Thesis submitted in partial fulfilment of the degree of Doctor of Clinical Psychology (DClinPsych)

See Heng (Vanessa) Yim
Oxford Institute of Clinical Psychology Training and Research
Harris Manchester College
University of Oxford

June 2022

Word count

Critical Review of the Literature	7054
Service Improvement Project	4333
Main Research Project	4368
Executive Summary	504
Reflective narrative	976

Table of Contents

Abstracts

Critical Review of Literature

Current views of psychological therapies for trauma typically assume the traumatic event to be in the past. Yet individuals who live in ongoing organised violence or experience intimate partner violence (IPV) may continue to be (re)exposed to related traumatic events or have realistic fears of their recurrence. This review considers the effectiveness, feasibility and the requirement for adaptations of psychological interventions for individuals living with ongoing threat. Eighteen papers featuring 15 trials were included (12 on organised conflict, three on ongoing IPV). For political violence, most studies showed moderate to large effects in reducing trauma-related symptoms when compared to waitlists. For IPV, findings were varied. Most studies found providing psychological interventions were feasible. The findings, albeit preliminary with mixed methodological quality, showed psychological treatments can be beneficial and should not be withheld in context of ongoing organised conflicts and IPV. Clinical and research recommendations are outlined.

Service Improvement Project

Aims

Ward rounds are key to treatment-related decision making but are often stressful for patients. This project aimed to explore and improve patients' experiences of the clinical team meeting (CTM, historically known as ward round) in an adult inpatient eating disorders unit. A mixed-method approach was adopted using in-vivo observations, two focus groups, an interview, and a staff survey. Six patients participated. Two former patients contributed to data analysis, co-production of service improvement initiatives and write-up.

Results

The mean CTM duration was 14.3 minutes. Patients spoke half of the time, followed by psychiatry colleagues. 'Request' was the most-spoken category. Thematic analysis identified (1) CTMs are important but impersonal, (2) CTMs generate a sense of palpable anxiety; (3) divergent views between staff and patients.

Clinical implications

The findings and implementation of co-produced changes to CTMs improved patients' experiences despite COVID-19 challenges. Factors beyond CTMs including the ward's power hierarchy, culture and language need addressing to facilitate shared decision-making.

Main Research Project

Background

Research on sudden symptom improvements (sudden gains) in internet-delivered psychological interventions are limited in routine practice.

Objective

This was a study on sudden gain and its relationship to outcome and cognitive processes. The intervention examined was a therapist-guided internet Cognitive Therapy intervention for social anxiety disorder (iCT-SAD) delivered in primary mental health services in the UK. The aim was to replicate the approach of a previous exploratory study (Thew et al., submitted) where the data were drawn from a randomised controlled trial (Clark et al., 2022).

Methods

The study used data from a larger implementation study (N = 193). Liebowitz Social Anxiety Scale was the primary outcome measure. Process variables examined included negative social cognition measured by the Social Cognition Questionnaire, self-focused attention (Social Phobia Weekly Summary Scale) and depressed mood (Patient Health Questionnaire).

Results

Seventy sudden gains were found among 57 participants. The occurrence rate of sudden gain was 39%. Individuals who experienced sudden gains had a larger reduction in social anxiety symptoms at end of intervention and at three-month follow-up. There was evidence of a reduction in the frequency of negative social cognitions prior to the gain, whereas change in self-focused attention occurred simultaneously with the gain. Depressed mood did not show significant changes over these timepoints.

Conclusions

Sudden gain was found in routine practice and was found to be related to meaningful symptom improvement.

Critical Review of the Literature

The effectiveness and feasibility of psychological interventions for populations under ongoing threat: A systematic review

See Heng (Vanessa) Yim
Oxford Institute of Clinical Psychology Training and Research
University of Oxford
See.yim@hmc.ox.ac.uk
June 2022

Word count: 7054

Proposed Journal: Clinical Psychology: Science and Practice

Rationale: This journal only publishes systematic review and meta-analysis and has an international readership. The review will fits its scope in understanding and advancing theoretical perspectives in clinical psychology especially the concept of 'ongoing trauma' which looks beyond PTSD.

Internal supervisor: Prof Paul Salkovskis

The effectiveness and feasibility of psychological interventions for populations under ongoing threat: A systematic review

Abstract

Current views of psychological therapies for trauma typically assume the traumatic event to be in the past. Yet individuals who live in ongoing organised violence or experience intimate partner violence (IPV) may continue to be (re)exposed to related traumatic events or have realistic fears of their recurrence. This review considers the effectiveness, feasibility and the requirement for adaptations of psychological interventions for individuals living with ongoing threat. Eighteen papers featuring 15 trials were included (12 on organised conflict, three on ongoing IPV). For political violence, most studies showed moderate to large effects in reducing trauma-related symptoms when compared to waitlists. For IPV, findings were varied. Most studies found providing psychological interventions were feasible. The findings, albeit preliminary with mixed methodological quality, showed psychological treatments can be beneficial and should not be withheld in context of ongoing organised conflicts and IPV. Clinical and research recommendations are outlined.

Introduction

Existing diagnostic criteria, models, and treatment interventions of posttraumatic stress disorder (PTSD) typically focus on trauma as a *past* event. Thereby we cannot ascertain if the recommended interventions apply in context of continued threat.

Post-traumatic stress disorder (PTSD) can only be diagnosed if symptoms have persisted for at least one month (American Psychiatric Association, 2013), meaning that a traumatic event would have occurred at least a month before diagnosis. In addition, prevailing models of trauma, such as the Cognitive Model of PTSD (Ehlers & Clark, 2000) conceptualise trauma exposure in relation to *past* occurrences, which lead to a sense of *current threat*. These conceptualisations do not specifically address the understanding and treatment of individuals and groups who are exposed to continuous actual or threatened traumatic events such as in war and conflict settings (Eagle & Kaminer, 2013). In such circumstances, the sense of current threat may not only be understandable, but also adaptive for survival (Rosenberg et al., 2008). The clinical position typically taken by professionals, however, is that ‘safety’ and ‘stabilisation’ need to be established before commencing psychological treatments. For example, in intimate partner violence (IPV) research, participants are typically recruited from those who live in shelters and/or have not experienced any abuse for the previous month (Crespo & Arinero, 2010; Johnson et al., 2011), in other words, when they are relatively safe and stable. Other research does not distinguish between people with recent trauma history or ongoing trauma through IPV (Keynejad et al., 2020). Not differentiating between past or ongoing trauma limits our understanding of effective psychological or psychosocial interventions for these individuals and communities. In addition to the argument for safety and stability comes the controversy whether offering treatment shortly after a traumatic event is advisable. Examples of this discussion include debriefing (van Emmerik et al., 2002) and Trauma

Risk Management (TRiM; Greenberg et al., 2010). If it is either unhelpful or even counter-productive to offer treatment in such circumstances, then this is a reasonable recommendation, but if it is not then such recommendations are ethically questionable for some of the most distressed of those seeking help in the wake of trauma. This issue is therefore in urgent need of resolution.

Researchers have conceptualised ongoing trauma in various ways and examined how responses to ongoing trauma differ from those who experienced past trauma. In an attempt to go beyond the concept of PTSD, the term *continuous traumatic stress* (CTS) was proposed by Straker & The Sanctuaries Counselling Team (Straker, 1987) from South Africa. They defined CTS as the presence of emotional or behavioral responses to past and current danger resulting from living in states of realistic ongoing threat including political, civil or community violence. However, the definition of CTS has been contested. Some researchers argue that in these settings, daily hassles and ongoing stressors are distinct constructs from past trauma (Tay & Silove, 2017). Studies on CTS have been largely theoretical papers and clinical case studies, which limit clinical conclusions to be drawn. It also appears that researchers are divided into two schools of thought: present-focused versus trauma-focused interventions. Diamond et al. (2010) wrote specifically about ongoing trauma stress response (OTSR) in the context of repeated missile attacks in Israel, and argued that treatment protocols for PTSD should be modified in this context. For example, there might not be a single traumatic event leading to a flashback, and people may be more preoccupied with survival rather than the past trauma. Diamond and colleagues' view was that the treatment focus was to work on current dangers and increasing protection, and anxiety management as well as cognitive restructuring, rather than the processing of past traumatic events in these settings. On the other hand, the use of exposure-based trauma-focused therapies under ongoing threat was supported in case studies (Murray et al., 2013) and case series (Gillespie et al., 2002). In these studies, it was suggested the psychological impact of past trauma impaired the ability of the person to effectively manage the continuing threat they found themselves in. Therefore, trauma-focused treatments could still have an important role to play in reducing the distress of individuals living in ongoing threat situations. Taken together, it seems that there are significant gaps in the evidence base regarding the distinct needs and treatment effectiveness for people living in the context of ongoing threat.

There are feasibility challenges in conducting research and implementing psychological interventions in ongoing threat settings. These include security and safety problems for clients and treatment providers, logistical difficulties for therapists and clients seeking to attend sessions, and for clients to concentrate in sessions (Murray et al., 2014). Feasibility of psychological interventions may also be impacted by cultural contexts in settings of ongoing threat. Culturally, there are debates over the validity of the concept of PTSD in developing regions and interventions may need to be adapted due to different interpretations of illness and reactions to stressors (Hinton & Lewis-Fernández, 2011). Furthermore, the majority of PTSD and trauma interventions have been researched in first world countries and have not been developed, validated, adapted or evaluated in different cultural contexts, taking into consideration factors such as community, faith and language. When considering feasibility, practical considerations such as safety and security need to be taken into account, as well as cultural and context-specific adaptations. These challenges to feasibility should not prevent support for those under continuing threat, otherwise, support may be denied to those most in need of it.

The review that comes closest to addressing the current questions is a recent systematic review by Ennis, Sijercic, and Monson (2021), who examined trauma-focused cognitive-behavioral therapies for PTSD under ongoing threat. They reviewed 21 studies in populations with ongoing risk of war and community violence, IPV and work-related traumatic events. Although medium to large treatment effects were found in favor of CBT compared to waitlist controls, the authors cautioned against drawing firm conclusions due to the paucity and heterogeneity of the studies. The current review aims to address the same issue from a broader perspective, and therefore updates and supplements that review. Firstly, Ennis and colleagues only included CBT interventions in their review, with the reasoning that it is recommended as first line treatment for PTSD (American Psychological Association, 2017), without acknowledging that these recommendations are largely based on treatment of *past* trauma and in setting without current threat. They therefore may have missed valid and effective interventions for ongoing threat that utilise other approaches. Secondly, their review included population where ongoing threat may have passed or changed from the original traumatizing events, which may dilute the clarity of interventions for *ongoing* threat. For example, they also included refugees living in camps and women living in shelters after IPV. Thirdly, while Ennis and colleagues note the importance of considering intervention adaptations due to ongoing threat and review these in their results, an even clearer focus on feasibility, which highlights adaptations in response to ongoing threat and cultural considerations, could help guide future researchers and clinicians. Lastly, Ennis et al. restricted their review to interventions that address PTSD. While this provides a clear structure, it may not measure the full spectrum of distress related to ongoing stress.

Aims

The current paper aimed to extend the Ennis et al. (2021) findings by including non-CBT interventions and feasibility . We included broader trauma-related distress outcomes and adopted a more robust definition of ongoing threat. The objectives of the current systematic review were to consider the effectiveness and feasibility of the full range of psychological interventions for psychological effects of traumatic events in contexts of ongoing threat. For feasibility, we did not use the criteria for feasibility studies such as adherence rate or selection of outcome measures. In this review, feasibility specifically referrs to the practicality of the intervention delivery and implementation within the constraints in resources, as well as the adaptations and modifications to suit the populations and the context of ongoing threat (Bowen et al., 2009).

Method

Definition

To avoid confusion, although we aimed to add to the evidence on supporting individuals and groups under ongoing threat settings, we did not use the term CTS here as there are varied definitions of the construct in relation to whether or not ongoing stress includes daily stressors (Miller & Rasmussen, 2010; Nuttman-Shwartz & Shoval-Zuckerman, 2016). In this review, we used the Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5) definition of a traumatic event which includes actual threatened risk of death or physical harm which an individual experienced, witnessed or learned about (APA, 2013). In the current study, the definition of ongoing threat focused specifically on the following two areas: individuals living in (i) precarious and personally dangerous situation including ongoing socio-political conflict caused by organised violence such as political, armed, and community violence, and (ii) intimate partner violence (IPV). Additionally, the ongoing threat should be related to the individuals' index trauma for the studies to be included. We did not include combat trauma as there is a separate literature in the area.

Search Strategy

A systematic literature search on peer-reviewed articles was conducted on May 6, 2021, and updated on January 4, 2022 using PsycINFO, MEDLINE, EMBASE as well as citation search. The search was conducted according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA, Moher et al., 2009) guidelines and the search terms can be found in Appendix B. The search terms were adapted in different bibliographic databases with database-specific filters and terms. The protocol was pre-registered on Prospero (CRD42021277966).

Inclusion and Exclusion Criteria

Inclusion and exclusion criteria are summarised in Table 1.

Table 1. Inclusion and Exclusion Criteria.

Inclusion criteria	Exclusion criteria
Peer-reviewed articles documenting empirical research, including but not limited to randomised controlled trials, controlled and uncontrolled studies, mixed-method studies, case series;	Books, dissertation, conference papers, non-peer-reviewed articles, case studies;
Peer-reviewed articles documenting empirical research, including but not limited to randomised controlled trials, controlled and uncontrolled studies, mixed-method studies, case series;	Not written in English;
Populations including children and adult experiencing at least one traumatic event with actual or potential actual or threatened death, serious injury, or sexual violence as defined by the DSM-5 (APA, 2013) who were currently living in states of ongoing threat specifically in organised violence (political, civil or community violence) or intimate partner violence. The context of the ongoing threat is linked to the 'index' traumatic event but not due to daily stressors or hassles;	Articles not describing continuous threat; or when the ongoing threat context was not related to community/ political/ war violence, or intimate partner/ domestic violence;
Participants experienced elevated level of distress as a result (e.g., traumatic stress symptoms, depression, anxiety and quality of life) and at least one of these indicators of distress were reported as an outcome;	Exclusion of trauma types included medical trauma, combat/ veteran trauma, work-related trauma (e.g., police, paramedics, healthcare professionals, Covid19 responses), post-conflict areas or

	refugees resettled in camps in another country that were not experiencing conflicts, developmental trauma, children affected by parental conflict, vicarious trauma;
Interventions were psychologically informed targeting distress relating to the traumatic event(s). The interventions followed the top two level of Inter-Agency Standing Committee (IASC) guidelines on Mental Health and Psychosocial Support in Emergency Settings (MHPSS) which meant that they were focused, non-specialised support (focused individual, family or group interventions by trained and supervised workers, basic mental health care by primary health care workers), or specialised services (psychological or psychiatric supports by specialists for people with severe mental disorders) (Inter-Agency Standing Committee, IASC, 2007).	Papers published in 'predatory journals'. We decided to exclude studies from predatory journals based on the recommendations from (Munn et al., 2021). In the absence of a standardised definition of 'predatory journal', only indexed studies on bibliographic databases with stringent indexing criteria were included. When assessing the studies especially the ones from citation search and when the publishers' credibility was queried, we measured those journals against criteria such as whether they were a member of COPE used the Think, Check, Submit campaign checklist (http://thinkchecksubmit.org/).

Data Extraction

The study characteristics extracted were: author/s, year of publication, location where study was conducted, type and definition of ongoing threat, type of intervention, intervention details (frequency, length, content, provider), adaptations related to culture, context and ongoing threat (feasibility), study outcomes (effectiveness) and challenges due to ongoing threat (feasibility).

Quality Appraisal

The methodological quality of included studies was assessed by SHY using the Mixed Method Appraisal Tool (MMAT; Hong et al., 2018). HL cross-rated 20% of the included studies.

Data Synthesis and Analysis

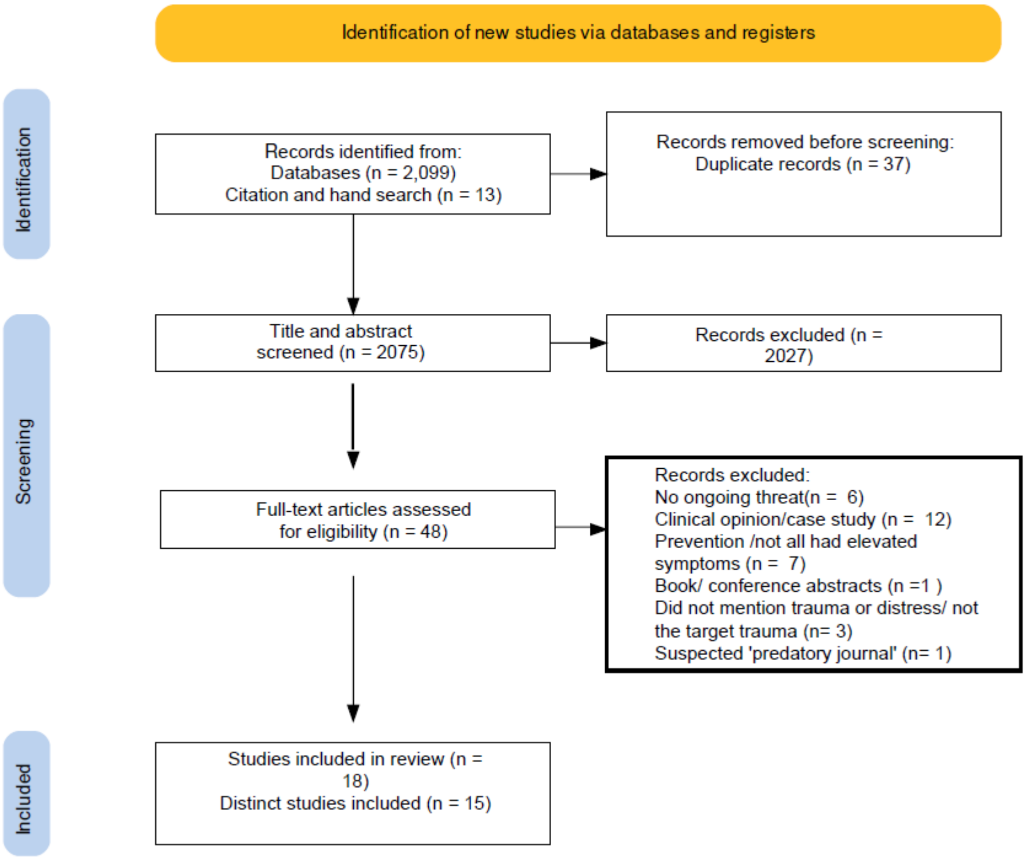
A narrative synthesis (Popay et al., 2006) of the findings from the included studies was used, structured around demographic information, type of intervention and target, the construct definitions of ongoing threat, methodological quality and threats to validity, intervention design and outcome/effectiveness, and feasibility, challenges and treatment adaptations such as task-shifting (i.e., use of non-specialist therapists) (Purgato et al., 2020) and cultural adaptations of the therapy.

