treatments on a large scale still appears to require a radical paradigm-shift for policy makers, health insurance providers, as well as therapists and clients. This paper depicts practical guidelines for clinicians about how to conduct online Narrative Exposure Therapy (e-NET). We particularly discuss the challenges in delivering e-NET and suggest methods to address them appropriately and effectively.

Offering online treatment potentially overcomes barriers commonly encountered in face-to-face treatments; for example, the lack of access to treatment in rural/remote areas, stigma related to attending a mental health clinic, travel costs, and privacy issues. The COVID-19 pandemic with the accompanying public health restrictions on travel and closing of mental health clinics and practices has furthermore illuminated the need to increase the availability of online treatments and to analyse and improve standards in order to be able to continue to provide clients with the best possible treatments.

Given the recency of the development of online treatments for PTSD, evidence to support its use is sparse. However, several systematic reviews have examined the efficacy of the available online treatment trials for PTSD (Bolton & Dorstyn, 2015; Kuester, Niemeyer, & Knaevelsrud, 2016; Lewis, Roberts, Bethell, Robertson, & Bisson, 2018; Morland et al., 2020; Olthuis et al., 2016; Sloan, Gallagher, Feinstein, Lee, & Pruneau, 2011). Most of these studies include different methods of administering treatment; some studies included treatments that were completely computer-assisted, while others involved paraprofessionals or therapists either partially or fully (Benight, Ruzek, & Waldrep, 2008). A recent review of Morland, Wells, and Rosen (2020) focused on clinical video conferencing finding a good feasibility, acceptability and effectiveness of such treatments in reducing PTSD symptoms. Findings also indicate that the therapeutic process doesn’t seem to be compromised by conducting the treatment via video (Morland et al., 2020). Dropouts appear to be similar in online treatment compared to face-to-face (Goetter et al., 2015; Morland et al., 2020). Recently, guidelines discussing online treatment in general and in regards to PTSD treatment have been released underlining the importance of this topic (Joint Task Force for the Development of Telepsychology Guidelines for Psychologists, 2013; Morland et al., 2020). Those guidelines can be used complementary with the here depicted more specific e-NET guidelines.

Trauma-focused treatment approaches have been found to show the best long-term benefits (e.g. Bisson, Roberts, Andrew, Cooper, & Lewis, 2013). Thereof NET is a short-term trauma-focused therapy, which was originally developed for survivors of multiple traumatic experiences including torture, war, and violence in conflict and crisis regions (Schauer et al., 2011). It is suitable in resource poor situations and can also be conducted in unstable living conditions. Underpinned by neurobiological research on memory, NET assumes that traumatic experiences are not properly integrated within the autobiographical memory (Brewin, Gregory, Lipton, & Burgess, 2010; Elbert, Schauer, & Neuner, 2015). Due to the high physical arousal during traumatic experiences, aspects of such events, including sensory impressions, automatic cognitions, emotions and physical reactions are recorded in memory separately from contextual information including when, where and why the event took place (Elbert & Schauer, 2002). In order to reconnect these two memory processes and restore autobiographic memory, NET requires recall and verbalization of both the explicit and implicit memory components of a traumatic event at the same time during exposure. By establishing a chronological list of a client’s traumatic, stressful and emotionally burdening experiences, together with joyful, strengthening and resource-building events (the lifeline), a NET therapist assists their client to organize their memories in an autobiographical, chronological order. In subsequent sessions, the clients’ life story is narrated from birth until the present day particularly focusing on traumatic experiences. Whenever such an event is processed during the treatment, the therapist slows down the narration and explores the event in detail, connecting the hot (sensory,
emotional, cognitive, physiological, and meaning) and cold (time, place, and context) memory components of the event. The therapist assists the client to reconstruct the memory chronologically and to identify and integrate triggered involuntary memory aspects within the contextual information of the story (Elbert et al., 2015). As storytelling is a frequently occurring mechanism of dealing with upsetting events in many cultures, this pragmatic narrative approach of NET to heal traumatic memories is easily understood and applied in a variety of societies (Robjant & Fazel, 2010) and after multiple and complex traumatization (Schauer, Robjant, Elbert, & Neuner, 2020). Providing approximately 8–12 individual 90-minute sessions, NET has been proven to effectively reduce trauma-related mental health symptoms in severely affected individuals (Lely et al., 2019; Neuner, Elbert, & Schauer, 2020; Siehl, Robjant, & Crombach, 2020). Furthermore, several studies show that the technique can be disseminated effectively, and within a short time period, to professionals and paraprofessionals (Jacob, Neuner, Maedl, Schaal, & Elbert, 2014). The easy to grasp concept and the pragmatic, and predictable process of NET has also been shown to be suitable for children (KIDNET; Schauer, Neuner, & Elbert, 2017).