Results

Eighteen papers met the inclusion criteria, featuring 15 trials, involving 1867 individuals with elevated level of trauma-related symptoms who received psychological interventions whilst in an ongoing threat context. The updated search yielded 305 more unique entries, but none were relevant to the current review. The PRISMA flowchart is reported below (Figure 1).

Figure 1

PRISMA Flowchart



The inclusion of the studies was screened by SHY, and cross-rated by HL (a coursemate) for 20% of the total studies at each stage of the screening for reliability checks (i.e. title and abstract screening, full-text screening). At title and abstract screen, there were three disputed studies, and they were resolved through discussion with PS before full text screening could proceed. At full-text screening, there were two disputed studies (see Appendix C for the outcomes and justifications). They were resolved after discussion within the research team.

Overview of the Included Studies and Demographics

Studies were conducted in 10 locations (see geographical distributions in Table 2).

Table 2

Lists of locations where included studies took place

Location	Number of included papers
Colombia	1
Democratic Republic of the Congo	2
Hong Kong	1

Indonesia	1
Iran	2
Iraq	2
Occupied Palestinian Territories	4
South Africa	3
Thailand	1
Zimbabwe	1

The included studies were classified by level of evidence: randomised controlled trials (RCTs), quasi-experimental design and controlled studies, noncontrolled design, case studies. Eleven out of 15 studies were RCTs, two studies adopted a non-randomised noncontrolled group design, and two studies were case series.

The types of intervention are summarised in Table 3. Most studies in the current review used variations of cognitive-behavioral therapy (CBT) (n= 10, 66.7%), including trauma-focused CBT, internet CBT, narrative exposure therapy (NET), cognitive processing therapy (CPT) and teaching recovery techniques (TRT). The rest of the studies (n=5) used group Eye Moment Desensitisation and Reprocessing (EMDR), an empowerment intervention, Critical Incident Stress Management (CISM), and tree of life healing circles. The intervention duration ranged from a one-off 30-minute session to 14 weekly 90-minute sessions.

Table 3

Descriptions of the interventions

Type of interventions		Number of studies	Authors (Year)	Intervention details (frequency, length, content, provider)
Cognitive behavioral therapy (CBT)	Trauma-focused CBT	n=2	Dawson et al. (2018)	Five weekly one-hour individual sessions with children, plus one 1-hour caregiver session, delivered by four high-school educated counsellors.

		Bryant et al. (2011)	Eight one-hour individual CBT sessions delivered by Thai psychologists, psychiatrists or nurses.
Internet CBT	n=2	Wagner et al. (2012) Knaevelsrud et al. (2015)	Two weekly 45-min writing assignment over a five-week period under the *Interapy Internet CBT protocol* (Lange et al., 2001). Delivered by Arabic-speaking psychotherapists or psychiatrists.
Narrative exposure therapy (NET)	n=2	Orang et al. (2018)	Ten to 12 weekly 2-hour NET sessions delivered by two psychology Master-level counsellors.
		Hinsberger et al. (2017), Hinsberger et al. (2020), Xulu et al. (2021)	Eight 2-hour sessions every second working day using NET for Forensic Offender Rehabilitation (FORNET) in English with interpreters by four German and two South African NET therapists.
Teaching Recovery Techniques (TRT)	n=2	Barron et al. (2013), Barron et al. (2016)	Five TRT sessions delivered by counsellors in pairs with 10 adolescents per group.
Common Elements Treatment Approach (CETA)	n=1	Bonilla-Escobar et al. (2018)	Twelve to 14 weekly, 1.5-hour sessions delivered by lay psychosocial community workers (who were Afro-Columbian survivors of

				violence themselves and recognised leaders or caregivers in their communities) without previous mental health experience and supervised by psychologists. A modular transdiagnostic psychotherapy model based on CBT for low-resource contexts for PTSD, depression, anxiety and other comorbid problems.
	Cognitive processing therapy (CPT)	n=1	Bass et al., (2013), Kaysen et al. (2020)	Eleven weekly 2-hour group CPT with 6-8 women per group, delivered by female psychosocial assistants with at least four years of post-primary school education.
Eye Moment Desensitisation and Reprocessing (EMDR)		n=1	Zaghrout-Hodali et al. (2008)	4 sessions of 1.5-2-hour group EMDR (butterfly hug protocol by Wilson et al., 2020) and a four to five-month follow-up, delivered by two therapists. The qualifications of the therapists were not stated in the paper. Sessions were conducted at intervals of two days for first three sessions and increased to two

				weeks between session 3-4.
Solution-focused counselling		n=1	Dinmohammadi et al. (2021)	Six weekly 90-min solution-focused counselling sessions delivered by the first author who held a master's degree in midwifery counselling.
Psychological debriefing	Critical Incident Stress Management (CISM)	n=1	Thabet et al., (2005)	Seven weekly group sessions of CISM (Mitchell & Everly, 2000) delivered by a child psychiatrist with two facilitators (social worker and psychologist).
Tree of life community circle		n=1	Mpande et al., (2013)	Three-day session with a progression of eight guided conversations held in 'circles' run by counsellors.
Empowerment program		n=1	Tiwari et al., (2005)	Single 30-min session of Empowerment protocol by Parker et al. to enhance the women's independence and control, including safety, choice-making and problem-solving, delivered by a midwife who had a postgraduate degree in counselling.

How Ongoing Threat was Constructed

Our inclusion criteria included children and adult experiencing ongoing threat that was linked to the ‘index’ traumatic event. The types of trauma we examined included organised violence and intimate partner violence. Appendix E summarises how ongoing threat was constructed. In column 3, we included how trauma exposure, ongoing exposure and reexposure were defined and measured. Out of the 15 studies, ten studies took place in the context of ongoing political and armed violence, two studies in the context of ongoing community violence, one of which with Afro-Colombians victims of conflict and torture, and one with traumatised perpetrators, three studies featured ongoing IPV. Most studies adopted a descriptive approach when describing the ongoing threat, which included threats such as terrorist attacks, shootings, fire, physical and psychological abuse. For example, one study mentioned that the participants in the study were exposed to military invasion and damage to their homes during the course of therapy (Zaghrout-Hodali et al., 2008). One study (Barron et al., 2016) asked participants to report exposure to potential traumatic event during the study. Other studies on organised violence reported types of trauma using self-report questionnaires. Wagner et al. (2012) and Dawson et al. (2018) used self-report types of traumatic experiences, two studies used the Harvard Trauma questionnaire to measure refugee trauma history (Bass et al., 2013, Kaysen et al., 2020), and two studies used the Exposure to War Stressors Questionnaire (EWSQ) (Barron et al., 2013, 2016). Studies on ongoing IPV used self-report questionnaires, such as the Life Events Checklist (Orang et al., 2018), and the Conflict Tactics Scale (CTS and CTS-2) (Tiwari et al.,2005; Dinmohammadi et al.,2021).

The twelve studies targeting political and community violence were categorised into the ISAC pyramid for mental health and psychosocial support in emergency situations in (IASC, 2007). Only one study examined level of ongoing threat as an independent variable (Kaysen et al., 2020), where they compared the effectiveness of CPT under high and low level of security threat across different locality districts. Less than half of the studies (46.7%) examined the specialised services provided by psychiatric and psychological professionals on a 1:1 basis. The other studies evaluated group programs or interventions provided by a range of mental health specialists and non-specialists such as lay counsellors (53.3%).

Methodological Quality and Threats to Validity

According to Mixed Method Appraisal Tool (MMAT; Hong et al., 2018), calculation of an overall score from the ratings of each criterion is discouraged. Instead, it is suggested that a more detailed presentation of the ratings of each criterion are provided to inform the quality of the included studies. Appendix D details the quality appraisal assessment of each study using MMAT. Threats to the validity of the evidence are included below.

Most measures were validated in developing countries and in different contexts, but some were not validated in that particular region (e.g., Dawson et al., 2018, Barron et al., 2013). Some subscales of measures (e.g., Strength and Difficulties Questionnaire, an emotional and behavioral screening tool) showed low reliability and had to be discarded in one study (Barron et al., 2013).

Two studies explicitly identified a lack of power due to early termination of the study as a result of an unstable political situation (Bryant et al., 2011; Dawson et al., 2018).

Amongst the six studies comparing a trauma-focused intervention to another therapy, two studies used the same set of therapists for both intervention arms (Dawson et al. 2018, Mpande et al., 2013) which may have led to therapist drift, affecting the fidelity of the interventions. These studies, along with nine other studies, did not describe therapist fidelity to the interventions. In Dawson et al. (2018), it is of note that the trauma-focused CBT intervention claimed by the authors blended different therapeutic modalities including prolonged exposure and elements of narrative exposure therapy as part of the adaptation of treatment.

Cluster randomisation and counsellor-based randomisation (Bass et al., 2013; Barron et al., 2013, 2016) affected the characteristics and sizes of the groups. Eight out of thirteen studies with comparison groups (58.3%) reported unequal group sizes or baseline characteristics.

Effectiveness: Intervention Design and Outcomes

Appendix F shows the study characteristics and outcomes. Cohen's *d* effect size was used to indicate strength of intervention benefits or harms across interventions.

Of the 13 studies with controlled group(s) design, four studies had an active therapeutic control group (i.e., another form of therapy) only without waitlist control, seven studies had a passive waitlist or non-psychological support control group, one study had an active therapeutic control plus a passive control group, and one study had an active psychoeducation group and a passive control group. The calculation of dropout/ treatment completion was not uniform (across different timepoints, questionnaire completion versus treatment completion). When examining treatment completion rate, it ranged from 37.5% to 100% (n= 14, median 91.2%), with the internet intervention studies having the lowest completion rates.

All participants in the included study experienced at least one traumatic event and had elevated levels of trauma-related symptoms. However, not all participants reached clinical diagnostic threshold for PTSD.

Ongoing Community and Political Threat

Children. Four studies examined traumatised 7- to 15-year-old children. Three took place in the Occupied Palestine Territories (Barron et al., 2013, 2016; Thabet et al., 2005), and the other took place in Aceh, Indonesia (Dawson et al., 2018). In an adapted CBT intervention called Teaching Recovery Techniques (TRT), when compared to waitlist controls, two classroom RCTs found significant effects of the TRT intervention on PTSD outcome (Barron et al., 2013; Barron et al., 2016). In terms of secondary outcomes, one found TRT significantly reduced depression and traumatic grief (Barron et al., 2013), whereas the other did not find significant effect on depression or dissociative experience (Barron et al., 2016). Nevertheless, in a non-RCT where children were allocated to Critical Incident Stress Management (CISM), psychoeducation and control groups, researchers found nonsignificant effect of CISM when compared to the other two groups on post-traumatic stress and depression outcomes (Thabet et al., 2005). When compared to another active treatment, in the RCT by Dawson et al. (2018) who compared the effectiveness of trauma-focused CBT to problem-solving therapy, although large effect size was found within the treatment intervention on PTSD, the between-group effect sizes on PTSD, depression and anger were small and statistically nonsignificant for both child self-report and caregiver-report outcomes.

However, these results need to be interpreted with caution due to the methodological problems of these studies. Group sizes were unequal in Barron et al. (2013) and Thabet et al. (2005). Baseline characteristics differed across groups in Barron et al. (2013, 2016). There was a significantly higher level of post-traumatic stress (PTS) and mental health difficulties in the intervention group in Barron et al. (2013), and a significantly higher exposure to war stressors in the waitlist group for females in Barron et al. (2016). In terms of measures used, Thabet et al. (2005) adopted a measure of PTSD based on DSM-IIIR rather than DSM-IV, the diagnostic manual used at the time of the study. Dawson et al. (2018) indicated that the measures used were not validated in the local population. Moreover, the RCT by Dawson et al. (2018) was not 80% powered due to early termination, and there might be allegiance bias as the study used the same therapists for both active treatment conditions.

Adults.

Cognitive Behavioral Therapy (CBT). Four studies on adult trauma under ongoing political violence used various forms of CBT as the treatment modality. Bryant et al. (2011) compared CBT with supportive counselling amongst Thai individuals with PTSD after exposure to terrorism. Large effect size was found between groups for PTS though effect size was moderate at 3-month follow-up. However, for depression and grief, although there were moderate to large effect sizes post-intervention, the effect sizes were small at follow-up. Wagner et al. (2012) was a pilot case series of the RCT by Knavealud et al. (2015) on internet CBT amongst traumatised individuals in Iraq when compared with waitlist control. At post-intervention, large, controlled effect sizes were found for PTS, depression, anxiety and quality of life, and moderate controlled effect size was found for somatisation (Knaevelsrud et al., 2015). However, the results from Bonilla-Escobar et al. (2018) showed a more complicated picture. They used an adapted CBT called CETA among Afro-Colombian Victims of Conflict and Torture in two cities with ongoing community violence and armed conflict. CETA is a modular intervention where psychosocial workers can choose the order and dosing (number of sessions per element) of the components. The elements include encouraging participation, psychoeducation, cognitive coping, gradual exposure of trauma memories, cognitive processing, safety planning, relaxation, behavioral activation and gradual in-vivo exposure. Divergent results between two municipalities were found – moderate to large, controlled effect sizes for

PTS, depression, anxiety and functional impairment in Buenaventura but nonsignificant and small effect sizes in Quibdo.

Several quality concerns were found. One study was only 50% powered due to early termination in Bryant et al. (2011), and the drop-out rate was high (around 41%) in Knaevelsrud et al. (2015). In Bonilla-Escobar et al. (2018), the traumatic experiences were significantly higher in the CETA than control group in Buenaventura, whereas in Quibdo, the total mental health symptoms were higher in the control group. Further, although the authors claimed that the culturally adapted outcome measure used has undergone validation, there was no justification for how the clinical cut-off score was determined.

Narrative Exposure Therapy (NET). The three studies included that used NET for community trauma were all based on one trial (Hinsburger et al., 2017, 2020; Xulu et al., 2021). They used the Forensic Offender Rehabilitation Narrative Exposure Therapy (FORNET) which focused on reducing trauma symptoms as well as aggressive behaviors amongst traumatised ex-offenders in South Africa. In FORNET, narrative exposure includes not only the traumatic events but also perpetrated acts of violence. The trial results revealed a significant reduction of PTSD outcomes in FORNET group when compared to a non-trauma-focused CBT (meaning no trauma exposure) as well as a waitlist control. Controlled effect sizes on post-traumatic stress when compared to waitlist control was large at seven to 11-month follow-up. The large within-group effect size for FORNET was sustained at 15-20 months post-intervention. However, there was no significant difference for the number of perpetrated events or appetitive aggression post-intervention across all groups. Taking methodological quality into consideration, it seems that the study was not well-powered, with small sample size in the FORNET and CBT conditions and unequal group sizes. Those in the CBT group also were older than people in the other groups. Another confounding variable was that people in the treatment conditions were involved in another reintegration program prior to taking part in the trial when compared to those on the waiting list, which could potentially affect the intervention effect.

Cognitive Processing Therapy (CPT). One cluster-RCT (two studies) examined the use of group cognitive processing therapy among female sexual violence survivor in the context of ongoing political violence in the Democratic Republic of Congo (Bass et al., 2013; Kaysen et al., 2020). They found a significant reduction of PTSD symptoms, depression and anxiety, as well as functional impairment. Secondary, separate efficacy analyses compared geographical regions, which were classified as high insecurity and low insecurity by the psychosocial supervisors (Kaysen et al., 2020). There was a higher attendance rate in the higher insecurity regions. A significant interaction between site security and session was found in the model where the authors claimed that by visual inspection of the slope of the session-by-session change in symptom score, people in regions of high security risks had a more rapid improvement than people in regions with lower risks. This conclusion is not well-supported by the data. The measure of setting-level insecurity (high/low insecurity) was a subjective judgment of the respective regional supervisors, and the outcome measure used was not a validated scale in itself.

Non-CBT Interventions. The tree of life healing circle (TOL) was compared with a control intervention called psychoeducation and coping skills workshop (PACS) in a quasi-experimental group design (Mpande et al., 2013) that targeted people experiencing ongoing political and community violence in Zimbabwe. It was a non-randomised, non-equivalent group study, where participants were allocated based on regions to avoid ‘contamination’ of the findings as community members in the same region might disclose the intervention details to others. They found reduction of distress with large effect sizes in a locally devised and validated measure of distress, but small to moderate increases in quality-of-life measure. However, the effects between groups seemed to be comparable, and slightly larger effect sizes were seen in the PACS group. There were several confounds which potentially biased the findings, one being a higher baseline family problems and stressful life events in the TOL group, and the possibility of allegiance effect/ therapist drift as they had the same set of facilitators across the two interventions.

The evidence on EMDR was inconclusive as only one case series (Zaghrout-hodali et al 2008) used this intervention in group setting and there was no statistical analysis or validated measure to indicate treatment outcome apart from using an analog scale (subjective unit of distress) and qualitative feedback.

Intimate Partner Violence

Orang et al. (2018) used an RCT to examine women who were living with abusive partners in Iran. The results revealed small effect sizes of NET on PTS and depression measures when compared to treatment as usual which was sustained at 6-month follow-up. Non-significant results were found for secondary measures such as daily functioning. Methodological issues limiting the certainty of the findings included a relatively small sample size (n=45) and a higher perceived stress scale in the NET group at baseline as a potential confound.

Two other RCTs examined solution-focused counselling (Dinmohammadi et al., 2021) and a one-off 30-minute empowerment session (Tiwari et al., 2005) for pregnant females experiencing ongoing IPV. However, the two studies did not focus on traumatic stress but instead focused on general quality of life and mental health as secondary outcome (primary outcome being the number of abusive events). Effect sizes were not reported in the two studies, although Dinmohammadi et al. (2021) found significant improvement in general quality of life and mental health when compared to a control group, whereas in Tiwari et al. (2005), there was no change on the mental health subscale. Tiwari et al. (2005) commented that at post-intervention, more women in the control group experienced depression. Yet, there was insufficient reporting of baseline depression across the two groups and hence no conclusion on the effect of mood could be drawn. The primary outcomes of both studies were number of abusive events rather than wellbeing-related outcomes.

Feasibility: Treatment Models, Adaptations and Challenges

Studies described practical challenges due to the ongoing threat (Table 4). Two studies (Bryant et al., 2011; Dawson et al., 2018) had to terminate recruitment prematurely due to the ongoing attacks, and local authority being suspicious of the study. One study described challenges due to counsellors dropping out because of personal trauma (Barron et al., 2016). Another study's research team could not travel to the country due to security and safety concern (Wagner et al., 2012).

In terms of modifications, for political and community violence, adapting for ongoing threat and cultural context were described in eight studies, but only seven of which described what the adaptations were. Culturally-specific interventions were included such as Thai meditation techniques (Bryant et al., 2011) and the use of metaphors from the Koran (Wagner et al., 2012; Knaevelsrud et al., 2015). To adapt for the ongoing threat context, one study included narrative exposure of the significant events in the community or province, in addition to narrating the personal life events (Dawson et al., 2018), and another study modified the cognitive restructuring element to factor in realistic threats (Bryant et al., 2011). To build trust, as some participants worried about political infiltration (Wagner et al., 2012), names and places were omitted in the written narratives, while another trial abandoned the narrative component (Hinsberger et al., 2017, 2020). For ongoing IPV, study participants (Tiwari et al., 2005; Orang et al., 2018) hid their participation from their partners. Orang and colleagues (2018) also included a safety planning session which focused on coping skills and human rights education. They checked in at the beginning of each narrative exposure session in relation to IPV occurrence to gauge readiness for the exposure.

Table 4

Feasibility, Challenges and Treatment Adaptations

Author/s, (year)	Adaptations related to culture, context and ongoing threat	Challenges due to the ongoing threat
Bryant et al. (2011)	Thai meditation techniques encouraged rather than simply focusing on Western methods of relaxation. Modifying cognitive restructuring to recognize the realistic threats of possible terrorist attacks, to accept a level of risk to allow everyday activities such as buying food in the local market.	Recruitment to the study was terminated prematurely due to increased terrorist attacks and health workers being targeted.
Hinsberger et al. (2017, 2020)	Added content on engaging in violence, exposure sessions were extended to include perpetrator events. Abandoned the narration element to facilitate participants' trusts and openness.	/
Bonilla-Escobar et al. (2018)	In Buenaventura, most surveys were conducted in a local church for security reasons.	/
Wagner et al. (2012), Knaevelsrud et al. (2015)	Treatment duration was set up to be longer than the original protocol. Most participants did not finish their treatment, took almost twice as long (on average 12 weeks) compared to participants in a Western context to complete treatment.	Research coordinators could not travel to Iraq due to security concerns.

	More directive therapeutic stance as the healthcare professionals were seen as authoritative who gave expert advice in their culture. Refusal to give explicit advice might be seen as incompetence or indecisiveness. Participants were explicitly asked not to mention names of places or people to increase trust as some were worried about the risk of political infiltration and confidentiality of the data (worry that the website may be supported by intelligence agencies). Use of quotes and metaphors from the Koran by the therapists.	
Dawson et al. (2018)	Elements of prolonged exposure therapy were used including the construction of a chronological narrative of the children's life. The narrative component also reviewed historical elements such as family's history, wider community and province to help understand the context of the traumatic events they experienced in their life.	The study was terminated prematurely due to local authorities shutting the study down, as the political unrest caused suspicion of Western activities in the region. The researchers were forced to leave the region.
Barron et al. (2013)	/	Counsellor drop-out in the study due to self-reported trauma, highlighting the challenge of conducting research in war zones
Barron et al. (2016)	/	/
Bass et al. (2013), Kaysen et al. (2020)	A psychoeducation session addressing how beliefs about sexual assault impact on women's social status. Simplifying the jargons, use of verbal and pictorial rather than handwritten assignments due to high rate of illiteracy. Removal of two behavioral assignments to focus on the cognitive	/

	elements of the treatment. Adapting the language to Swahili and the therapy was named 'mind and heart therapy' rather than CPT.	
Zaghrout-Hodali et al. (2008)	Did not include elicitation of positive and negative cognitions, nor a validity of cognition rating scale or body scan unlike the original protocol, however, did not explain reasoning behind this.	/
Thabet et al. (2005)	The authors stated the intervention was adjusted to the ongoing political conflict context but did not further elaborate.	/
Mpande et al. (2013)	/	/
Orang et al. (2018)	Participation kept secret from partners. Allocated one to two sessions to work on issues related to safety, such as encouragement to seek help from police, lawyers, coping skills, safety planning, human rights education. A short discussion of IPV occurrence in the past week at the beginning of each session to gauge readiness for the narrative exposure.	/
Dinmohammadi et al. (2021)	/	/
Tiwari et al. (2005)	Participation was kept secret from partners. The research team suggested the women might establish a code with trusted friends and neighbors.	

Discussion

This systematic review sought to examine the effectiveness and feasibility of psychological interventions where the threat of ongoing traumatic events continued. The quality of reviewed research was poor mostly due to practical circumstances it was conducted in. Nevertheless, there was evidence moderate to large effect sizes relative to waitlist controls for PTSD related outcomes, with weaker evidence against active controls. For secondary outcomes, although large effect sizes were found in some studies examining depression and anxiety, these effect sizes became small to moderate at follow-ups. There were no significant effects on outcomes in studies that examined aggression and dissociation. There was also evidence for the feasibility of treatment and its application by non-specialists.

The findings of the present review are consistent with those of Ennis et al. (2021) but go beyond the effectiveness of trauma-focused CBT for populations under ongoing political or community violence. This review also adds evidence for the effectiveness non-CBT interventions, secondary outcomes and intervention feasibility. It used a broader definition of distress and stricter criteria of ongoing threat. For non-CBT studies, the three studies on Tree of Life, CISM, and group EMDR demonstrated less robust evidence and the data were less supportive of their effectiveness. We did not find any individual EMDR study from our search, , hence we cannot be certain about its effectiveness in settings with ongoing threat. This is because the included group EMDR case series was based on analogue scales and qualitative feedback only.

Consistent with the argument from Keynejad et al. (2020) in their systematic review and meta-analysis on treating survivors of IPV in low-resource settings, many studies failed to differentiate ongoing versus past trauma, where treatment implications might differ. Hence, we only included studies which evidenced that the survivors experienced ongoing trauma such as living with the abusive partners, unlike that of Ennis et al (2021). Based on our criteria, methodological issues have limited the strength of the evidence in psychological treatments for ongoing IPV. One found a small to moderate effect sizes on traumatic stress and depression of NET when compared to treatment as usual sustained at follow-up (Orang et al., 2018). For non-trauma-focused interventions, one study demonstrated effectiveness using a solution-focused counselling approach on improving quality of life of the pregnant abused women (Dinmohammadi et al., 2021), whereas the one-off empowerment program is likely effective in terms of mental health (Tiwari et al., 2005).

Promising evidence was noted for feasibility and scalability in low-resource settings where conflicts were ongoing. Studies applied practical, contextual and cultural adaptations, and upskilled community members in task-shifting, as more than half of the included interventions were conducted by lay counsellors. Most participants were able to attend the sessions and drop-outs were not due to feasibility-related reasons, which challenges common assumptions that psychological interventions are impossible in ongoing threat contexts. That said, some feasibility challenges remain, for example, local government disallowing research team to conduct studies, forcing the studies to be terminated (Bryant et al., 2011, Dawson et al., 2018); fear of political infiltration and thus negatively affected participants' trust and subsequent participation in the study (Wagner et al., 2012, Knaevelsrud et al., 2015, Mpande et al., 2013). While existing systemic reviews tend to focus on specific types of interventions, future reviews should closely consider the political and cultural context. Confidentiality around accessing therapy was particularly important in studies on IPV, and whether safety could be ensured for the women to attend. It appears that the included studies successfully maintained privacy and confidentiality, therefore making the interventions feasible.

Clinical Implications

This review suggests that psychological interventions for trauma-related difficulties do not cause harm, are feasible for populations under ongoing threat and are most likely beneficial. The assumption that we should not offer psychological interventions in these settings is therefore contradicted by the findings of this review. Note also that there was no evidence that suggests psychological interventions for those experiencing trauma were counter-productive.

Regarding cultural adaptation, in general, studies should consider incorporating cultural elements and knowledge in the treatments. Examples from the current review include integrating religious texts (Wagner et al., 2012, Knaevelsrud et al., 2015) and adopting indigenous meditation techniques (Bryant et al., 2011). An added benefit of training community workers as therapists is that they likely have more cultural knowledge about the regions and more culturally specific manifestations of traumatic symptoms such as somatisation, although supervisors would need to pay attention to the community workers' wellbeing and personal trauma as they are likely to be exposed to the same ongoing trauma.

The ongoing nature of the trauma might lead to characteristics and responses different from the diagnostic criteria of PTSD in DSM-5 (APA, 2013) and ICD-11 (World Health Organisation, 2019). These populations might be more preoccupied with the present safety and anticipated danger rather than past index trauma (Nuttman-Shwartz & Shoval-Zuckerman, 2016). From the synthesis, it is still uncertain whether certain trauma-focused interventions or present-focused interventions are superior to others, or whether there would be synergistic effects if components from different treatments s are used. Contrary to authors discussing CTS who did not advocate for exposure-based treatments for individuals and groups under ongoing threat (Diamond et al., 2010; Eagle & Kaminer, 2013), the majority of the included interventions were exposure-based, such as trauma-focused CBT and NET. This echoes Coventry et al.'s (2020) network meta-analysis (NMA) findings that multicomponent interventions (included imaginal exposure and cognitive restructuring) were most effective for reducing trauma symptoms in refugees, veterans, childhood sexual abuse or IPV survivors. Safety planning, including asking about the number of violent and abusive events in the past week to gauge readiness in exposure work, was mentioned in Orang et al. (2018) and seen as helpful, but not in other studies. Across the studies, descriptions about specific treatment adaptations to ongoing threat situations were limited.

Research Implications

While the controversy of advisability, effectiveness and feasibility of psychological intervention for people in ongoing threat settings is still ongoing, it is important to operationalise the construct of ongoing threat so distinct conclusions can be drawn. In the included studies, ongoing threat was largely descriptive with a lack of objective measurement. For example, some studies simply mentioned ‘ongoing threat situation’, whereas the Life Events Checklist was used in other studies as a measure of trauma exposure. During the screening process, some studies did not specify if threat was ongoing or recent but ceased, which were not included in this review (Greene et al., 2021). Future studies should detail the extent of past and ongoing (re)exposure throughout the study period, to facilitate a richer understanding of the unique nature of ongoing threat in relation to people’s psychological responses in these contexts. Goral et al. (2021) devised a measure of ‘ongoing traumatic response’ which could be used in future studies. They found that, unlike PTSD symptoms, CTS symptom severity was not significantly associated with level of exposure to trauma. The symptoms included reduced sense of safety, trust, and mental exhaustion, change in sense of self such as feelings of emptiness, hopelessness and estrangement. Of note is that of the reviewed studies, none of them measured these responses such as safety or changes in sense of self. Future studies could include these constructs, which help explore how these may be similar or different from complex PTSD and subsequently guide treatments.

At present, the discussion of whether psychological treatment for trauma should be offered when significant threat remains is informed only by the inference, which can be drawn from the present review and others, that treatment may be effective under such conditions. Future research should employ more diverse and rigorous methodologies in addition to using active and waitlist control to ascertain the effectiveness of both CBT and non-CBT interventions. For example, future studies could conceptualise the level and nature of ongoing threat as a mediator or moderator using psychometrically validated measures. It is essential to evaluate the same treatment in groups where threat is continued or not (such as ongoing IPV versus historical IPV). This might be especially important as the differential findings across the two municipalities amongst Afro-Colombians survivors of torture and conflict might mean that intervention effective in one setting may not be generalised to another (Bonilla-Escobar et al., 2018).

Most outcome reporting was limited to distress relating to trauma, depression and anxiety, and only Hinsberger et al. (2017, 2020) included outcomes on somatisation, a culturally-sensitive construct found in these populations (Hinton & Lewis-Fernández, 2011), which future studies could include. As most studies were conducted in low-resource settings, future studies could include cost effectiveness as one of the indicators to facilitate scaling up of the evidence (Murray et al., 2014). Given the inconsistent and variable quality of the studies, future studies could use standardised checklists such as TIDieR checklist (Hoffmann et al., 2014) and adhere to WHO Mental Health Gap Action Programme (mhGAP) guidelines (Keynejad et al., 2021) when designing and evaluating interventions.

Unlike Ennis et al., (2021), whilst we did not want to disregard the struggles of populations living under stressful situations, we did not include individuals living in refugee camps in another country or people who lived in refuge so we could specifically understand the stress arisen from the index trauma and daily stressors related to the traumatic events but not the daily hassles. Miller and Rasmussan (2010) proposed a model that traumatised people living under ongoing threat may face stressors from (i) the index trauma, (ii) daily stressors related to the traumatic event, and (iii) daily hassles not related to the traumatic event. We did not adopt this model and definition as we were interested in the interventions focusing on the 'index trauma' and living in situations related to the traumatic events. That said, to further advance the understanding of effective interventions in these contexts, future reviews could specify different types of threats and future studies could tease apart how the different sources of threat affect the person's functioning and symptoms, and how treatments can be adapted accordingly.

Limitations and Diversity Discussion

We are mindful of other countries with ongoing conflict that were not represented here. For example, the concept of CTS is used mostly in South Africa and Israel, but it is uncertain how this can be generalised and conceptualised in other regions. The definition of ongoing conflict could be arbitrary. Some regions might have officially had ceasefire, yet conflicts between armed groups or civilians might still be occurring. Despite promising results of feasibility, our understanding of feasibility based on the published studies might be biased as other regions with active conflict might not be researched, the situation might be too unstable for research, or negative results not published.

There might also be differences in psychological needs at acute phase of ongoing threat and in situations of prolonged ongoing threat. This review only included the top levels in the ISAC guideline (i.e. specialist interventions and targeted interventions). However, in areas of active conflict, other levels of psychosocial interventions and community approaches are useful for meeting basic needs and achieving primary/ secondary prevention which are not included in the review. Due to the limited number of studies found, we did not analyse the effectiveness between those delivered by specialists and non-specialists.

Although the quantity and quality of studies does not yet let us draw firm conclusions, this does not negate the importance of the research question and this review, which we hope other researchers will build on. Asking whether interventions during ongoing threat are effective and feasible mean we are paying attention to ongoing humanitarian crises and not withholding help, based on untested assumptions, to those who may need it the most. Building culturally-sensitive, evidence-based psychological interventions during ongoing threat can one day ease suffering, prevent re-traumatisation and start earlier healing in marginalised populations.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

American Psychological Association. (2017). *Clinical practice guideline for the treatment of Posttraumatic Stress Disorder (PTSD) in adults*. https://www.apa. org/about/offices/directorates/guidelines/ptsd.pdf.

Barron, I., Abdallah, G., & Heltne, U. (2016). Randomised Control Trial of Teaching Recovery Techniques in Rural Occupied Palestine: Effect on Adolescent Dissociation. *Journal of Aggression, Maltreatment & Trauma*, *25*(9), 955–973. https://doi.org/10.1080/10926771.2016.1231149

Barron, I. G., Abdallah, G., & Smith, P. (2013). Randomised Control Trial of a CBT Trauma Recovery Program in Palestinian Schools. *Journal of Loss and Trauma, 18*(4), 306–321. https://doi.org/10.1080/15325024.2012.688712

Bass, J. K., Annan, J., McIvor Murray, S., Kaysen, D., Griffiths, S., Cetinoglu, T., Wachter, K., Murray, L. K., & Bolton, P. A. (2013). Controlled Trial of Psychotherapy for Congolese Survivors of Sexual Violence. *New England Journal of Medicine, 368*(23), 2182–2191. https://doi.org/10.1056/NEJMoa1211853

Bonilla-Escobar, F. J., Fandiño-Losada, A., Martínez-Buitrago, D. M., Santaella-Tenorio, J., Tobón-García, D., Muñoz-Morales, E. J., Escobar-Roldán, I. D., Babcock, L., Duarte-Davidson, E., Bass, J. K., Murray, L. K., Dorsey, S., Gutierrez-Martinez, M. I., & Bolton, P. (2018). A randomised controlled trial of a transdiagnostic cognitive-behavioral intervention for Afro-descendants' survivors of systemic violence in Colombia. *PLOS ONE*, *13*(12), e0208483. https://doi.org/10.1371/journal.pone.0208483

Bowen, D. J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., Bakken, S., Kaplan, C. P., Squiers, L., Fabrizio, C., & Fernandez, M. (2009). How we design feasibility studies. American Journal of Preventive Medicine, 36(5), 452–457. https://doi.org/10.1016/j.amepre.2009.02.002

Bryant, R. A., Ekasawin, S., Chakrabhand, S., Suwanmitri, S., Duangchun, O., & Chantaluckwong, T. (2011). A randomised controlled effectiveness trial of cognitive behavior therapy for post-traumatic stress disorder in terrorist-affected people in Thailand. *World Psychiatry : Official Journal of the World Psychiatric Association (WPA)*, *10*(3), 205–209. PubMed. https://doi.org/10.1002/j.2051-5545.2011.tb00058.x

Coventry, P. A., Meader, N., Melton, H., Temple, M., Dale, H., Wright, K., Cloitre, M., Karatzias, T., Bisson, J., Roberts, N. P., Brown, J. V. E., Barbui, C., Churchill, R., Lovell, K., McMillan, D., & Gilbody, S. (2020). Psychological and pharmacological interventions for posttraumatic stress disorder and comorbid mental health problems following complex traumatic events: Systematic review and component network meta-analysis. *PLOS Medicine*, *17*(8), e1003262. https://doi.org/10.1371/journal.pmed.1003262

Crespo, M., & Arinero, M. (2010). Assessment of the efficacy of a psychological treatment for women victims of violence by their intimate male partner. *The Spanish Journal of Psychology*, *13*(2), 849–863. https://doi.org/10.1017/s113874160000250x

Dawson, K., Joscelyne, A., Meijer, C., Steel, Z., Silove, D., & Bryant, R. A. (2018). A controlled trial of trauma-focused therapy versus problem-solving in Islamic children affected by civil conflict and disaster in Aceh, Indonesia. *Australian & New Zealand Journal of Psychiatry*, *52*(3), 253–261. https://doi.org/10.1177/0004867417714333

Diamond, G. M., Lipsitz, J. D., Fajerman, Z., & Rozenblat, O. (2010). Ongoing traumatic stress response (OTSR) in Sderot, Israel. *Professional Psychology: Research and Practice*, *41*(1), 19–25. https://doi.org/10.1037/a0017098

Dinmohammadi, S., Dadashi, M., Ahmadnia, E., Janani, L., & Kharaghani, R. (2021). The effect of solution-focused counseling on violence rate and quality of life of pregnant women at risk of domestic violence: A randomised controlled trial. *BMC Pregnancy and Childbirth*, *21*(1), 221. https://doi.org/10.1186/s12884-021-03674-z

Eagle, G., & Kaminer, D. (2013). Continuous traumatic stress: Expanding the lexicon of traumatic stress. *Peace and Conflict: Journal of Peace Psychology*, *19*(2), 85–99. https://doi.org/10.1037/a0032485

Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, *38*(4), 319–345. https://doi.org/10.1016/S0005-7967(99)00123-0

Ennis, N., Sijercic, I., & Monson, C. M. (2021). Trauma-focused cognitive-behavioral therapies for posttraumatic stress disorder under ongoing threat: A systematic review. *Clinical Psychology Review*, *88*, 102049. https://doi.org/10.1016/j.cpr.2021.102049

Giacaman, R., Shannon, H. S., Saab, H., Arya, N., & Boyce, W. (2007). Individual and collective exposure to political violence: Palestinian adolescents coping with conflict. *European Journal of Public Health*, *17*(4), 361–368. https://doi.org/10.1093/eurpub/ckl260

Gillespie, K., Duffy, M., Hackmann, A., & Clark, D. M. (2002). Community based cognitive therapy in the treatment of post-traumatic stress disorder following the Omagh bomb. *Behaviour Research and Therapy*, *40*(4), 345–357. https://doi.org/10.1016/S0005-7967(02)00004-9

Goral, A., Feder-Bubis, P., Lahad, M., Galea, S., O'Rourke, N., & Aharonson-Daniel, L. (2021). Development and validation of the Continuous Traumatic Stress Response scale (CTSR) among adults exposed to ongoing security threats. *PLOS ONE*, *16*(5), e0251724. https://doi.org/10.1371/journal.pone.0251724

Greenberg, N., Langston, V., Everitt, B., Iversen, A., Fear, N. T., Jones, N., & Wessely, S. (2010). A cluster randomised controlled trial to determine the efficacy of Trauma Risk Management (TRiM) in a military population. *Journal of Traumatic Stress*, *23*(4), 430–436. https://doi.org/10.1002/jts.20538

Greene, M. C., Likindikoki, S., Rees, S., Bonz, A., Kaysen, D., Misinzo, L., Njau, T., Kiluwa, S., Turner, R., Ventevogel, P., Mbwambo, J. K. K., & Tol, W. A. (2021). Evaluation of an integrated intervention to reduce psychological distress and intimate partner violence in refugees: Results from the Nguvu cluster randomised feasibility trial. *PLOS ONE*, *16*(6), e0252982. https://doi.org/10.1371/journal.pone.0252982

Higson-Smith, C. (2013). Counseling torture survivors in contexts of ongoing threat: Narratives from sub-Saharan Africa. *Peace and Conflict: Journal of Peace Psychology*, *19*(2), 164.