1.1. Challenges and advantages of conducting NET online

Provision of NET through digital contact with a therapist offers a number of advantages as well as disadvantages compared to face-to-face NET. These can differ between clients and therapists and should be considered before offering e-NET to a client. In the following, some major challenges and advantages of applying e-NET will be discussed. In the subsequent section practical considerations will be explored.

Preference for in-person compared to online treatment: Some clients and therapists prefer face-to-face care. This is more likely, if there is limited experience with online treatment and low computer literacy. Conversely, other clients and therapists may prefer online treatment. Client preference may influence the success of the treatment and should therefore be followed where possible.

Privacy and stigmatization: When using non-medical grade video-conferencing platforms, there is a risk of interception of the electronic communication. This risk is lower when using secure medical grade approved platforms and proper procedures are taken; however, a low risk remains, and this is particularly important when considering treatment of those who have experienced trauma in the context of political activism. Furthermore, clients who are delivering or receiving online treatment in their own homes may not have a private space available. For other clients, their privacy may be more protected through online treatment. Online treatment can help in avoiding the stigma of being seen in a clinic. Despite these advantages, particular efforts are necessary to ensure the privacy of the client regarding online data protection by setting up a secure internet-based system.

Access and costs for treatment: Online treatment can be delivered with relative ease to clients who would otherwise not be able to access psychotherapeutic care (e.g. those with physical health problems and disabilities that make travel difficult, in epidemics that confine people to their homes). Limiting stressful travel to appointments can reduce time and costs for clients and can reduce impact on the environment (Robjant, Meyer, Kaiser, Kaltenbach, & Schauer, 2020). Depending on the country and the health care system, compensation of therapists may be restricted to face-to-face encounters, but in general, online treatments could be more efficient and allow increased access opportunities for traumatized individuals. However, services provided via Internet might exclude other groups of people with no Internet access or electronic devices and presupposes a certain level of wealth. Clients also need some literacy and media skills in order to access online treatment.

Safety: In the case of expressed intention of self-harm, suicide or harm to others, the physical distance between therapist and client reduces options of immediate action. One key challenge that is particularly present in treating PTSD is the management of dissociation. PTSD clients can show a range of dissociative symptoms, from minor dissociative features (e.g. dizziness, difficulties to see, hear or speak, nausea, numbness, pain insensitivity) to very disabling dissociative states (e.g. fainting, long periods of depersonalization or derealization) that can last hours or even days. Applying anti-dissociative strategies in e-NET can be more challenging compared to face-to-face NET because the involvement of the different senses of the client is limited. NET has always included strategies to counter dissociation during exposure rather than in a pre-stage of therapy, since such an approach was conceptualized (Schauer & Elbert, 2010) and it is therefore important that e-NET also includes such strategies without the requirement of a prior stabilization phase of treatment.

Therapist-client relationship: A good therapeutic relationship is a key component in the success of NET. There is strong evidence that a good relationship between therapist and client is associated with positive outcomes after all types of psychological treatment (Norcross, 2011). A good therapist-client relationship seems especially important in exposure-based treatment where overcoming avoidance plays a major role in treatment success. Some therapists and clients seem to have reservations that online treatment could make it more difficult to create a good therapeutic alliance. However, research has shown that the therapeutic alliance doesn’t seem to be compromised in video calls (Lingely-Pottie & McGrath, 2006; Morland et al., 2020).
Observing and reacting to emotions and physical reactions: Characteristics that are visible differ between video calls and face-to-face NET. In video calls, only the face and the upper body of the other person are usually clearly visible making it more challenging to note changes in the body physiology (e.g., shaking legs, sweaty hands) and to see small, but indicative gestures and movements, usually key in NET. The whole body ‘tells’ the story, not just the words. Since sensory information is much scarcer in digital contacts it can be challenging to rapidly track reactions, emotional responsiveness or the body post-ure of the client and to react immediately if changes (e.g. first signs of dissociation) occur. On the other hand, the client’s face is enlarged on the screen and may even be closer and more visible to the therapist than in face-to-face sessions enabling the therapist to see more subtle facial expressions.

Connection problems and uni-directional audio transmission: Transmission delays in the video and/or the tone can occur in video calls. This can lead to a loss of some of the information and important body cues. Many video platforms only allow one person at a time to speak or make a noise, while the other one is blocked from transmitting audio information at the same time (uni-directional). This is contrary to face-to-face encounters (bi-directional). Therefore, subtle validation by the therapist, supportive sounds, utterances of understanding (like ‘aha, oh, mhm . . . ’), and outright interruptions are made more difficult. Furthermore, disruptions from a few moments to a complete loss of connection can occur; leading to interruptions or break-off of sessions.