Hinsberger, M., Holtzhausen, L., Sommer, J., Kaminer, D., Elbert, T., Seedat, S., Augsburger, M., Schauer, M., & Weierstall, R. (2020). Long-term effects of psychotherapy in a context of continuous community and gang violence: Changes in aggressive attitude in high-risk South African adolescents. *Behavioural and Cognitive Psychotherapy*, *48*(1), 1–13. Cambridge Core. https://doi.org/10.1017/S1352465819000365

Hinsberger, M., Holtzhausen, L., Sommer, J., Kaminer, D., Elbert, T., Seedat, S., Wilker, S., Crombach, A., & Weierstall, R. (2017). Feasibility and effectiveness of narrative exposure therapy and cognitive behavioral therapy in a context of ongoing violence in South Africa. *Psychological Trauma: Theory, Research, Practice, and Policy, 9*(3), 282–291. https://doi.org/10.1037/tra0000197

Hinton, D. E., & Lewis-Fernández, R. (2011). The cross-cultural validity of posttraumatic stress disorder: Implications for DSM-5. *Depression and Anxiety*, *28*(9), 783–801. https://doi.org/10.1002/da.20753

Hoffmann, T. C., Glasziou, P. P., Boutron, I., Milne, R., Perera, R., Moher, D., Altman, D. G., Barbour, V., Macdonald, H., Johnston, M., Lamb, S. E., Dixon-Woods, M., McCulloch, P., Wyatt, J. C., Chan, A.-W., & Michie, S. (2014). Better reporting of interventions: Template for intervention description and replication (TIDieR) checklist and guide. *BMJ (Clinical Research Ed.)*, *348*, g1687. https://doi.org/10.1136/bmj.g1687

Hong, Q. N., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P., Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M.-C., Vedel, I., & Pluye, P. (2018). The Mixed Methods Appraisal Tool (MMAT) version 2018 for information professionals and researchers. *Education for Information*, *34*(4), 285–291. https://doi.org/10.3233/EFI-180221

Inter-Agency Standing Committee (IASC) (2007). *IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings.* Geneva: IASC.

https://www.who.int/mental_health/emergencies/guidelines_iasc_mental_health_psychosocial_june_2007.pdf

Johnson, D. M., Zlotnick, C., & Perez, S. (2011). Cognitive behavioral treatment of PTSD in residents of battered women's shelters: Results of a randomised clinical trial. *Journal of Consulting and Clinical Psychology*, *79*(4), 542–551. PubMed. https://doi.org/10.1037/a0023822

Jordans, M. J. D., Pigott, H., & Tol, W. A. (2016). Interventions for Children Affected by Armed Conflict: A Systematic Review of Mental Health and Psychosocial Support in Low- and Middle-Income Countries. *Current Psychiatry Reports*, *18*(1), 9. https://doi.org/10.1007/s11920-015-0648-z

Kaysen, D., Stappenbeck, C. A., Carroll, H., Fukunaga, R., Robinette, K., Dworkin, E. R., Murray, S. M., Tol, W. A., Annan, J., Bolton, P., & Bass, J. (2020). Impact of setting insecurity on Cognitive Processing Therapy implementation and outcomes in eastern Democratic Republic of the Congo. *European Journal of Psychotraumatology*, *11*(1), 1735162. https://doi.org/10.1080/20008198.2020.1735162

Keynejad, R. C., Hanlon, C., & Howard, L. M. (2020). Psychological interventions for common mental disorders in women experiencing intimate partner violence in low-income and middle-income countries: A systematic review and meta-analysis. *The Lancet Psychiatry*, *7*(2), 173–190. https://doi.org/10.1016/S2215-0366(19)30510-3

Keynejad, R., Spagnolo, J., & Thornicroft, G. (2021). WHO mental health gap action programme (mhGAP) intervention guide: Updated systematic review on evidence and impact. *Evidence Based Mental Health*, *24*(3), 124. https://doi.org/10.1136/ebmental-2021-300254

Knaevelsrud, C., Brand, J., Lange, A., Ruwaard, J., & Wagner, B. (2015). Web-Based Psychotherapy for Posttraumatic Stress Disorder in War-Traumatised Arab Patients: Randomised Controlled Trial. *J Med Internet Res*, *17*(3), e71. https://doi.org/10.2196/jmir.3582

Miller, K. E., & Rasmussen, A. (2010). War exposure, daily stressors, and mental health in conflict and post-conflict settings: Bridging the divide between trauma-focused and psychosocial frameworks. *Conflict, Violence, and Health*, *70*(1), 7–16. https://doi.org/10.1016/j.socscimed.2009.09.029

Mitchell, J. T., & Everly Jr., G. S. (2000). Critical incident stress management and critical incident stress debriefings: Evolutions, effects and outcomes. *Psychological Debriefing: Theory, Practice and Evidence.*, 71–90. https://doi.org/10.1017/CBO9780511570148.006

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & The PRISMA Group. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLOS Medicine*, *6*(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097

Mpande, E., Higson-Smith, C., Chimatira, R. J., Kadaira, A., Mashonganyika, J., Ncube, Q. M., Ngwenya, S., Vinson, G., Wild, R., & Ziwoni, N. (2013). Community intervention during ongoing political violence: What is possible? What works? *Peace and Conflict: Journal of Peace Psychology*, *19*(2), 196–208. https://doi.org/10.1037/a0032529

Munn, Z., Barker, T., Stern, C., Pollock, D., Ross-White, A., Klugar, M., Wiechula, R., Aromataris, E., & Shamseer, L. (2021). Should I include studies from “predatory” journals in a systematic review? Interim guidance for systematic reviewers. *JBI*

Evidence Synthesis, *19*(8). https://journals.lww.com/jbisrir/Fulltext/2021/08000/Should_I_include_studies_from__predatory__journals.5.aspx

Murray, L. K., Cohen, J. A., & Mannarino, A. P. (2013). Trauma-focused cognitive behavioral therapy for youth who experience continuous traumatic exposure. *Peace and Conflict: Journal of Peace Psychology*, *19*(2), 180.

Murray, L. K., Tol, W., Jordans, M., Zangana, G. S., Amin, A. M., Bolton, P., Bass, J., Bonilla-Escobar, F. J., & Thornicroft, G. (2014). Dissemination and implementation of evidence based, mental health interventions in post conflict, low resource settings. *Intervention (Amstelveen, Netherlands)*, *12*(Suppl 1), 94–112. PubMed. https://doi.org/10.1097/WTF.0000000000000070

Nuttman-Shwartz, O., & Shoval-Zuckerman, Y. (2016). Continuous Traumatic Situations in the Face of Ongoing Political Violence: The Relationship Between CTS and PTSD. *Trauma, Violence, & Abuse*, *17*(5), 562–570. https://doi.org/10.1177/1524838015585316

Orang, T., Ayoughi, S., Moran, J. K., Ghaffari, H., Mostafavi, S., Rasoulian, M., & Elbert, T. (2018). The efficacy of narrative exposure therapy in a sample of Iranian women exposed to ongoing intimate partner violence—A randomised controlled trial. *Clinical Psychology & Psychotherapy*, *25*(6), 827–841. https://doi.org/10.1002/cpp.2318

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., Britten, N., Roen, K., & Duffy, S. (2006). *Guidance on the conduct of narrative synthesis in systematic reviews*.

Purgato, M., Uphoff, E., Singh, R., Thapa Pachya, A., Abdulmalik, J., & van Ginneken, N. (2020). Promotion, prevention and treatment interventions for mental health in low- and middle-income countries through a task-shifting approach. *Epidemiology and Psychiatric Sciences*, *29*, e150. https://doi.org/10.1017/S204579602000061X

Rosenberg, A., Heimberg, R. G., Solomon, Z., & Levin, L. (2008). Investigation of exposure–symptom relationships in a context of recurrent violence. *Journal of Anxiety Disorders*, *22*(3), 416–428. https://doi.org/10.1016/j.janxdis.2007.05.003

Straker, G. (1987). The continuous traumatic stress syndrome: The single therapeutic interview. *Psychology in Society*, *8*(1), 48–79.

Tay, A. K., & Silove, D. (2017). The ADAPT model: Bridging the gap between psychosocial and individual responses to mass violence and refugee trauma. *Epidemiology and Psychiatric Sciences*, *26*(2), 142–145. PubMed. https://doi.org/10.1017/S2045796016000925

Thabet, A. A., Vostanis, P., & Karim, K. (2005). Group crisis intervention for children during ongoing war conflict. *European Child & Adolescent Psychiatry*, *14*(5), 262–269. https://doi.org/10.1007/s00787-005-0466-7

Tiwari, A., Leung, W. C., Leung, T. W., Humphreys, J., Parker, B., & Ho, P. C. (2005). A randomised controlled trial of empowerment training for Chinese abused pregnant women in Hong Kong. *BJOG: An International Journal of Obstetrics & Gynaecology*, *112*(9), 1249–1256. https://doi.org/10.1111/j.1471-0528.2005.00709.x

van Emmerik, A. A., Kamphuis, J. H., Hulsbosch, A. M., & Emmelkamp, P. M. (2002). Single session debriefing after psychological trauma: A meta-analysis. *The Lancet*, *360*(9335), 766–771. https://doi.org/10.1016/S0140-6736(02)09897-5

Wagner, B., Schulz, W., & Knaevelsrud, C. (2012). Efficacy of an Internet-based intervention for posttraumatic stress disorder in Iraq: A pilot study. *Psychiatry Research*, *195*(1), 85–88. https://doi.org/10.1016/j.psychres.2011.07.026

World Health Organisation. (2019). *ICD-11: International classification of diseases* (11th revision). https://icd.who.int/

Xulu, K. R., Womersley, J. S., Sommer, J., Hinsberger, M., Elbert, T., Weierstall, R., Kaminer, D., Malan-Müller, S., Seedat, S., & Hemmings, S. M. J. (2021). DNA methylation and psychotherapy response in trauma-exposed men with appetitive aggression. *Psychiatry Research*, *295*, 113608. https://doi.org/10.1016/j.psychres.2020.113608

Zaghrout-Hodali, M., Alissa, F., & Dodgson, P. W. (2008). Building resilience and dismantling fear: EMDR group protocol with children in an area of ongoing trauma. *Journal of EMDR Practice and Research*, *2*(2), 106–113.

Service Improvement Project

Patients' experiences of clinical team meetings (ward round) at an adult inpatient eating disorders ward: a mixed-method service improvement project

See Heng (Vanessa) Yim
Oxford Institute of Clinical Psychology Training and Research
University of Oxford
See.yim@hmc.ox.ac.uk
June 2022

Word count: 4333

Proposed Journal: Eating Disorders: The Journal of Treatment and Prevention

Rationale: The project will target readership from people who work in the field of eating disorders. The journal's focus on clinically applicable and practical research and fits the focus of this manuscript.

Internal supervisor: Dr Myra Cooper

External supervisor: Dr Roshan Jones and David Viljoen

A note on terminology:

'Patient' was the preferred word after discussing the study with the participants and a former patient in the ward who supported the study.

Abstract

Aims

Ward rounds are key to treatment-related decision making but are often stressful for patients. This project aimed to explore and improve patients' experiences of the clinical team meeting (CTM, historically known as ward round) in an adult inpatient eating disorders unit. A mixed-method approach was adopted using in-vivo observations, two focus groups, an interview, and a staff survey. Six patients participated. Two former patients contributed to data analysis, co-production of service improvement initiatives and write-up.

Results

The mean CTM duration was 14.3 minutes. Patients spoke half of the time, followed by psychiatry colleagues. 'Request' was the most-spoken category. Thematic analysis identified (1) CTMs are important but impersonal, (2) CTMs generate a sense of palpable anxiety; (3) divergent views between staff and patients.

Clinical implications

The findings and implementation of co-produced changes to CTMs improved patients' experiences despite COVID-19 challenges. Factors beyond CTMs including the ward's power hierarchy, culture and language need addressing to facilitate shared decision-making.

Note: Plain language summary is available in Appendix G.

Key words

Anorexia Nervosa, Inpatient Treatment, Qualitative Research, Psychiatric Nursing, Service Users

Clinical implications

- Eating disorders ward rounds are anxiety-provoking as important decisions are made
- In the ward examined, nurses and psychologists were little involved in ward rounds
- Nurses and patients were given more power and guidance to improve patient experience
- The ward needs to move away from a culture of ‘request’ to a goal-driven approach

Introduction

The ward round is seen as a key component of care provision in in-patient psychiatric settings (Hopkins Rintala et al., 1986). It is usually scheduled weekly, and involves multidisciplinary team members (MDT, including health professionals such as psychiatrists, clinical psychologists, nurses, occupational therapists etc) coming together for decision-making regarding treatment; monitoring progress with and setting of admission goals; managing physical and psychiatric risks; planning for the week including time away from the unit; clarifying roles and tasks for various members of the MDT and discharge planning (Wagstaff & Solts, 2003).

However, studies have shown that the ward round in psychiatric units has not been an optimal environment for patients. Earlier studies adopted behavioural analysis and ethnographic approaches to understanding the characteristics of psychiatric ward rounds. Sanson-Fisher et al. (1979) examined the content of interactions during ward rounds in a 40-bed inpatient psychiatric unit. The main findings included dominance of the medical model (more than half of the total discussion time), the consultant psychiatrist speaking the most, as well as more ‘authority’ statements being used over ‘discussion’ statements. Only one third of the time was spent on discussing intra-psychological or associated social-environmental factors. Although the study used terminology that is no longer used (e.g. ‘neurotic’ versus ‘psychotic’ patients), the findings revealed a large discrepancy between staff’s perception of their ideal ward round versus the actual operation. The researchers suggested a need to flatten the organisational hierarchy between staff members as well as between staff and patients. Similar findings were evident in a physical rehabilitation hospital: not enough time was spent on psychological aspects of care (Hopkins Rintala et al., 1986). More recent studies have adopted qualitative and survey methodologies to analyse patients’ experiences, needs and satisfaction with ward rounds. White and Karim

(2005) conducted a survey across four inpatient psychiatric wards. The majority of patients felt anxious about ward rounds and preferred to know the exact time when they would be seen. They wanted fewer professionals present. Holzhüter et al. (2021) argued that ward rounds would result in higher patient engagement if patients prepared for the ward round in advance and had an agenda. Taken together, it seems that the current ward round model for mental health care may be sub-optimal. However, it was seen by the ward staff that the current structure and tradition provided a safe structure and stability, whereas initiating structural change was although valued, could be seen as time-consuming (Fiddler et al., 2010).

Ward rounds in eating disorders (EDs) services

Various guidelines in ED inpatient management provide recommendations for how ward rounds should operate such as the Management of Really Sick Patients with Anorexia Nervosa (MARSIPAN) guidelines (Robinson & Rhys Jones, 2018), Standards for Acute Inpatient Services for Working-Age Adults and Quality Network for Eating Disorders (QED), and Standards for Adult Inpatients Eating Disorders Services (Royal College of Psychiatrists, 2017). A ward round admission meeting or a documented Care Programme Approach (CPA) is recommended within one week of the admission. The patient should be supported to attend the meeting with advance preparation.

Dalle Grave's inpatient enhanced cognitive behavioural therapy model (CBT-E) postulated a new framework for in-patients with EDs where all health professionals and the patient sit at a weekly roundtable to discuss the treatment (Dalle Grave, 2010). The meeting includes analysis of the patient's interpretation of the weight chart, the patient's formulation and ED maintaining mechanisms. Dalle Grave's inpatient CBT-E model also suggests a 'team formulation', where different members of the team discuss the psychological, biological, and systemic factors that may cause or maintain a person's psychological distress. In the context of the inpatient CBT-E model, the team includes a physician, a nurse, a dietician, and a psychologist.

The current study

Despite the prominence of ward rounds in inpatient ED settings, and the need for a multidisciplinary approach to attend to the patients' physical, medical and psychological needs, surprisingly little research has reviewed this model of working. In terms of the wider literature on staff's experiences of inpatient ED wards, some recent qualitative studies revealed strong emotional responses have been found amongst mental nurses working in inpatient ED services, including feelings of frustration and guilt (Ryu, Hamilton, & Tarrant., 2022; Wu & Chen, 2021). Nurses experienced a moral dilemma when balancing the use of power/authority and providing a caring and helpful nursing support, especially when patients resisted certain decisions such as increasing food intake and restricting movement/ exercise (Zugai, Stein-Parbury, & Roche., 2019). It is therefore crucial to examine the under-researched area of patient's experiences of ED ward rounds where decisions are being made.

Aims

The present study focused on a single 14-bed adult eating disorders unit as part of a wider New Care models (Provider Collaborative) initiative (Viljoen & Ayton, 2021). Historically, patients were not involved in ward rounds. Since 2014, patients have been invited to the weekly meetings, and the ward round was renamed 'clinical team meeting' (CTM). In 2015, the service introduced the integrated cognitive behavioural therapy for ED (I-CBTE) model (Dalle Grave, 2010). A previous audit identified issues relating to CTMs including the meetings overrunning, patients lacking a sense of agency and the absence of psychologist input.

This project specifically focused on a single unit and addressed the gap in the literature on ward rounds in ED settings. The aims were (1) to explore patients' and staff members' experiences and perception of the utility of CTMs in relation to the patients' admission goals; and (2) improve the current model of CTMs within the wider service improvement goals of embedding I-CBTE principles on the unit.

Methods

A mixed-method approach was used. The study consisted of a mixture of in-vivo CTM observations, focus groups, interviews, and surveys. They were all held virtually due to the COVID-19 pandemic. Direct observations of the CTMs not only enabled comparison with previous literature on ward rounds, but also allowed a deeper understanding of the behaviours, meeting foci, and attendee dynamics in a naturalistic context (Appendix H). Depending on patients' preferences, focus groups and interviews were used to elicit in-depth insights into patients' experiences and ideas for improving the CTMs. The focus groups/interviews were semi-structured, following a topic guide (Appendix I). Surveys were used for staff as a more flexible approach was needed due to the shift working pattern (Appendix J).

Ethical considerations

The project was listed as a service evaluation based on the Health Research Authority decision tool as it focused on quality improvement of a single unit and did not aim at generalising the findings (Health Research Authority, 2020). It was approved by the Trust's Quality and Audit team and was registered on the local NHS Foundation Trust quality improvement database. Staff and patients' informed consent were sought for audio recording the CTMs and for their participation in all stages of the study (Appendix K).

Participants

At the time of data collection, there were nine inpatients. Six of whom participated in the study. Five participated in two focus groups, and one participated in an interview. Of the six participants, five gave consent for the researcher to observe their CTMs. Patient participants were all female, five were voluntary patients and one was under Section 3 of the Mental Health Act (Department of Health and Social Care, 2015). Seven staff members completed the survey, four were nurses, the rest were a clinical psychologist, a healthcare assistant and a dietician.

Procedure and data analysis

CTM observations

The observation utilised a behavioural analysis approach (Hopkins Rintala et al., 1986). Measures taken were: (i) minutes each staff member spoke, (ii) length of the meetings, and (iii) minutes spent on different areas of patient care such as decision making, formulation, risk, goal setting ecetera. The meetings were audio-recorded. The field notes from the observation documented the patients' expressions and emotions, which helped to inform the analysis/coding of the qualitative data. The recordings were listened to repeatedly to familiarise with the key ideas. The content was systematically coded from a bottom-up manner. Using the preliminary codes, the initial framework was refined with a former patient. Applying the analytic framework, the content was recoded and the time spent on the session was analysed.

Survey, focus groups and interview

The focus groups and interview were audio-recorded, transcribed verbatim, and entered into NVivo 12 (QSR International Pty Ltd, 2018). The duration of the interview was 35 minutes and the two focus groups took one hour each. The interviewer was a trainee clinical psychologist who was independent from the service, which helped maintain neutrality. Reflexive thematic analysis (Braun & Clarke, 2020) was chosen because of its flexibility, its focus on identifying patterns rather than having an idiographic approach, its emphasis on uncovering latent meanings and reflexivity. Critical realist ontology was used, which recognised the viewpoints of different stakeholders and their experiences whilst locating it within the service context (Vincent & O'Mahoney, 2018). The first author read the transcripts twice before coding, and engaged in a recursive process of text coding, group and theme development, and discussed with the other authors. Throughout the process, the researcher paid attention to the latent and semantic meanings. Themes were subsequently refined with a former patient.

Patient and service user involvement

The GRIPP2 reporting checklist (Staniszewska et al., 2017) was used to document the involvement at various research stages as well as the outcomes of such involvement (Appendix L). The Trust eating disorder patient forum and two former patients were involved in the conceptualisation, data analysis, co-production of service improvement initiatives, and write up and one patient's reflections on their involvement are included in the Appendix M.

Improvement initiatives

Improvement initiatives were identified after feeding back the findings to staff and patients. These were later disseminated in a nurse training session and patient community meeting, and subsequently implemented.

Results

CTM observations

The mean duration of a CTM was 14.3 minutes (range= 7-24.3 minutes). Table 1 below shows the percentages (%) of time each role spoke in the CTM (N= 5). As shown in the table, the patient spoke the most in the meeting (48% of the time), followed by the consultant psychiatrist (21%), and the psychiatry specialist trainee (16%). The dietician spoke about 10% of the time. The Inpatient Mental Health Advocate (IMHA) attended one of the five meetings and spoke for 6% of the time. The core medical trainee and nurse spoke about 2% of the time, whilst the specialty doctor and medical student did not speak at all. It is worth noting that no psychologist or occupational therapist was present in the meetings observed.

Table 1. Time each role spoke in the CTM (N= 5) (in percentages %)

Role (in descending order according to time spoken)	Mean (%)	Range (min-max) (%)	Standard deviation (%)	Number of times this role was present out of the five CTMs observed
Patient	48	36-64	12	5
Consultant psychiatrist	21	10-36	10	5
Psychiatry specialist trainee	16	9-25	6	5
Dietician	10	6-17	4	5
Inpatient Mental Health Advocate (IMHA)	6	N/A	N/A	1
Nurse	2	0-5	2	5
Core medical trainee	2	1-7	3	5
Specialty doctor	0	0	0	5
Medical student	0	0	0	5

Table 2 shows the mean percentage (%) of time and number of occurrences of each coded category was mentioned in the meeting. A few categories were discussed more often than others including requests (such as home leave, increasing break times - an average of 23% of the meeting) and medication (11% of the meeting). Risks such as self-harm and alcohol use (20%), and clarification/ questions (24%) also took up considerable amounts of time in the meetings in which they were discussed, followed by physical health, weight and follow-up actions (13%). Psychology-related concerns such as the patient formulation were mentioned in three of the meetings and took on average 5% of the time. Appendix N shows the inter-rater reliability ratings between the researcher's and former patient's analysis of the discussion time.

Table 2. The amount of time each category mentioned in CTM (in percentages %).

Category	Mean (%)	Range (min-max) (%)	Standard deviation (%)	Number of times the theme came up out of the five CTMs observed.
Request	23	6-41	15	5
Medication	11	5-24	8	5
Goal	11	4-23	9	4
Mood	6	4-11	3	4
Validation	4	0-7	4	4
Risk	20	5-45	22	3
Update and review of progress	6	2-11	5	3
Meal-related eg. meal plans	4	2-7	3	3
Psychology-related eg. therapy and formulation	5	2-9	3	3
Weight	13	6-21	10	2
Questions and clarifications	24	11-37	18	2
Follow-up from previous meetings	13	7-18	7	2
Expressing feelings	6	2-9	5	2
Physical health	13	N/A	N/A	1
Signposting	9	N/A	N/A	1
Support planning	7	N/A	N/A	1

Thematic analysis of the survey, interview and focus groups

Three themes were identified after an iterative process of theme development with a former patient.

Theme 1: CTM is important but feels impersonal

A few factors contributed to the feeling of impersonality. CTMs felt too brief for any well-rounded discussion of a patient's treatment progress and goals. Whilst it is an important meeting, some participants, felt that the people who made the key decisions were 'strangers'. One patient said, "remembering the very first admission in the very first CTM I had, and I was taken to a room full of strangers and you have to tell them quite personal things, I found that absolutely terrifying". In addition, the virtual format (due to COVID-19) could exacerbate the impersonality. Remote working meant that patients may not have met the staff in person. There were mixed views about the new virtual format. Participants acknowledged that technical problems were barriers to a smooth meeting, and some felt overwhelmed by the many 'strangers' on the screen. Other participants, however, expressed feeling more comfortable speaking to attendees remotely as opposed to having many unfamiliar staff sitting in the same room: 'I actually prefer if most of the people are remote, it makes it more comfortable to speak this time'.

Theme 2. A sense of palpable anxiety

Both staff and patients recognised the palpable anxiety on the ward on Mondays when CTMs took place. This quote illustrates the level of unease:

> There's a huge amount of anxiety surrounding CTMs into the point where I feel for the staff working on the ward on a Monday because everybody's really stressed. You know, all that is that there's a palpable sense of tension.

A source of anxiety came from not knowing what to expect. One participant said, 'You feel like this, this secret bag of things. You don't know how to access this'. Another participant expressed confusion, 'I think clarity from the beginning would have lessen my anxiety…what it's for, how it works, what the process is, who is going to involve…What's their role? What's my role?'. The inherent power difference also contributed to the anxiety, as evident in the language used by both staff members and patients, such as the word 'request'. This word carries the idea that patients and staff are not engaging in shared decision-making, and the power of approval lies with the clinical team. One participant said, 'there are things that you request that get turned down, or get approved even'. Another quote echoes similar ideas, 'maybe we ought to ask, ought to say, has this been agreed? I requested a two-hour ground leave on Saturday, is this approved?... Is that acceptable? We don't know what our boundaries are.'

Theme 3. The differing views on the goals of CTMs between staff and patients

Whilst the staff team and some patients would like to embed an I-CBTE formulation into CTMs, explicitly discussing their psychological formulation might not be preferred by all patients due to the personal nature of the document. As one patient put it, '…there are too many people, I feel very anxious because it [formulation] is a very personal document, I wouldn't want to share it with all the staff, one-to-one is fine but not in front of everybody, I wouldn't be comfortable'. A participant noted the psychological dimension was missing in the CTM:

> Like one of my goals is like, building up relationships and things, but there isn't any, much of the psychologist side of therapy side of the CTM, there's the dietician side and doctor side, the other stuff so we don't talk about the other goals?

However, others felt therapy groups might be a better place to discuss the psychological aspects of treatment: 'I think the groups help much more with goals much more than CTM…things like the goal setting groups and formulation groups are much more helpful in that respect'. Healthcare assistants (HCAs) would want to be included in CTM: 'I know the patients very well as an HCA I see first-hand the daily struggles and issues of service users. This often gets overlooked and input not valued always.' There appeared to be a conflict around patient empowerment. For staff members, they wanted to move towards a culture of patients taking initiatives. Nevertheless, for some patients, they would like to follow the expertise of the staff and have staff proactively feed-back, as evident in this quote:

> They ask us how we think we might be getting on, but they don't say how they think we're progressing and I think that would be encouraging if they said to us, oh I think you are doing really well on AB and C but maybe you need to work on X, Y. We don't get any response. What they think.

The discrepancy was additionally shown by some staff members not understanding what made CTM overwhelming:

> Also something changing that makes ward round feel more collaborative for the patient, so that they welcome it rather than fear it but I do not know what as I do not know why they do not see it this way.

A diagram of the data collection, dissemination and improvement process so far is shown below (Figure 1). Senior staff found the results helpful. They acknowledged that the meeting is short for everything to be covered and would like to have psychological input in CTMs but it had been difficult due to budget/ staffing. The service decided to revise the patient induction booklet (Appendix O) and created a new CTM agenda sheet (Appendix P). The former patient suggested making a guidance sheet for nurses to help patients prepare for CTMs (Appendix Q). A nurses training session and a patient meeting ensued, focusing on using the new documents. Eight nurses attended the training. They agreed with the idea of moving away from the language of 'request' and proactively giving positive feedback in relation to making progress on any goals based on the patient's unique formulation. For example, rather than 'you are doing well', the feedback could be more specific, pointing out how the patient managed to reduce an ED maintaining factor (such as overcoming compensatory behaviours; addressing problems with body image, low self-esteem or perfectionism; or interpersonal difficulties), and how that helped them progress towards their goals. The idea was to be ‘formulation-driven’ whilst being sensitive to individual patient’s wishes not to show the formulation in the CTM. Four patients attended the feedback meeting and found the new CTM agenda sheet more helpful than the old one. It was suggested that nurses distribute the forms one day before CTMs took place.

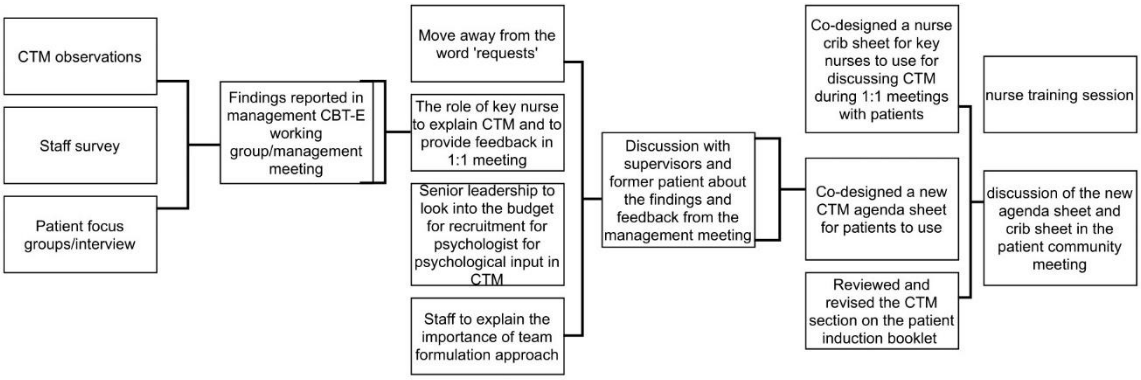


Figure 1. Diagram showing the improvement process.

Discussion

Psychiatric ward rounds have been criticised for lacking patient participation, stressful, and paternalistic. The service improvement project aimed to understand patient’s experience of CTM in an ED adult ward and implement improvements based on the findings.

The observational data show that, similar to early studies such as Hopkins Rintala et al. (1986), psychiatry colleagues spoke the most amongst all clinicians, with other professions (eg. nursing, dietician etc) speaking for less than 20% of the time. ‘Request’ was the most-discussed category, and psychological aspects were spoken for 5% of the time. Contrary to Hopkins Rintala et al. (1986), patients spoke the most in this current study amongst all attendees in the CTM (roughly half the time), indicating that the service has come a long way since 2014 from patients not being invited to the meetings to speaking the largest amount of the time. The development of the CTM agenda form that better reflected patients' needs and goals confirmed previous studies' findings in relation to 'needing a guide' (Lindberg et al., 2013) and preparing for the ward round in advance helped facilitate discussion and engagement (Holzhüter et al., 2021). Reviewing and adapting the CTMs was part of a wider service transformation towards I-CBTE.

Nevertheless, despite the efforts in implementing the I-CBTE model in all aspects of the service, the thematic analysis revealed differing views between staff team and patients, and there was a sense of impersonality in the CTMs. The findings echoed with the wider literature on the power dynamics between nurses and patients in ED wards (Zugai et al, 2019). The language of 'request' and 'approve' further reflected the power imbalance between staff and patients. As a result, there might not be standalone solutions to improving the CTM model without considering systemic factors such as staff-patient power hierarchy and ward culture. There seemed to be a lack of shared understanding in terms of patients' role in the CTM: staff wished the patients to take more initiatives, whereas patients took up a 'powerless position' not knowing what to expect. The power dynamic was possibly maintained by a multitude of factors: some patients might not feel comfortable or able to participate in the decision-making process, especially those who were sectioned under the Mental Health Act, where decisions were initially taken from them. This is different from the Dalle Grave model (2010) where patients were voluntarily admitted. Furthermore, although the inpatient CBT-E model emphasised the importance of discussing one's formulation during meetings, some patients might not feel comfortable doing this due to the large number of professionals in the room. This was further exacerbated by the pandemic as the patients might not have met the clinicians face to face since their admission. In the context of eating disorders, clinicians might assume a more ‘expert’ role with this population due to the associated heightened physical health risks, resulting in them paying less attention to the underlying psychological processes and assuming a more ‘expert’ medical approach (Land et al., 2004). Impaired decision-making was found in people with EDs (Guillaume et al., 2015) and EDs are characterised by ambivalence towards recovery (Geller, Zaitsoff, & Srikameswaran, 2005). Another maintaining factor is clinical perfectionism - patients worried they were not responding to the agenda questions well enough. Moving towards a shared decision-making model requires a shift in attitudes from both staff and patients (i.e. moving away from the expert clinician and passive patient) (National Institute for Health and Care Excellence, 2021).

The prevalance of anxiety is consistent with the survey results from White and Karim (2005). Understandly, there is a baseline level of anxiety given the nature of CTMs when important decisions are made. The COVID-19 pandemic has had a serious impact on the ward: heightened anxiety for staff and patients; changes to care procedures due to remote working for non-ward staff; an increased reliance on agency staff; the closure of the ward to visitors (family and friends). The rapid increase in numbers and acuity of referrals alongside the challenges above resulted in service improvement taking a back-seat for some months.

Additionally, the findings revealed that the decision-makers were those who spent the least time with the patients. CTMs could be seen as too brief for patients to deliberate, discuss, and consider options, similar to findings from Lindberg et al (2013) in the older adults setting. Although staff members such as healthcare assistants and nurses wished to be more involved, and that having ward nurses to join the ward round is recommended in the MARSIPAN guideline, shift patterns and staff shortages meant that staff who knew the patients well might not always be able to join the CTMs.

Limitations

The lack of psychological input affected the project. During the timespan of the project, three clinical psychologists left the service and there was an absence of a senior psychologist to support the project in-house. Consequently, it was difficult to provide psychological input during CTMs, and train and supervise new staff members. Furthermore, the lack of inpatient psychology leadership made it difficult to galvanise the team's engagement as the project's ownership was perceived to lie within the psychology leadership. Staff shortages meant that formulation groups were no longer running, hindering the development of psychologically informed CTMs as not all patients had the opportunity to create a CBT-E formulation of their EDs.

Evaluating patients' experiences after the implementation of changes was complicated by the turnover of patients and staff in the ward, meaning that if pre- and-post measurements were taken, they would not come from the same participant group. Nevertheless, the service evaluation has gained strength by its high patient buy-in (two thirds of the inpatients took part in the focus groups/ interview and two former patients supported the study).