2. Overcoming challenges in e-NET

To ensure practicable and safe e-NET sessions a variety of topics should be discussed with the client beforehand. Some components are essential both in NET delivered face-to-face as well as via video. However due to the use of video additional safety procedures should be discussed before starting e-NET. In general, because of the nature of online treatments, clients have to take on more responsibility than in in-person sessions. This emphasizes the importance of a thorough assessment and consent process and psychoeducation before starting the treatment. Table 1 summarizes how these challenges can be addressed in e-NET.

3. Step by step through the sessions: e-NET variations to the typical NET process

E-NET sessions should mirror face-to-face NET sessions as outlined in Schauer et al. (2011, 2020) as far as possible. However, some components of the procedure will require some adapting. The three ‘pillars’ of NET are: 1) Diagnostic interview and psychoeducation; 2) Life line; and 3) Narrative Exposure through the lifeline from birth to the present. These three phases safely reveal the trauma material step by step and allow healing of the memory disturbance. E-NET also includes these three core components but is adapted as follows.

3.1. Diagnostic interview and psychoeducation

3.1.1. Diagnostic interview

Key to any trauma-focused treatment is the use of valid diagnostic measures to establish a need for treatment and to identify any comorbid problems. Most commonly this takes place as a part of an initial clinical assessment. Just like in NET, assessment for e-NET must include checklists that capture potential traumatic events that may be generic or bespoke for the population concerned. Event checklists allow clients to approach the trauma material before being asked to discuss it, and allow the therapist to understand the full trauma and stress load of a client’s life. Typically there are two important areas to cover: (1) a classic event checklist (for example the Life Event Checklist (LEC-5; Weathers et al., 2013)) and a valid measure for confirmation of a PTSD diagnosis (for example the Posttraumatic Stress Disorder checklist (PCL-5; Blevins, Weathers, Davis, Witte, & Domino, 2015)); (2) an adverse childhood experiences scale, like a childhood trauma event checklist (for example the Maltreatment and Abuse Chronology of Exposure scale (MACE; Isele et al., 2014; Teicher & Parigger, 2011)).

Scales to assess suicidal ideation, self-harm, and substance misuse should be included in the assessment as well. In addition, where other comorbid disorders are suspected (e.g. in the broad clinical assessment), further measures should be included in order to identify these (e.g. depression, anxiety, psychosomatic symptoms). For e-NET, it is especially important that the therapist is aware of the likelihood of dissociation. For this we recommend the use of the shutdown-dissociation scale (Shut-D; Schalinski, Schauer, & Elbert, 2015; Schauer & Elbert, 2010) and an exploration of potential risk factors. Similar to face-to-face NET, comorbid difficulties need not necessarily result in the exclusion of clients but in appropriate adaptations to guarantee the clients’ safety. It is recommended to conduct the checklists for traumatic events and PTSD symptoms as a clinical interview to ensure that e-NET is a suitable treatment for the client.

3.1.2. Psychoeducation and consenting

Psychoeducation is about a) discussing the outcome of the diagnostic interview, b) providing education about PTSD, c) explaining the different treatment options and
Table 1. Addressing challenges in e-NET.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Approach</th>
</tr>
</thead>
</table>
| Confidentiality               | ● Choose a secure video platform.  
                                  ● Make sure your workspace conforms to confidentiality standards (e.g. being alone in a room, no disturbances, lockable place to store clients’ confidential information).  
                                  ● Ensure that the client is in a calm, private space where they can talk openly and undisturbed. Check at the beginning of each session that the client is alone in the room, with surrounding people informed not to disturb.  
                                  ● Discuss how to handle disturbances of other people in order to guarantee confidentiality (also see interruptions and distractions). |
| Setting                       | Technical set-up  
                                  ● Ask the client to test the video platform, microphone and camera before the first session and at the beginning of each session.  
                                  ● Adjust the camera for client and therapist until it is appropriate. The camera should depict the facial features and be on eye level. It must show the whole face and if possible, the upper part of the body (e.g. shoulders). Beware of facing the camera too close and direct, rather sit back a little and sideward with one shoulder more in front to not appear too confrontational.  
                                  ● Check at the beginning of each session that sound and video of therapist and client are fluent. |
| Communication in video calls  | ● Speak loud and clearly.  
                                  ● In case of uni-directional audio transmission, focus more on visual forms of encouragement and validation (e.g. nodding the head).  
                                  ● Look at the camera and not only at the video of the client (can evoke the impression that you constantly look down).  
                                  ● Be transparent (e.g. if you write down something, the client should be made aware of this to understand and avoid misinterpretations of the different facial expression and posture). |
| Interruptions and distractions | ● Discuss in advance with the client how to handle interruptions (e.g. muting the cellphone, informing people about not to be disturbed, organizing childcare).  
                                  ● Both, therapist and client should have a second way how to reach each other (e.g. cellphone/office number).  
                                  ● Sessions are to be continued if anyhow possible. This could also mean finishing the session on the phone.  
                                  ● Continue normally after short interruptions.  
                                  ● Agree how to proceed with the narration and present emotions in case no contact can be established anymore (e.g. the client could write down the remaining part of the event and do exercises to re-orientate in the present). A new session must then follow timely. |
| Drug intake and self-harm practices | ● Check for self-injury and drug intake before starting the treatment as well as throughout the treatment.  
                                  ● Make sure that the client is not intoxicated at the time of the session (no drinks, unprescribed or illegal drugs, tranquilizers, cannabis etc.). |
| Emergencies – Suicidal ideations and intent | Preventative measures  
                                  ● Check for suicidal thoughts and intent before starting the treatment as well as throughout the treatment.  
                                  ● To ensure an appropriate and timely reaction in case of an emergency ask for the current location of the client at the beginning of each session.  
                                  ● Explore and agree on a procedure with the client in advance (e.g. determine emergency contact person and professionals working on-site with the client, initiate collaboration with local services).  
                                  ● Option for agreeing on a no-suicide contract, however, to our knowledge there is no data available on it’s reliability in e-health situations. |
| Active suicide intent         | ● Follow the guidelines of the respective country.  
                                  ● Remain in contact with the client until the client has professional support on-site.  
                                  ● Contact emergency contact person for support on-site. |
| Dissociation                  | ● Include an assessment of dissociation symptoms in the diagnostic session.  
                                  ● Discuss and practice anti-dissociation exercises with all clients.  
                                  ● For highly dissociative clients: work together with a therapy assistant. |
| Exclusion criteria            | ● No trauma-related symptoms.  
                                  ● Symptoms that require an immediate need of stationary care (e.g. active suicide intent, active psychotic symptoms).  
                                  ● Clients with high dissociative symptoms may not be systematically excluded; however, their participation in e-NET may need other requirements (e.g. a therapy assistant). |

in particular the rationale and process of the offered treatment, and d) consenting.

In e-NET the client has more responsibility compared to face-to-face NET and must be prepared to take responsibility to action a pre-made plan (made between client and therapist) in the case of an emergency. It is therefore important to have a thorough psychoeducation and consenting procedure that may require more time than face-to-face NET. In addition to the general psychoeducation elements
depicted in Schauer et al. (2011), aspects such as confidentiality, the set-up of the sessions, communication in video calls, procedures in case of interruptions or distractions, emergency procedures, and dissociation should be discussed in greater detail with the client (see Table 1). The client needs to know how they and their therapist will react. The client and therapist must assure that the client has the capacity, motivation and ability to self-monitor their safety during and between sessions. The therapist should check on this in each session. As with face-to-face NET, psychoeducation is repeated where necessary throughout the treatment.

3.2. Lifeline

Since trauma memory is decontextualized, there is need for a biographical timeline approach that focuses on the arousing and important situations and their evolving schemas within life periods during development: the lifeline (Schauer et al., 2020). Long-term healing in therapy is achieved through processed attention to the entire life biography. The therapist helps classify specific life events within lifetime periods along the time axis. This spatio-temporal allocation and naming of the most important personal events (general and specific events) in the successive lifetime periods is a meaningful component of NET, carried out from an observer’s position. The lifeline session can be technically challenging in e-NET because of its interactive elements and the use of symbols. However, it is key to a successful intervention since it allows a gradual approach to the trauma material and provides a road map for the coming exposure sessions.