Conclusion and Relevance for clinical practice

Whilst generalisation is not claimed in this study, the findings resonate with other studies on patients' and staff members' experiences of psychiatric ward rounds and add to the existing literature by having valuable inputs from former patients and incorporating improvements based on the findings. Future improvements may wish to adopt methodological approaches such as ethnography and conversation analysis to study the social interactions on the ward. It was also noted that there might be a difference between experiences of voluntary versus sectioned patients. There was only one participant who was sectioned, and future research could examine the sub-groups separately.

In conclusion, the co-production of a more psychologically-informed process including an amended admission handbook, CTM guidance sheet and training for nurses helped facilitate a more person-centred care. Services also need to recognise and address the power dynamics and specific psychological maintaining factors that affect the engagement and decision-making in order to achieve shared decision-making between staff and patients. This also connects to sensitively attending to patient’s preference but also being aware of ED maintaining factors (e.g. perfectionism and ambivalence to recovery) influencing the decision-making process.

References

Braun, V., & Clarke, V. (2020). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 1–25. https://doi.org/10.1080/14780887.2020.1769238

Dalle Grave, R. (2010). Inpatient cognitive behavior therapy for severe eating disorders. *Psihologijske Teme*, *19*(2).

Department of Health and Social Care. (2015). *Code of Practice: Mental Health Act 1983*. London. https://www.gov.uk/government/publications/code-of-practice-mental-health-act-1983

Fiddler, M., Borglin, G., Galloway, A., Jackson, C., McGowan, L. and Lovell, K. (2010), Once-a-week psychiatric ward round or daily inpatient team meeting? A multidisciplinary mental health team's experience of new ways of working. International Journal of Mental Health Nursing, 19: 119-127. https://doi.org/10.1111/j.1447-0349.2009.00652.x

Gardner, L., & Trueman, H. (2021). Improving mealtimes for patients and staff within an eating disorder unit: understanding of the problem and first intervention during the pandemic—an initial report. *BMJ Open Quality*, *10*(2), e001366. https://doi.org/10.1136/bmjoq-2021-001366

Geller, J., Zaitsoff, S.L. & Srikameswaran, S. Tracking Readiness and Motivation for Change in Individuals with Eating Disorders Over the Course of Treatment. *Cogn Ther Res* **29,** 611–625 (2005). https://doi.org/10.1007/s10608-005-5774-1

Guillaume, S., Gorwood, P., Jollant, F., Van den Eynde, F., Courtet, P., & Richard-Devantoy, S. (2015). Impaired decision-making in symptomatic anorexia and bulimia nervosa patients: a meta-analysis. *Psychological Medicine*, *45*(16), 3377–3391. https://doi.org/10.1017/S003329171500152X

Health Research Authority (2020). *Is my study research?* http://www.hra-decisiontools.org.uk/research/about.html

Holzhüter, F., Schuster, F., Heres, S., & Hamann, J. (2021). Clinical Decision-Making During Psychiatric Ward Rounds. *Frontiers in Psychiatry*, *12*. https://www.frontiersin.org/article/10.3389/fpsyt.2021.721699

Hopkins Rintala, D., Hanover, D., Alexander, J. L., Sanson-Fisher, R. W., Willems, E. P., & Halstead, L. S. (1986). Team care: An analysis of verbal behavior during patient rounds in a rehabilitation hospital. *Archives of Physical Medicine and Rehabilitation*, *67*(2). https://doi.org/10.1016/0003-9993(86)90120-6

Koo, T. K., & Li, M. Y. (2016). A guideline of selecting and reporting intraclass correlation coefficients for reliability research. *Journal of chiropractic medicine*, *15*(2), 155-163.

Land, P. (2004). Thinking about Feelings: Working with the Staff of an Eating Disorders Unit." *Psychoanalytic Psychotherapy* 18: 390–403. https://doi.org/10.1080/14749730420002973

Lindberg, E., Persson, E., Hörberg, U., & Ekebergh, M. (2013). Older patients' participation in team meetings-a phenomenological study from the nurses' perspective. *International Journal of Qualitative Studies on Health and Well-Being*, *8*, 21908–21908. PubMed. https://doi.org/10.3402/qhw.v8i0.21908

National Institute for Health and Care Excellence. (2021). *Shared decision making*. https://www.nice.org.uk/guidance/ng197

QSR International Pty Ltd. (2018). *NVivo (Version 12)*. https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home

Robinson, P., & Rhys Jones, W. (2018). MARSIPAN: management of really sick patients with anorexia nervosa. *BJPsych Advances*, *24*(1). https://doi.org/10.1192/bja.2017.2

Royal College of Psychiatrsts. (2017). *Standards for Adult Inpatients Eating Disorders Services (2nd ed.)*. London, United Kingdom. https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/quality-networks/eating-disorders-qed/2nd-edition-standards-for-adult-inpatient-eating-disorder-services.pdf?sfvrsn=86374031_2

Ryu, H., Hamilton, B. and Tarrant, B. (2022). Early Career Mental Health Nurses' Emotional Experiences in Specialist Eating Disorder Units, Victoria, Australia. *International Journal of Mental Health Nursing* 31: 230–39. https://doi.org/10.1111/inm.12955

Sanson-Fisher, R. W., Poole, A. D., & Harker, J. (1979). Behavioural analysis of ward rounds within a general hospital psychiatric unit. *Behaviour Research and Therapy*, *17*(4). https://doi.org/10.1016/0005-7967(79)90005-6

Staniszewska, S., Brett, J., Simera, I., Seers, K., Mockford, C., Goodlad, S., … Tysall, C. (2017). GRIPP2 reporting checklists: tools to improve reporting of patient and public involvement in research. *BMJ*, *358*. https://doi.org/10.1136/bmj.j3453

Viljoen, D., & Ayton, A. (2021). *Results and Learning from the Healthy Outcomes for People with Eating Disorders (HOPE) New Care Model (Provider Collaborative) pilot: More investment required to address demand and capacity in adult community and inpatient eating disorder services*. Preprint DOI: 10.31234/osf.io/7cgza

Vincent, S., & O’Mahoney, J. (2018). *The SAGE Handbook of Qualitative Business and Management Research Methods: History and Traditions*. London: SAGE Publications Ltd. https://doi.org/10.4135/9781526430212

Wagstaff, K., & Solts, B. (2003). Inpatient experiences of ward rounds in acute psychiatric settings. *Nursing Times*, *99*(5).

Wu, W.-L. and Chen, S.-L. (2021), Nurses’ perceptions on and experiences in conflict situations when caring for adolescents with anorexia nervosa: A qualitative study. Int J Mental Health Nurs, 30: 1386-1394. https://doi.org/10.1111/inm.12886

White, R., & Karim, B. (2005). Patients’ views of the ward round: A survey. *Psychiatric Bulletin*, *29*(6). https://doi.org/10.1192/pb.29.6.207

Zugai, J.S., Stein-Parbury, J. and Roche, M. (2019), Dynamics of nurses’ authority in the inpatient care of adolescent consumers with anorexia nervosa: A qualitative study of nursing perspectives. Int J Mental Health Nurs, 28: 940-949. https://doi.org/10.1111/inm.12595

Main Research Project

Sudden Gains in internet cognitive therapy for social anxiety disorder in routine clinical practice

See Heng (Vanessa) Yim
Oxford Institute of Clinical Psychology Training and Research
University of Oxford
See.yim@hmc.ox.ac.uk
June 2022

Word count: 4368

Proposed Journal: Internet Interventions

Rationale: The Journal focuses on the implementation and dissemination of internet interventions that promotes mental health which fits with the intervention examined in this study that aims to disseminate the internet CBT for social anxiety.

Internal supervisor: Prof Paul Salkovskis

External supervisor: Dr Graham Thew

Sudden Gains in internet cognitive therapy for social anxiety disorder in routine clinical practice

Abstract

Background

Research on sudden symptom improvements (sudden gains) in internet-delivered psychological interventions are limited in routine practice.

Objective

This was a study on sudden gain and its relationship to outcome and cognitive processes. The intervention examined was a therapist-guided internet Cognitive Therapy intervention for social anxiety disorder (iCT-SAD) delivered in primary mental health services in the UK. The aim was to replicate the approach of a previous exploratory study (Thew et al., submitted) where the data were drawn from a randomised controlled trial (Clark et al., 2022).

Methods

The study used data from a larger implementation study (N = 193). Liebowitz Social Anxiety Scale was the primary outcome measure. Process variables examined included negative social cognition measured by the Social Cognition Questionnaire, self-focused attention (Social Phobia Weekly Summary Scale) and depressed mood (Patient Health Questionnaire).

Results

Seventy sudden gains were found among 57 participants. The occurrence rate of sudden gain was 39%. Individuals who experienced sudden gains had a larger reduction in social anxiety symptoms at end of intervention and at three-month follow-up. There was evidence of a reduction in the frequency of negative social cognitions prior to the gain, whereas change in self-focused attention occurred simultaneously with the gain. Depressed mood did not show significant changes over these timepoints.

Conclusions

Sudden gain was found in routine practice and was found to be related to meaningful symptom improvement.

Highlights

- Sudden gains in social anxiety was found using iCT-SAD in routine practice
- Having a sudden gain was associated with a greater reduction in social anxiety at end of intervention and at follow-up
- Significant reductions in the frequency of negative cognitions occurred immediately prior to sudden gains

Key words

Social anxiety, Internet interventions, Sudden Gains, Effectiveness study, Cognitive behavioural therapy, IAPT

Introduction

Digitalising the NHS has been on the UK government's agenda as evidenced in the NHS Long Term Plan (NHS England, 2019). That also includes the expansion of digitally assisted therapies that range from self-guided interventions, guided self-help programmes to video therapies, especially within primary mental healthcare services such as the Improving Access in Psychological Therapies (IAPT) services. The SARS-Cov2 pandemic has given new impetus to the development, adoption and expansion of digital therapies (Wind et al., 2020). Internet interventions for social anxiety disorder (SAD) may offer a cost-effective and more accessible alternative to face to face therapies that may overcome barriers of seeking and accessing therapy among individuals with SAD, as SAD is common and persistent if untreated (Bruce et al., 2005).

The cognitive model of social anxiety (Clark and Wells, 1995) underpins the treatment evaluated in the present study. It postulates that the cognitive and behavioural processes in SAD include the following: excessively high standards for and conditional beliefs concerning the consequences of a social performance, unconditional negative beliefs about the self (e.g. I am boring), self-focused attention, as well as engaging in safety seeking behaviours that are intended to prevent or minimise the feared catastrophe (Salkovskis, 1991). All these in turn drive and maintain anxiety. Cognitive Behavioural Therapy (CBT) specifically developed for SAD by Clark and Wells (1995) or the by Rapee and Heimberg (1997) is recommended by NICE Guidelines as the first-line treatment for SAD (Pilling et al., 2013). There is a growing evidence-base for internet CBT for SAD (iCBT-SAD) in efficacy trials. For example, meta-analysis by Kampmann et al. (2016) indicated substantial evidence from randomised controlled trials (RCT) for internet-delivered CBT could effectively reduce social anxiety symptoms. In the UK, a form of internet cognitive therapy (iCT-SAD) has been developed based on the cognitive model of social phobia (Clark and Wells, 1995) and has strong empirical support from pilot studies and randomised controlled trials in the UK (Stott et al., 2013, Clark et al., 2022) and Hong Kong (Thew et al., 2022). Clinical services such as those in the Improving Access to Psychological Therapies (IAPT) programme have been keen to adopt internet interventions due to their potential benefits for clients such as flexibility and self-pacing (Thew, 2020). iCT-SAD has recently been implemented and evaluated across a group of IAPT services (Clark et al., in prep).

Research on internet interventions for SAD shows that they are effective but much less is known about individual patient-level data. A promising research area is examination of sudden gains in therapy, where large improvements in symptom measures are detected on a session-by-session basis as a way of identifying key therapy elements. Tang & DeRubeis (1999) developed three criteria to identify sudden gains: the gain should be (1) large in absolute magnitude, (2) large relative to the previous symptom score, and (3) large relative to symptom fluctuation. Sudden gains (SGs) have been found to occur in in-person and online psychological therapies in a range of clinical populations including social anxiety (Bohn et al., 2013), OCD (Aderka et al., 2012) and depression (Kelly et al., 2005). Shalom & Aderka (2020) conducted a systematic review and meta-analysis on 50 studies that examined SGs across depression and different anxiety disorders. They found that on average, 34.65% of participants experienced a SG, and the effect size on the primary outcome was significantly greater for individuals who experienced SGs.

However, out of the 50 included studies in the meta-analysis, only three (across five treatment conditions) examined social anxiety disorder (Bohn et al., 2013; Hofmann et al., 2006; Thorisdottir et al., 2018). None of these studies examined SG in routine clinical settings, all used data drawn from RCTs conducted in research settings. One might argue that such RCTs lack ecological validity due to possible differences in the motivation of the participants and level of training of the therapists. Moreover, most of the studies on SGs included a small sample size. For example, there were 45 participants across two treatment conditions for Thorisdottir et al. (2018) and 67 participants for Bohn et al. (2013). None of the included studies examined internet-based treatments for this population. Clark et al. (2022) did an RCT comparing face to face CT-SAD to iCT-SAD. Thew et al (submitted) conducted a secondary analysis exploring sudden gains from the RCT, and found that sudden gains were found in 64% of the participants in face-to-face cognitive therapy for SAD, and in 51% of those in iCT-SAD. The current study aimed to further the understanding of mechanisms of change in internet interventions for SAD and help identify potential targets that may require more therapist support for optimising the delivery of internet interventions. Such study is useful for understanding the change mechanisms of anxiety reduction and will enable the development of internet-delivered CBT to optimise outcomes (Kazdin, 2007).

Aims

This study aimed to examine sudden gains (SGs) in iCT-SAD. It aimed to replicate the approach of Thew et al (submitted) and extend to routine clinical setting. This study sought to understand whether differences might be observed in SGs when iCT-SAD is delivered as part of routine service provision. To achieve this aim, we performed a secondary analysis of iCT-SAD data drawn from an implementation study exploring the use of iCT-SAD in routine clinical practice (Clark et al., in prep).

First, we identified the frequency, magnitude of SG, and the likelihood of reversal of SGs. The primary aim was to examine whether experiencing a SG was associated with better social anxiety outcomes. The secondary aim was to examine how key process variables (negative social cognitions, self-focused attention and depressed mood) change around the period when sudden gains are found . Specifically, building on the previous study findings (Thew et al., submitted), we hypothesised that reductions in negative social cognition and self-focused attention would precede sudden gains but mood changes would not necessarily do so.

Method

Participants

The data were drawn from a larger study implementing iCT-SAD in IAPT services (N=193). Ethical approval was granted by the North East Tyne & Wear South Research Ethics Committee (REC 20/NE/0241). The inclusion and exclusion criteria were the same as the service criteria in the respective IAPT services. Specifically, we included people with a primary presenting problem of SAD who were willing and able to use an internet intervention. People had to be able to speak, read and write in English and agreed to not have their medication changed during the course of the study. The exclusion criteria included people with marked clinical risk based on the service's assessment, and people who were concurrently on another clinical research study. Recruitment took place between August 2020 and January 2022 from six IAPT services across London and the Southeast. More detailed information about the implementation study is given in Clark et al. (in prep). The inclusion criteria were people with a primary presenting problem of SAD who were willing and able to use an internet intervention.

.

Intervention

iCT-SAD is an online Cognitive Therapy intervention that replicates the treatment procedures from the traditional in-person Cognitive Therapy protocol (Clark et al., 2006). It is delivered via a secure online platform supported by a weekly telephone call with a trained therapist, along with brief written messages and one webcam call in the second week of treatment. Individuals can message their therapists in the messaging section on the platform. The modules include psychoeducation, patient testimonies, multi-media materials, case examples, interactive activities where users are encouraged to complete a range of exercises, tasks and behavioural experiments. Treatment begins with eight core modules, typically completed over the initial two weeks. These are ‘Introducing the treatment’, ‘Getting started’, ‘Feeling self-conscious’, ‘Safety behaviours’, ‘My attention and safety behaviour experiment’, ‘Watching your conversation videos’, ‘Getting out of your head and into the world’, and ‘Behavioural experiments’. A range of further problem-specific modules are then available in order to tailor the treatment to the clients specific feared concerns. For more details of the design and development of the intervention, please refer to Stott et al. (2013). It is typically delivered across 14 weeks, followed by up to 3 monthly booster sessions. For the present study, this timeline was followed but incorporated flexibility based on clinical need.

Therapists

A total of 33 therapists from the participating IAPT services provided the treatment. All were Psychological Wellbeing Practitioners (PWP) or High Intensity CBT therapists who had received specialist training in iCT-SAD and regular supervision from four experienced iCT-SAD practitioners.

Outcome measures

Outcome measures were completed weekly on the intervention website.

Social anxiety measures

The self-report version of the 24-item Liebowitz Social Anxiety Scale (LSAS) (Connor et al., 2000) was used weekly which has shown good internal consistency, concurrent and divergent validity as well as test-retest reliability.

Process measures

(1) Negative social cognitions

The Social Cognitions Questionnaire (SCQ) (Wells et al., 1993) was measured weekly. It's a 22-item scale measuring the frequency (range 1-5) and belief (range 0-100) ratings for a range of negative automatic cognitions in social anxiety. The SCQ has good internal consistency and discriminant validity.

(2) Self-focused attention

Two items on self-focused attention in social situations were taken from the Social Phobia Weekly Summary Scale measured weekly (SPWSS) (range 0-8) and the scale has been shown to have high internal consistency (Clark et al., 2003). One of the items asked about self-focused attention in general situations, and the other item asked about difficult social situations.

Mood measures

As part of the routine outcome collection in IAPT services, the Patient Health Questionnaire-Depression Scale (PHQ-9) (Kroenke et al., 2001) for monitoring low mood weekly. A score above 9 indicates clinical 'caseness'. Scores 5-9 indicates mild depression, 10-14 indicates moderate depression, 15-19 moderate-severe depression, and 20-27 indicates severe depression. PHQ-9 and is argued to possess good reliability, internal consistency and validity (Kroenke et al., 2001; Spitzer et al., 2006).

Data analysis

Analyses were performed in R Studio (R Core Team, 2021).

Identification of SGs

As iCT-SAD allows individuals to access the platform and work on their treatment at any time, the notion of discrete treatment 'sessions' is not applicable. Instead, we refer to treatment 'week'. The week prior to the SG is referred to as week 'n' (pre-gain), and the week after the SG as 'n+1' (post-gain). The 'suddengains' R package (Wiedemann et al., 2020) was used to identify SGs based on the self-report LSAS using the criteria outlined by Tang et al., (2005). For criterion one, we used a cut-off of 12 LSAS points, consistent with Thew et al. (submitted) which was calculated based on the Reliable Change Index (RCI) (Jacobson & Truax, 1991) for the scale. The other criteria were a drop of at least 25% of the pre-gain score, and that the mean difference between the three pre- and post-gain measurements was greater than a critical value of 2.78 times the pooled standard deviations of the two groups. SG reversal was defined as a loss of 50% of the gain at any subsequent point. Where a participant experienced more than one SG, the gain with the larger magnitude was used as it was thought to be more clinically significant. If the magnitudes were the same, then the first SG would be used for the analysis.