In the following, we explain five variations of the lifeline that are possible in e-NET: 1. Firstly, the therapist and client can make use of a software application depicting the lifeline (yourlifeline.net; ask authors for permission to use) in order to conduct the lifeline session. This software application contains all important elements of the lifeline (rope, flowers, stones, candles, and sticks) and client and therapist can work on it simultaneously. The therapist can guide the client through the construction of their lifeline just as they would in a face-to-face lifeline session. The client can decide the shape of the rope and can select the most appropriate symbol for each event. Each symbol can be linked to the name, place, and time of the event. One advantage of using this tool is that this can easily be referred to during subsequent sessions, and new events can be added throughout the treatment. 2. Alternatively, the therapist can instruct the client to collect all of the symbols (real rope, stones, flowers, candles, and sticks) prior to the lifeline session. In the session itself, the therapist can then guide the client through the process as if they were physically present in the room. It is important that the therapist is able to view the entire lifeline at several points during the session, even though the therapist’s focus will be on emphasizing the context, i.e. where and when and broader socio-political context, of the events (on the lifeline). 3. Another option is that the therapist has the materials in front of them and constructs the lifeline on behalf of the client. This risks the possibility of reduced engagement and increased avoidance by the client and it will therefore be necessary for the therapist to monitor this closely through the session and to find ways of increasing the client’s connection with the process (for example by asking the client to select the specific symbol for each event, by asking additional questions regarding the context of the event). 4. Most video platforms have some kind of whiteboard available. This function can also be used to depict the events of the lifeline. Client or therapist can write the names of the events in chronological order. The use of this tool is flexible; for example, client or therapist can draw the symbols or insert pictures of the symbols. 5. The client or the therapist can point the camera on a real flipchart or whiteboard and draw the lifeline on there.

Variations how to work with the lifeline are not limited to these five suggestions. Independent of the method used to depict the lifeline, the therapist should be observant that the visual representation of the events is clearly arranged and the chronology is followed. Despite the use of an additional tool, care should be taken to ensure that the therapist is still able to carefully observe the client’s reactions as they complete the lifeline. The client should be visible to the therapist at all times in addition to a shared screen for the lifeline. This is important to detect the emotional valence of the event as well as possible omissions of traumatic events and to help clarify the chronology. It is important to understand that the lifeline session is accomplished within the framework of 90 min and shouldn’t be split in several sessions.

Many NET therapists remark that the lifeline is a key session for building therapeutic alliance and trust that will be relied upon for future exposure sessions. It is important that the therapist takes every opportunity to encourage, and praise the client as they proceed through the lifeline and to actively seek to understand the client’s life story.

3.3. Narrative exposure

In e-NET, it is highly recommended to begin with a ‘body scan’ prior to beginning the imaginal exposure. This includes asking about bodily sensations from feet to head, localizing and determining tensions, naming nervousness, palpitations, numb areas, and checking for cold or warm areas. This will provide useful information for the therapist about the current level of physiological arousal and emotional activation before the exposure begins.
The body check can be repeated during the narration to provide clues about dissociation and the overall body experience during the narration (see Schauer & Elbert, 2010).

After the body check the therapist should proceed in the usual manner through the ‘stone’, ‘stick’, or ‘flower’, establishing the cold memory contextual information before proceeding through all parts of the hot memory cycle (sensorial impressions, cognitions, emotions and physiology). This should be done both in the present moment and at the time of the trauma. Meaning and significance of each moment may be established before proceeding to the next moment in the event. The most available information in e-NET will be hearing the narrative and variations in the voice and facial expressions. This is likely to lead to a natural bias in attention for the therapist. In e-NET it is therefore recommended that the therapist takes particular care to ask questions about the client’s physical experiences and body movements, both in the present and at the time of the event. When a client makes gestures that cannot be seen by the therapist, these should be explored verbally.

The therapist must seek to overcome the physical distance in e-NET by maximizing the emotional attunement to the client by offering empathic responses and suggestions of emotions they believe the client to be feeling (Robjant et al., 2020), just as they would in normal NET (e.g. offering praise and encouragement throughout the exposure). The usual practice of alternating between the present (‘how do you feel now as you describe this to me?’) and the past (‘how did you feel at that moment back then when this happened?’) must be maintained in e-NET. The therapist may consider increasing the amount that they alternate between present and past in order to reduce chances of dissociation. Anti-dissociative strategies should be engaged as soon as signs of dissociation can be observed (see below).

At the end of the session, the usual practice in NET is to establish a safe point to end the imaginal exposure and the narration. This is usually at a point in the narration where the traumatic event has ended, or at least had ended for that day (in situations of prolonged periods of trauma) and when the client also appears calmer (e.g. reporting less physiological signs of arousal). The therapist ends the detailed narration at this moment and aims to locate the event within the wider context of the clients’ lifetime period and in the context of their life as a whole. In e-NET, we recommend that the therapist takes more time to re-establish this, given the intense, surreal environment of a 90–120 minute focus towards a computer screen and away from the rest of the current surroundings. The re-orientation of the client to the present context (the room itself, their plans for the coming hours and day) should be an inherent part of the end of each e-NET session. This should include a body check to make sure the client is oriented in the present. In face-to-face NET the therapist would be able to walk the client out of the room, asking general questions, and there would likely be admin tasks (e.g. arranging subsequent appointments) which all help to re-orient the person to the current circumstance. Therefore, more time needs to be spent on this in e-NET, including asking the client to look away from the screen and around the room, and even to move around if necessary, before the video session is terminated.

4. Handling dissociation and flashbacks during e-NET

Dissociation and flashbacks are a major concern of therapists when using online therapy. However, there are a lot of tools – both preventive and in the moment of dissociation – that can be used during e-NET. Most likely, clients who dissociate during a session have experienced this reaction in their daily life as well. However, the risk of dissociating or experiencing a flashback is higher during an exposure session due to the fact that the memory of the traumatic event connected to the dissociative reaction is activated. In most cases, no direct risk is connected with dissociation; a potential risk is that the client injures themselves due to the loss of control over the body (e.g. falls, hits an object). For an extensive overview about dissociation and how to handle it during trauma-focused therapy see Schauer and Elbert (2010). Many of these strategies can and should be pre-emptively taught to clients before proceeding with e-NET.

4.1. Assessment of dissociative symptoms

It is recommended to assess dissociative symptoms before starting e-NET, e.g. with the Shutdown Dissociation Scale (Shut-D; Schalinski et al., 2015). Risk factors for dissociation, e.g. sexual abuse, history of dissociation, should also be assessed. This assessment enables the therapist and client to know if the client is experiencing symptoms of dissociation and also to identify potential triggers that lead to dissociative symptoms before starting e-NET.

4.2. Feasibility of e-NET for dissociative clients

After assessing dissociative symptoms, a decision concerning the clients’ dissociative symptoms and associated risk for successful conduction of e-NET and a mitigation plan has to be made. Clients with low to moderate dissociative symptoms may participate in e-NET, with a person close by, who could be contacted by the therapist, e.g. via phone, in case the client dissociates. For clients with extremely high dissociative symptoms (i.e. with a diagnosis for a dissociative subtype of PTSD; for diagnosing see
Schauer, Schalinski, and Elbert (2013) it should be considered whether e-NET is applicable or face-to-face NET might be indicated. In any case, clients with high dissociative symptoms may only participate in e-NET if a therapy assistant is present in the room or nearby and instructed on how to react in case of dissociation. A therapy assistant doesn’t need any other training than to sit in and be present during the sessions and to conduct instructions of the therapist in case the client dissociates as outlined in Schauer and Elbert (2010). Ideally, they shouldn’t be privately involved with the client, e.g. family members or friends are often not suitable. e-NET paired with a therapy assistant could even make sessions with highly dissociative clients more feasible as they don’t have to travel to the treatment place.

4.3. Discuss a strategy on how to deal with dissociation

A strategy about how to deal with dissociation during sessions has to be discussed with all clients before starting e-NET – we suggest that the therapist discusses this with the client even with those who didn’t report symptoms of dissociation. Chessell, Brady, Akbar, Stevens, and Young (2019) have presented a useful protocol to counteract dissociation, based on Schauer and Elbert (2010), which could also be applied to e-NET.

4.3.1. Introduce preventive measures

The therapist must check with the client whether they are in good overall health and have eaten that day (illness or low blood sugar promote fainting). Most commonly, a glass of water or soda should be available in each session. Furthermore, the therapist pays attention to the clients’ environment and whether it is suitable: for example, does the room have enough light? Does the client have a place to sit upright with good grounding for the feet? Could they injure themselves in case they dissociate? The therapist may introduce pre-arranged tools that help to stimulate the senses in the here and now: a touch stimulator (e.g. a massage ball, an item with texture) and an intense smell (e.g. mint, lemon, lemongrass; be aware that ammonia is not suitable, since it may induce disgust which triggers parasympathetic reactions). Dissociation exercises should be introduced and practiced within the scope of psychodducation. For clients with dissociative symptoms these exercises may be practiced repeatedly and their contact person or the therapy assistant is to be familiar with the exercises as well. Examples for dissociation exercises that can be practiced beforehand are body activation exercises (moving different body parts, muscular activation (to treat tonic immobility) and applied tension to skeletal muscles (that will raise the blood pressure), feeling different parts of the body and basic grounding exercises such as exercises to raise awareness of the present surrounding (client experiences and describes their direct surrounding).

4.3.2. Emergency situations of dissociation

The therapist has to discuss with the client how to react in case the client notices symptoms of dissociation in themselves (e.g. immediately tell therapist, agree on a sign). In the next step it should be discussed how the therapist reacts in case the client is not responsive or disappears from the screen. Therapist and client develop a procedure that both feel comfortable with (e.g. waiting and reaching out for visible or audible signs of the other party for some minutes before other, more intrusive measures are taken, like informing a contact person via phone to enter the room). A potential plan could be: a) try to re-establish contact; b) give client time to respond on screen (approx. 5 min); c) try to contact client on cellphone or landline; d) ask the defined contact person for support. In general, cellphones should be muted during sessions; however, with dissociative clients, it might be helpful to have the cellphone as an additional option to call the client in case they don’t react to the therapists’ voice on the video.