Hypothesis-driven analyses

Two independent-sample *t*-tests were conducted at post-intervention and at 3-month follow-up to examine if the change in pre- to post-intervention LSAS scores significantly differed between participants with or without SGs. Effect size measure used was Cohen's *d*. Levene's test and Shapiro-Wilks test were conducted to check if the assumptions of homogeneity and normality were met.

Five linear mixed-effects models and linear contrasts comparing the consecutive timepoints around the gain were conducted to explore changes in the frequency of, and degree of belief in, negative social cognitions (measured by SCQ), self-focused attention in general and difficult social situations (SPWSS), and mood changes (PHQ) around the period of SGs. Timepoint around the SG (n-2, n-1, n, n+1, n+2, n+3) was the categorical fixed factor, and participant was specified as a random factor to allow for between-participant variation. The 'nlme' R package (Pinheiro et al., 2018) was used. Visual inspection in the QQ plot showed normally distributed residuals. Bonferroni correction was used due to multiple comparisons being tested.

Missing data

In order to ensure that participants completed a sufficient dose of therapy to permit analysis of treatment trajectories, and allow the calculation of SGs, participants with fewer than eight LSAS datapoints (N = 47) were not included in the analysis.

Where participants had a missing score for a particular session, imputation was not performed. Although the 'suddengains' R package automatically makes adjustments for small amounts of missing data when calculating SGs (Wiedemann et al., 2020), imputation could carry the risk of artificially influencing the calculation of sudden gains (see Tang et al. 2007).

Results

Participant characteristics

The mean and median number of weeks the 146 participants were involved in the intervention was 14.53 (SD= 3.33) and 14 (range= 8-30).

Participants' demographic characteristics are listed in Table 1.

Table 1. Participants' demographics.

Gender (n = 146)	Female	70
	Male	60
	Non-binary or prefer not to say	2
	N/A	14
Age (n= 135)	Mean	28.33 (SD = 7.76),
	Range	18-56
Ethnicity (n = 146)	White (British, Irish, any other)	103
	Mixed-Race	15
	Indian	1
	Chinese	1
	Any other Asian	2
	Caribbean	2

African	1
Any other Black	2
Other	3
Not stated	16

Characteristics of SGs in routine clinical practice

Of the 146 participants, 57 experienced a SG (39%). Forty-four participants had one SG, and thirteen had two SGs, giving a total of 70 SGs. There were three SG reversals. The mean SG magnitude was 25.29. Figure 1 shows the mean LSAS scores around the period of SGs. Figure 2 shows the distribution of pre-gain weeks when SGs occurred. SGs were distributed throughout the course of the intervention. The most common pre-gain weeks were two and six.

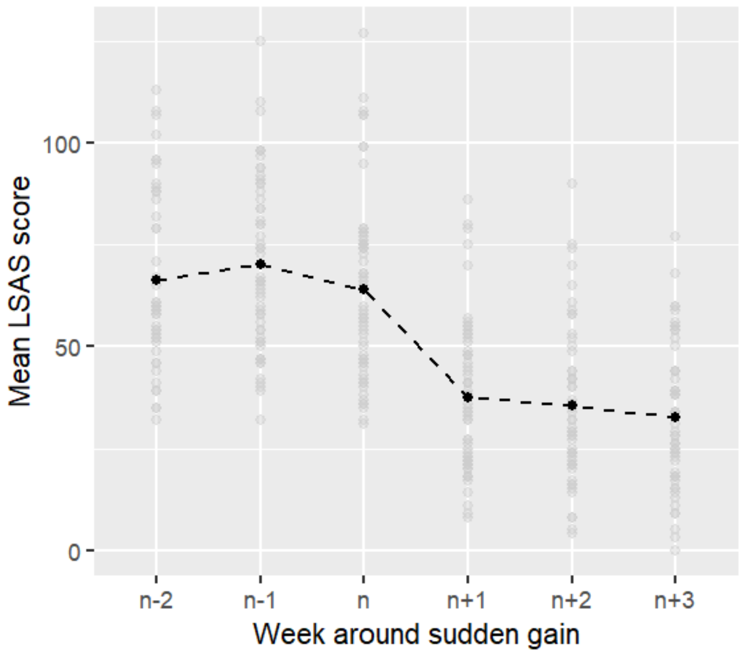


Figure 1. Mean LSAS scores around Sudden Gains.

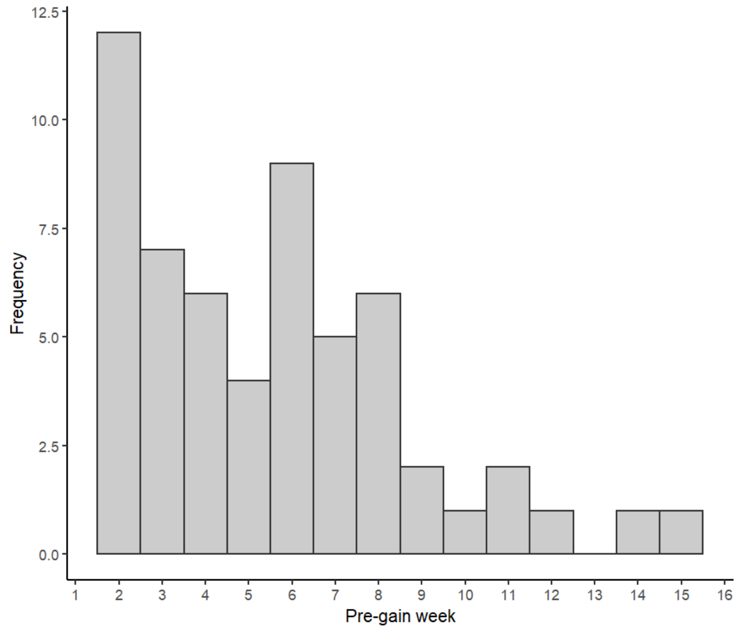


Figure 2. A Histogram of the pre-gain week (n).

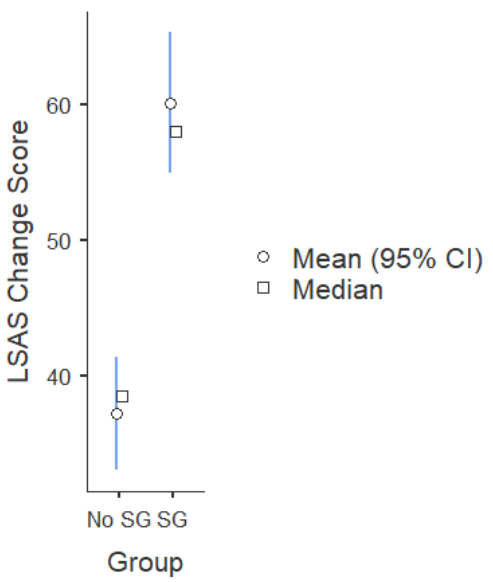
As iCT-SAD is delivered over 14 weeks (Clark et al., 2006), we examined the characteristics of SGs for those who have completed 14 or more sessions (n= 94). The number of SGs was 43 in 36 of them and the SG occurrence rate was 38.3%.

To examine the possibility that SGs might simply be the result of longer treatment duration, the average number of weeks of treatment between SG and no-SG groups were calculated. The average number of weeks for the SG and no-SG groups were 13.6 and 15.1, respectively. The Mann-Whitney U test indicated a significant difference between the number of weeks accessed across the two groups, $U(N_{SG} = 57, N_{no\text{-}SG} = 89)$, 1911, p = .01, suggesting that a ‘dose-response’ relationship was not found and that participants who experienced a SG had on average a slightly shorter treatment duration. The baseline LSAS scores for both SG and no-SG groups were not significantly different, p = .10.

SG and reduction in social anxiety

Two independent-samples *t*-tests of the LSAS change score between the start and end of intervention between group (SG/no-SG) were conducted. At post-intervention, it was found that the change in LSAS scores differed significantly across the two groups, $t(143) = 6.91$, $p < .001$, $d = 1.74$. At 3-month follow-up, the between-group difference remained significant, $t(119) = 5.03$, $p < .001$, $d = .92$. Taken together, participants who experienced a SG had significantly larger reduction in social anxiety at end of intervention and at follow-up. Figures 3 and 4 show the mean and median values in the two groups.

End Treatment



Follow-up

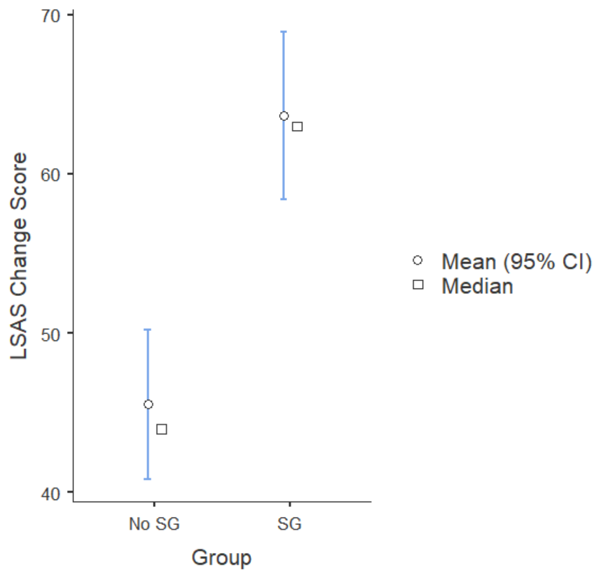


Figure 3 and Figure 4. Mean and median values of the two groups at post-intervention and 3-month follow-up.

Process variables around the period of SGs

Figure 5 shows the scores on participants' process data around the period of SGs. The end of intervention was denoted as week 14 as this was the median end of treatment timepoint.

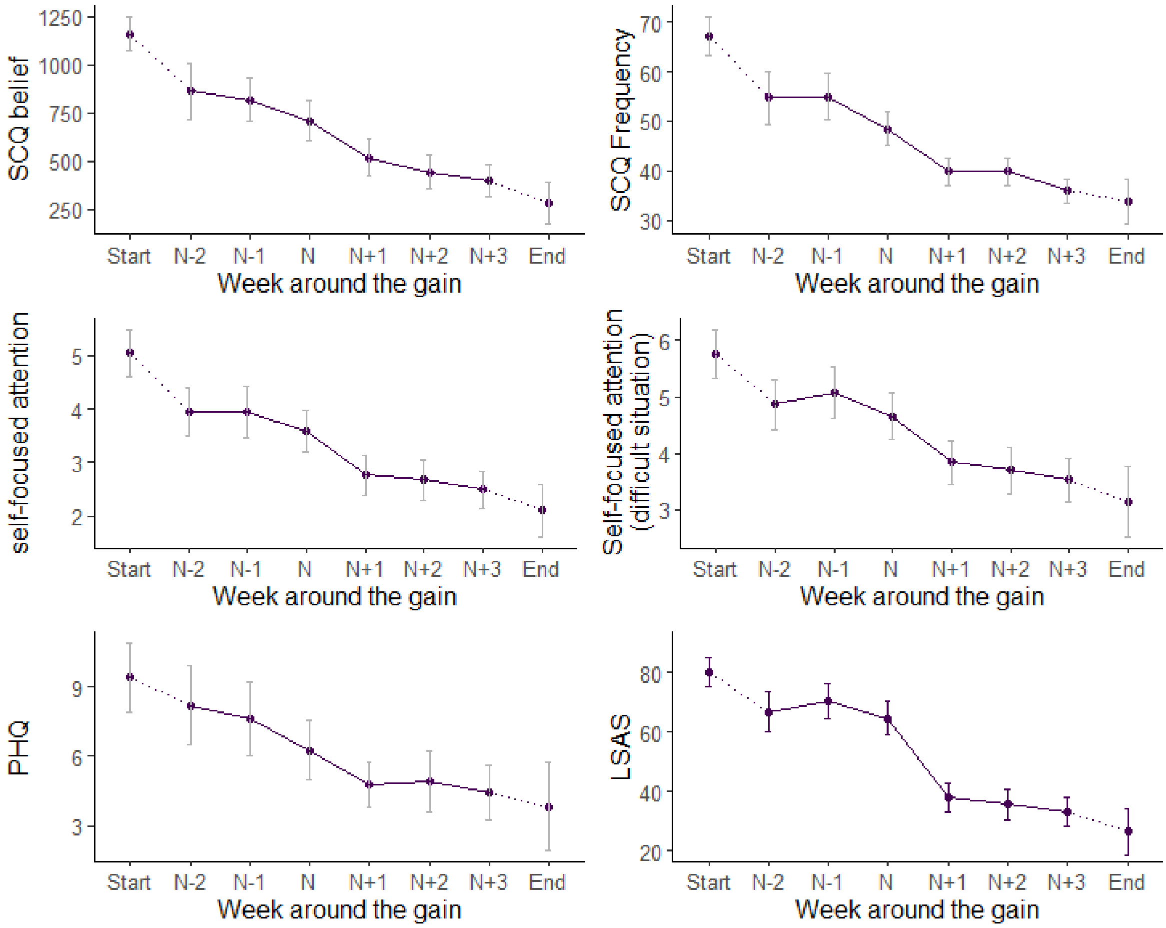


Figure 5. Social cognition, Self-focused attention, mood and social anxiety scores around the period of SGs.

Table 2 summarises the results of the linear mixed effects models. Bonferroni-adjusted pairwise linear contrasts indicated that all process variables except for mood significantly changed simultaneously with the gain (n to n+1). The frequency of negative social cognitions (SCQ frequency) also significantly declined in the interval prior to the SG (n-1 to n). Depressed mood did not significantly improve around the period of the gain.

Table 2. Summary of Contrasts in Linear Mixed effects Models Examining Process Measures around the periods of Sudden Gains.

Contrast	**Estimate**	**Standard Error**	**p(Bonferroni-adjusted)**	**p(unadjusted)**
		SCQ Belief		
n-2 vs n-1	-106.33	42.95	.15	.013
n-1 vs n	-92.32	39.27	.21	.019
n vs n+1	-194.65	38.37	<.001	<.001
n+1 vs n+2	-80.94	39.49	.44	.04
n+2 vs n+3	-30.43	40.62	1	.45
		SCQ Frequency		
n-2 vs n-1	-2.47	1.75	1	.16
n-1 vs n	-5.81	1.60	.003	<.001
n vs n+1	-8.64	1.56	<.001	<.001
n+1 vs n+2	-0.34	1.61	1	.83
n+2 vs n+3	-3.40	1.65	0.44	.04
		Self-focused attention (general)		
n-2 vs n-1	-0.20	0.23	1	.38
n-1 vs n	-0.30	0.21	1	.16
n vs n+1	-0.83	0.20	<.001	<.001
n+1 vs n+2	-0.11	0.21	1	.60
n+2 vs n+3	-0.13	0.22	1	.53
		Self-focused attention (difficult)		
n-2 vs n-1	0.13	0.25	1	.60
n-1 vs n	-0.40	0.23	.93	.08
n vs n+1	-0.86	0.22	.001	<.001
n+1 vs n+2	-0.12	0.23	1	.61
n+2 vs n+3	-0.16	0.24	1	.49
		PHQ		
n-2 vs n-1	-0.63	0.68	1	.35
n-1 vs n	-1.22	0.61	.51	.05
n vs n+1	-1.59	0.60	.09	.01
n+1 vs n+2	0.31	0.62	1	.61
n+2 vs n+3	-0.59	0.64	1	.36

Discussion

The study examined the occurrence and frequency of sudden gains (SG) in routine clinical practice with a relatively large sample size (n = 146), and explored (1) the presence of SGs and its effect on treatment outcomes, and (2) the temporal relationship between changes in process variables (negative social cognition, self-focused attention and mood) and SGs. There was clear evidence for SGs, and process variables generally changed contemporaneously with improvement in social anxiety.

The proportion of participants experiencing one of more SGs was 39% (57 participants out of 146 participants). This rate was comparable to the average SG occurrence rate of common mental health conditions (34.65%) in a meta-analysis (Shalom & Aderka, 2020). When compared to other studies of social anxiety treatments, the SG rate in this study was higher than Bohn et al. (2013) and Hofmann et al. (2006) where the rate was 22% and 19% respectively, but lower than in the previous study of iCT-SAD (51%) (Thew et al., submitted). Our study had a larger sample size than the other three studies, and when comparing like-for-like with Thew et al. (submitted), the lower SG rate might be due to the study occurring in a routine clinical setting rather than an RCT. When compared to the previous exploratory study, some participating therapists in this study had less experience delivering the intervention, they might have done less consolidation of key learning points during the phone calls (compared to the RCT therapists). Another possible reason for this discrepancy might be the restrictions due to the COVID-19 pandemic. Although one study on medical students with SAD found that the effect of CBT for SAD was sustained during the pandemic (Samantaray et al., 2022), COVID restrictions meant that social interactions were significantly reduced which limited opportunities for behavioural experiments. Participants might not have been able to experience a significant shift in their beliefs and anxiety by doing a single powerful experiment.

Participants who experienced SGs had a significantly larger decrease in social anxiety from baseline to end-of-treatment and to follow-up. The effect sizes were large. The findings were similar to Thew et al (submitted) but not Hofmann et al. (2006), where they did not find an effect of SG on treatment outcome at follow. One of the speculations was the group format used in the study might have a moderating and stabilising effect on the trajectory of treatment gains. Hofmann et al. (2006) hence questioned the external validity of this phenomenon and wondered whether those were fluctuations in their symptoms. Nevertheless, the systematic review and meta-analysis by Shalom & Aderka (2020) found an overall predictive effect of SGs across common mental health conditions. The difference could potentially be accounted for by the difference in intervention used – Hofmann et al., (2006) examined a face-to-face group therapy and the intervention used in this study was an internet-based individual intervention.

The study demonstrated that cognitive and attentional changes co-occurred with the gain, replicating the results from Thew et al. (submitted) in a routine setting. Using adjusted significance value, amongst the process variables examined, our current study may indicate that the frequency of negative self-cognition was the main process of change prior to sudden gain. These findings were slightly different from Thew et al. (submitted). They found a cumulative effect of SCQ-frequency (i.e. multiple significant decreases prior to and along with the gain) and a circumscribed effect on SCQ-belief (i.e. a significant decline along with the gain only). We only found significant reduction in frequency of negative self-cognition immediately prior to the gain. One reason that might account for the discrepancy was the use of Bonferroni correction, a conservative measure in this study, whereas Thew et al. (submitted) used unadjusted *p*-values due to the exploratory nature of the study. Nevertheless, taking the results from the two studies together, although we cannot be certain if the effect of cognitive change was cumulative or circumscribed around the gain, the results demonstrate an overall effect of cognitive change prior to SG. For mood, Thew et al. (submitted) found it to change simultaneously with the gain, but it was not significantly different around the period of gain in the present study.