4.4. Starting a session with a client who tends to dissociate

At the beginning of each session the therapist should check in with the client: Are the dissociation tools handy? Is the emergency contact available? Did they eat and drink something in the last hours? What is the clients’ current location? How is the current stress level and self-awareness? What does the client report in the body check?

4.5. Reacting to dissociation in an e-NET session

The therapist should be attentive to cues that might be related to dissociation. The therapist will already know the risk of the client dissociating based on the evaluation of the Shut-D and also the history of the client’s lifeline which will allow the therapist to learn about early onset trauma and traumas which would be likely to lead to dissociation (see Schauer and Elbert 2010 for further info). Especially in dissociative clients, therapists should repeatedly ask for currently present body sensations and address the different senses of the client. If the client shows initial signs of dissociation (e.g. fragmented or unclear talking, delayed or no response, startle reaction, nausea, report of warm hands or blurred vision), the therapist will react immediately. Reorienting the client is the most important strategy in case of dissociation. In this moment, therapist and client stop talking about the past traumatic event and focus on the present until the client is
Table 2. Examples on how to react to dissociative symptoms during an e-NET session.

<table>
<thead>
<tr>
<th>Sense</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Moving** | ● Ask client to change body posture (e.g. to sit upright)  
● Ask client to move  
● Ask client to make small movements with different body areas (e.g. starting with the fingers or toes) and increasing the size of the movement  
● Ask client to stretch  
● Ask client to tension different muscles in their body  
● Ask client to make pump fists with/without tension ball  
● Ask client to move from foot to foot |
| **Hearing** | ● Continuously talk to the client with a clear voice  
● Repeatedly name the clients’ first name  
● Repeatedly name the therapists name  
● Name characteristics of the present that differ from the traumatic event (e.g. name the current time, place, age of the client, weather)  
● Contrast past and present  
● Emphasize that the client is safe  
● Ask client to listen to their surrounding  
● Use sounds that are distinct from the clients’ experience during the event (e.g. call on cellphone, ring bell) |
| **Seeing** | ● Encourage the client to note their surrounding (e.g. see the therapist on the screen, look around in the room)  
● Encourage the client to look at their body |
| **Speaking** | ● Ask simple questions (e.g. name, day in the week, age, location, name of children)  
● Encourage the client to describe their surrounding |
| **Touching** | ● Ask client to use the touch stimulator (e.g. massage ball, object with rough surface, stone, square object, toy)  
● Ask client to rub/clap their hands  
● Ask client to touch different fabrics and textures  
● Ask client to massage their muscles, neck, arms, legs |
| **Smelling** | ● Ask client to smell or taste an intense, but well tolerated sensory experience (e.g. fresh mint, sour lemon, lemongrass, ginger, chilli)  
● Ask client to check if they smell something in their surrounding (e.g. a plant) |
| **Tasting** | ● Ask client to drink something (e.g. water, soda)  
● Suggest client to bite into something with a strong but acceptable taste (e.g. lemon, ginger)  
● Suggest client to chew a gum or sour/sweet candy (be careful: choking hazard – don’t suggest in case client is very disoriented) |

reoriented. Reorientation is done by addressing the different senses of the client: vision, hearing, smell, taste, and touch. Muscular activation is one of the most powerful counter dissociation tools and so the therapist should demonstrate to the client how they can do this while still asking questions to reorient the person to the present. Suggestions about addressing the different senses and activating the client are detailed in Table 2. In case the therapist cannot contact the client right away, it is important to stay calm, to keep talking to them with a clear voice and not to end the call. The amount of time it takes for a person to reorientate differs. If the therapist is not able to establish contact with the client, they must follow the dissociation plan as discussed with the client (e.g. call their contact person, call emergency personnel).

Rule of thumb: trauma-survivors who tend to dissociate during their e-NET trauma-narration need close supervision, a highly attentive and experienced therapist to provide ongoing management of their shut-down disposition and to permanently repeat contrasting of ‘then’ and ‘now’ including body checks throughout the exposure session. Keep focusing on sensory contrast to trauma context during e-NET (point out differences of the now to the then, while remembering the past).

4.6. After dissociation

Dissociation can be very exhausting for the client. The therapist should make sure to give the client enough time to recover and be completely in the present (orienting exercises). There should be some time to talk with the client about their experience and repetition of psychoeducation. In case of light dissociation (for example the client has momentarily dissociated and the therapist has been able to prevent a full shut down), continue with the narration until the end of the traumatic event. If the client’s dissociation has been more pronounced, the therapist should continue with the narration but without the exposure to the small detail, until a safe spot in the clients’ narration is reached. This is essential so that the client doesn’t stay in the traumatic event after the session. The exposure of this particular past event will have to be repeated during the next session with the therapist more attentive to using counter dissociation techniques at the appropriate moment, in order to process the event fully, this time without dissociation.

5. Discussion

Online treatments are increasingly needed to address the treatment gap for those with PTSD. e-NET presents several advantages in providing PTSD treatment to those who wouldn’t be able to access it otherwise or for whom it is more convenient and feasible to do the treatment from their home. However, therapists need to be aware of the challenges that come with providing treatment online. Practical issues (e.g. the set-up), questions around safety and confidentiality
need to be addressed together with the client before consenting to e-NET. We recommend deciding on an individual basis whether e-NET or face-to-face NET is the better option. There is good evidence for face-to-face NET; evidence for the effectiveness of e-NET is still being investigated. e-NET shouldn’t be conducted if there is a need for stationary care (e.g. suicide intent, active psychotic symptoms). For clients with dissociative symptoms, e-NET should only be conducted if adequate safety measures are in place (e.g. a therapy assistant); if this is not possible face-to-face NET should be used.

NET, with its emphasis on close emotional attunement through the traumatic experiencing is possible to deliver via online video platforms once the above considerations have been taken into account. Clinically, the opportunity to have the client’s facial emotional expression in greater focus for the therapist may allow the NET therapist greater capacity to intervene in close empathic responding during stone processing, regarded as being so key in face-to-face NET. Along with the physical distance between client and therapist comes a transfer of more responsibility to the client. The client is asked to consent to holding more responsibility for noticing and alerting the therapist about emotional and physiological changes as well as using tools such as the counter dissociation exercises. Depending on the client this can be a challenge or an advantage, with more detailed psychoeducation potentially deepening the understanding of the client and the involvement in the different steps of the treatment, decreasing helplessness and enabling responsibility and self-confidence.

Addressing the safety of clients in e-NET is essential and a thorough psychoeducation and consent process is important to explain potential safety issues (e.g. dissociation, suicide intent) to the client and agree on a procedure for emergencies. Safety issues are more evident because of the distance between client and therapist. Safety procedures for clients have been discussed above and therapists should address all of those with their clients before starting the treatment as well as being attentive throughout the treatment.

In addition to ensuring the safety of clients, it is also important to ensure the safety of the therapists. Therapists should feel confident administering e-NET. Research has shown that professionals as well as paraprofessionals can successfully conduct NET. In any case, it is crucial that those conducting e-NET with clients participate in a thorough NET training and are familiar with conducting treatment online. Paraprofessionals should only conduct e-NET after extensive training and while being closely monitored. In general, regular clinical supervision and a good work-life balance are highly important, and this is particularly relevant where therapists work from home. Therapists working from home should have measures in place to practice self-care, exchange experiences and challenging situations with clients with other therapists and through expert supervision.

Research testing the effectiveness of e-NET is underway; a case study with refugees, a case series with firefighters, and a waitlist control group trial with parents of neurodiverse children are currently testing the feasibility and effectiveness of e-NET for those groups (Kaltenbach, Crombach, Olthuis, Lach, & McGrath, 2021; Robjant et al., 2020). In addition, work groups in different countries started conducting e-NET in 2020 due to COVID-19 (ARQ Centrum ‘45, 2020). Given that the principles do not divert from the NET, we would expect positive effects of e-NET that could be comparable to other video-based treatments for PTSD.

In summary, e-NET provides an opportunity to reach more people in need of trauma treatment by offering a short-term treatment that has been found to be efficient in face-to-face treatment. Future studies need to test the feasibility and effectiveness of e-NET in various populations. Therapists wishing to deliver e-NET should be mindful to attend to the safety recommendations as outlined here and to ensure they are sufficiently trained to deliver the treatment. e-NET is a promising approach to close the current treatment gap and to enable traumatized individuals to recover.

Acknowledgments

We are grateful for the extensive exchange with other NET therapists about their experiences conducting e-NET. We furthermore thank those conducting e-NET in the currently running research projects and for sharing their experiences, especially Michelle Chisholm and Maria McGrath.

Data availability statement

Data sharing is not applicable to this article, as this article does not contain any data.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by grants from the Canadian Institutes for Health Research (to PM), Strategy for Patient Oriented Research (to PM), the IWK Health Centre (to EK and PM), Baden-Württemberg Stiftung (to MS), the European Research Council (ERC) PoC (323977; POPP; to MS), and vivo international.
of an online narrative exposure intervention for posttraumatic stress injury in parents of neurodiverse children.