When looking at the distribution of pre-gain week (Figure 2), weeks 2 had the highest occurrence of SGs. One possible point to note is that the current intervention was intensive in the first two weeks (i.e. two phone calls with the therapist and completion of all the core modules), which might result in sudden gains earlier in therapy. In Week 2, participants complete a behavioural experiment targeting self-focused attention and safety-seeking behaviours which may lead to large cognitive changes. In the only other study of sudden gains in iCT-SAD (Thew et al.,submitted), the modal pre-gain week was slightly later, occuring in week 4. Of note is that the current study had a larger participant size of 57 participants who experienced SGs versus 25 participants in Thew et al. (submitted). Nonetheless, the findings combined showed large symptom improvements early on in therapy.

Further efficacy and effectiveness studies are needed to ascertain the trajectory of change in these cognitive variables. In contrast, other studies such as Hofmann et al. (2006) did not find any evidence for cognitive changes preceding SG, and Bohn et al. (2013) found that cognitive changes did not precede SG but followed the gain which they suggested a possible ‘upward spiral’ effect (Tang & DeRubeis, 1999). We did not see any upward spiral effect apart from that of SCQ-belief subscale. One reason was that the measure used to identify SGs were different – this study used the LSAS whereas Bohn et al. (2013) used the Social Phobia Weekly Summary Scale (SPWSS).

Limitations

There was no control group in the routine setting, meaning we could not ascertain the extent of occurrence of SGs caused by natural fluctuations in the absence of treatment. Future studies could adopt a propensity-score case-control design. The measure of self-focused attention is a one-item measure, but it is widely adopted in studies on social anxiety. Reversal of SGs is an interesting concept to examine if it adversely impacts on recovery, but it is hard to draw firm conclusion as there were only three reversals in this study. Nevertheless, if this holds true in future studies, it may mean that iCT-SAD may result in individuals having more stable improvement. Finally, the extent to which causality can be inferred is limited, which is a general critique that SG studies face.

Implications and further research

The present results are consistent with the view that the occurrence of sudden gains may be clinically meaningful in the context of CT for SAD. Studies of individual patient trajectories have the potential to facilitate a better understanding of the mechanisms of change in psychological treatments for SAD. Further investigation of the specific therapeutic interventions occurring prior to SGs may help clarify potential mechanisms. Clinically, the findings suggest it may be helpful for therapists to use routine outcome measures to track changes in process variables and the presence of SGs, harnessing the SGs to ensure continuous gains, such as reinforcing cognitive changes and attentional changes.

This study provides further evidence for the occurrence of SGs in routine clinical primary care setting, replicating the previous findings of Thew et al. (submitted) with a larger sample size. Although the SG occurrence rate was lower than the previous RCT using the same online programme, it was comparable to the average occurrence rate found in the systematic review (Shalom & Aderka, 2020). Sudden gains seem to be a common phenomenon across various therapy modalities and mental health conditions (Shalom & Aderka, 2020), and studies have compared sudden gains in different modalities for SAD, such as group cognitive behavioural therapy versus group psychotherapy (Thorisdottir et al., 2018). Therefore, it seems that there may be common processes leading to SGs across all modalities and disorders. However, in this study, SGs occurred at earlier points in therapy than other interventions. Thus it may be of clinical interest for future studies to compare how the nature, content, type and intensity of the intervention may impact on sudden gains and the processes around the phenomenon. This will facilitate the exploration of unique processes around SGs. We found that reductions in negative social cognitions preceded SG and that changes in the degree of belief in these cognitions continued after the gain. Future studies could evaluate whether reductions in the use of safety behaviours , as described in the cognitive model, show a relationship with SG.

Leveraging the digital nature of the therapy, the ecological momentary assessment (EMA) technique (Shiffman et al., 2008) could also be a helpful method to monitor real-time behavioural changes. To increase the confidence in the causal relationship between cognitive change and sudden gain, experimental paradigms such as dismantling design can be used. Qualitative research on meaningful moments identified by individuals would also help to triangulate the findings. This may contribute to understanding the mechanisms of sudden gains examined by quantitative studies and what such ‘lightbulb moments’ mean to individuals. It would be meaningful to examine the magnitude of the cognitive or attentional change rather than simply examining the existence of change prior to the gain.

Reference

Aderka, I. M., Anholt, G. E., van Balkom, A. J. L. M., Smit, J. H., Hermesh, H., & van Oppen, P. (2012). Sudden Gains in the Treatment of Obsessive-Compulsive Disorder. *Psychotherapy and Psychosomatics*, *81*(1), 44–51. https://doi.org/10.1159/000329995

Bohn, C., Aderka, I. M., Schreiber, F., Stangier, U., & Hofmann, S. G. (2013). Sudden gains in cognitive therapy and interpersonal therapy for social anxiety disorder. *Journal of Consulting and Clinical Psychology*, *81*(1), 177–182. https://doi.org/10.1037/a0031198

Bruce, S. E., Yonkers, K. A., Otto, M. W., Eisen, J. L., Weisberg, R. B., Pagano, M., Shea, M. T., & Keller, M. B. (2005). Influence of psychiatric comorbidity on recovery and recurrence in generalized anxiety disorder, social phobia, and panic disorder: A 12-year prospective study. *American Journal of Psychiatry*, *162*(6), 1179–1187. https://doi.org/10.1176/appi.ajp.162.6.1179

Clark, D. M. (2005). *Three questionnaires for measuring the central constructs in the cognitive model of social phobia: preliminary analysis.* [Unpublished manuscript]. Department of Experimental Psychology, University of Oxford. www.oxcadatresources.com.

Clark, D.M. et al. *Implementation of internet-delivered cognitive therapy for social anxiety disorder in routine clinical practice: the OVERCOME-SAD study.* Department of Experimental Psychology, University of Oxford. [Manuscript in preparation].

Clark, D. M., Wild, J., Warnock-Parkes, E., Stott, R., Grey, N., Thew, G., & Ehlers, A. (2022). More than doubling the clinical benefit of each hour of therapist time: A randomised controlled trial of internet cognitive therapy for social anxiety disorder.

Psychological Medicine, 1–11. Cambridge Core. https://doi.org/10.1017/S0033291722002008

Clark, D. M., Ehlers, A., Hackmann, A., McManus, F., Fennell, M., Grey, N., Waddington, L., & Wild, J. (2006). Cognitive therapy versus exposure and applied relaxation in social phobia: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, *74*(3), 568–578. https://doi.org/10.1037/0022-006X.74.3.568

Clark, D. M., & Wells, A. (1995). A cognitive model of social phobia. In R. G. Heimberg, M. Liebowitz, D. A. Hope, & F. Schneier (Eds.), *Social phobia: Diagnosis, Assessment, and Treatment* (pp. 69-93). New York: Guilford Press.

Connor, K. M., Davidson, J. R. T., Churchill, L. E., Sherwood, A., Weisler, R. H., & Foa, E. (2000). Psychometric properties of the Social Phobia Inventory (SPIN): New self-rating scale. *The British Journal of Psychiatry*, *176*(4), 379–386. https://doi.org/10.1192/bjp.176.4.379

Hofmann, S. G., Schulz, S. M., Meuret, A. E., Moscovitch, D. A., & Suvak, M. (2006). Sudden Gains During Therapy of Social Phobia. *J Consult Clin Psychol*, *74*(4), 687–697. https://doi.org/10.1037/0022-006X.74.4.687

Jacobson, N. S., & Truax, P. (1992). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Methodological Issues & Strategies in Clinical Research.*, 631–648. https://doi.org/10.1037/10109-042

Kampmann, I. L., Emmelkamp, P. M. G., & Morina, N. (2016). Meta-analysis of technology-assisted interventions for social anxiety disorder. *Journal of Anxiety Disorders*, *42,* 71–84. https://doi.org/10.1016/j.janxdis.2016.06.007

Kazdin, A. E. (2007). Mediators and Mechanisms of Change in Psychotherapy Research. *Annual Review of Clinical Psychology, 3*(1), 1–27. https://doi.org/10.1146/annurev.clinpsy.3.022806.091432

Kelly, M. A. R., Roberts, J. E., & Ciesla, J. A. (2005). Sudden gains in cognitive behavioral treatment for depression: When do they occur and do they matter? *Behaviour Research and Therapy*, *43*(6), 703–714. https://doi.org/10.1016/j.brat.2004.06.002

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606–613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x

National Health Service. (2019). *NHS Long Term Plan*. https://www.longtermplan.nhs.uk/.

Pilling, S., Mayo-Wilson, E., Kew, K. M., Taylor, C., Clark, D. M., Afgan, S., Anigbogu, B., Armstrong, P., Bennett, M., Cartwright-hatton, S., Creswell, C., Dix, M., Hanlon, N., Leggett, K., Malizia, A. L., Satrettin, J., Stephens, K., Stockton, G., & Stopa, S. (2013). Recognition, assessment and treatment of social anxiety disorder: Summary of NICE guidance Article Published Version. *Bmj.Com*. https://doi.org/10.1136/bmj.f2541

Pinheiro, J., Bates, D., DebRoy, S., & Sarkar, D. (2018). R Core Team (2018) nlme: Linear and nonlinear mixed effects models. R package version 3.1-131.1. *R Software*. Retrieved from https://CRAN.R-project.org/package=nlme.

R Core Team (2021) R: a language and environment for statistical computing, version 4.1.2. R Foundation for Statistical Computing, Vienna. https://www.R-project.org/

Rapee, R. M., & Heimberg, R. G. (1997). A cognitive-behavioral model of anxiety in social phobia. *Behaviour Research and Therapy*, *35*(8), 741–756. https://doi.org/10.1016/S0005-7967(97)00022-3

Salkovskis, P. M. (1991). The Importance of Behaviour in the Maintenance of Anxiety and Panic: A Cognitive Account. *Behavioural Psychotherapy*, *19*(1), 6–19. https://doi.org/10.1017/S0141347300011472

Samantaray, N. nath, Kar, N., & Mishra, S. R. (2022). A follow-up study on treatment effects of cognitive-behavioral therapy on social anxiety disorder: Impact of COVID-19 fear during post-lockdown period. *Psychiatry Research*, *310*, 114439. https://doi.org/10.1016/j.psychres.2022.114439

Shalom, J. G., & Aderka, I. M. (2020). A meta-analysis of sudden gains in psychotherapy: Outcome and moderators. *Clinical Psychology Review*, *76*, 101827. https://doi.org/10.1016/j.cpr.2020.101827

Shiffman, S., Stone, A. A., & Hufford, M. R. (2008). Ecological Momentary Assessment. *Annual Review of Clinical Psychology*, *4*(1), 1–32. https://doi.org/10.1146/annurev.clinpsy.3.022806.091415

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Archives of Internal Medicine*, *166*(10), 1092–1097. https://doi.org/10.1001/archinte.166.10.1092

Stott, R., Wild, J., Grey, N., Liness, S., Warnock-Parkes, E., Commins, S., Readings, J., Bremner, G., Woodward, E., Ehlers, A., & Clark, D. M. (2013). Internet-Delivered Cognitive Therapy for Social Anxiety Disorder: A Development Pilot Series. *Behavioural and Cognitive Psychotherapy*, *41*(4), 383–397. Cambridge Core. https://doi.org/10.1017/S1352465813000404

Tang, T. Z., & DeRubeis, R. J. (1999). Sudden Gains and Critical Sessions in Cognitive-Behavioral Therapy for Depression. *Journal of Consulting and Clinical Psychology*, *67*(6), 894–904. https://doi.org/10.1037/0022-006X.67.6.894

Tang, T. Z., DeRubeis, R. J., Beberman, R., & Pham, T. (2005). Cognitive Changes, Critical Sessions, and Sudden Gains in Cognitive-Behavioral Therapy for Depression. *Journal of Consulting and Clinical Psychology*, *73*(1), 168–172. https://doi.org/10.1037/0022-006X.73.1.168

Tang, T. Z., DeRubeis, R. J., Hollon, S. D., Amsterdam, J., & Shelton, R. (2007). Sudden Gains in Cognitive Therapy of Depression and Depression Relapse/Recurrence. *J Consult Clin Psychol*, *75*(3), 404–408. https://doi.org/10.1037/0022-006X.75.3.404

Thew, G. R. (2020). IAPT and the internet: The current and future role of therapist-guided internet interventions within routine care settings. *The Cognitive Behaviour Therapist*, *13*, e4. Cambridge Core. https://doi.org/10.1017/S1754470X20000033

Thew, G.R., Ehlers, A., & Clark, D.M. *Sudden gains in face-to-face and internet-based Cognitive Therapy for Social Anxiety Disorder.* Behaviour Research and Therapy. [Manuscript submitted for publication]. Department of Experimental Psychology, University of Oxford.

Thew, G. R., Kwok, A. P. L., Lissillour Chan, M. H., Powell, C. L. Y. M., Wild, J., Leung, P. W. L., & Clark, D. M. (2022). Internet-delivered cognitive therapy for social anxiety disorder in Hong Kong: A randomized controlled trial. *Internet Interventions*, *28*, 100539. https://doi.org/10.1016/j.invent.2022.100539

Thorisdottir, A. S., Tryggvadottir, A., Saevarsson, S. T., & Bjornsson, A. S. (2018). Brief report: Sudden gains in cognitive-behavioral group therapy and group psychotherapy for social anxiety disorder among college students. *Cognitive*

Behaviour Therapy, *47*(6), 462–469. https://doi.org/10.1080/16506073.2018.1466909

Wiedemann, M., Thew, G. R., Stott, R., & Ehlers, A. (2020). suddengains: An R package to identify sudden gains in longitudinal data. *PLOS ONE*, *15*(3), e0230276. https://doi.org/10.1371/journal.pone.0230276

Wind, T. R., Rijkeboer, M., Andersson, G., & Riper, H. (2020). The COVID-19 pandemic: The 'black swan'for mental health care and a turning point for e-health. *Internet Interventions*, *20*. https://doi.org/10.1016/j.invent.2020.100317

Executive summary

Background

Digitalising psychological interventions in the National Health Service (NHS) has been a goal set out in the NHS Long Term plan (NHS, 2019). In addition to examining overall intervention effectiveness, using individual-level analysis can give us further insights into the mechanisms into how and why psychological interventions work. Social anxiety disorder (SAD) is a persistent and debilitating mental health condition if left untreated. Researching into internet-delivered interventions for SAD thus seems timely and important.

A UK-developed, therapist-guided internet Cognitive Therapy intervention for social anxiety disorder (iCT-SAD) has shown to be effective in a randomised controlled trial (Clark et al., 2022). A recent study investigated sudden and stable improvements in social anxiety using this treatment (Thew et al., submitted). These improvements are known in the literature as “sudden gains”. Examining the trajectory of clinical improvement and how different cognitive processes relate to sudden gains is a research area of interest. In particular, it is crucial to find out if such a phenomenon is found outside clinical trials in everyday clinical practice. It was therefore the aim of the current study to replicate the approach of the previous study in a new setting. The current study therefore investigated sudden gains in iCT-SAD within the Improving Access to Psychological Therapies (IAPT) settings.

Methods

The study was a secondary data analysis from a larger implementation study. One hundred and ninety-three participants took part. Liebowitz Social Anxiety Scale was the primary measure of social anxiety. Process variables examined included negative social cognition, self-focused attention and depressed mood.

Main findings

Frequency of Sudden Gains

After removing those with missing data, data from 146 participants were retained. A total of 70 sudden gains were found among 57 participants. The proportion of participants experiencing one of more SGs was 39%. This finding was smaller than the previous study (51%), but is comparable to the findings from a systematic review and meta-analysis of sudden gains in common mental health conditions.

Sudden Gains and Social Anxiety

Individuals who experienced sudden gains had a larger reduction in social anxiety symptoms at both the end of intervention and at the three-month follow-up point relative to those without a sudden gain. The effect sizes were both large, suggesting that SGs were strongly related to better treatment outcomes.

Cognitive/ Mood Changes and Sudden Gains

All process variables except for mood significantly changed simultaneously with the gain. The only variable that significantly changed prior to the gain was the frequency of negative self-beliefs. Our findings are consistent with the previous study with the exception of negative self-belief. The previous study found significant changes in negative self-belief preceding the gain whereas this study only found changes contemporaneously with the gain. Further research is needed to understand the trajectory of the cognitive change.

Conclusions

Sudden gains were found within iCT-SAD when delivered in routine practice and were found to be related to larger symptom improvement. Clinically, therapists can focus on monitoring and targeting negative cognitions as well as harness sudden gains in therapy to help sustain long-lasting change.

Reflective narrative

The choice of my research projects was informed by my special interest in refugee trauma and eating disorders, and my pre-training experience in evaluating internet-delivered therapies.

Systematic Review

Supervisors and clinicians often say that therapy could not start until the person is settled. However, in the last few years, more conflicts have been happening globally which made me wonder if this means that therapy is not feasible for these individuals. Researching on the evidence of psychological interventions in individuals who experience ongoing traumatic events fits with my value of social justice.

I learnt a great deal about maintaining focus in the review, because it was hard to define 'continued threat'. For example, the conflict situations in Ukraine and South Africa are different but they may both be understood as continued threat. Refugees who experience 'daily hassles' living in high income countries face challenges (e.g. due to their refugee status and fear of deportation; adjustment to a new culture and finding stable accommodation) and this can be viewed as continued threat. However, these questions cannot be answered in one systematic review within the word limit and timeframe, and thus I had to make a decision on what to include.

During the review and write-up process, a similar paper was published in one of the most influential journals in clinical psychology, and the authors claimed they were the first in the field to research the topic. That was a shock for me and I learnt about the reality of the pace of academic research in terms of being 'scooped'. On the other hand, it felt reassuring to me as well as the topic I chose was worthwhile to be published in a high-impact journal. The process of carrying out the review has shaped my thinking and sparked my interest in looking into the topic further in the future. I would be interested in trying to disentangle whether present or past-focused approaches work better, for example. I have learnt to maintain a critical stance in examining research in non-western contexts and I feel more aware of how to work in a culturally-sensitive way.

Service Improvement Project

Researching inpatients' experiences of ward round has been in my mind since observing a ward round, where I observed patients crying during the meetings. How shared decision-making can be achieved is a challenge due to the high level of physical health risk, the perceived ego-syntonic nature of the disorder, and the neurobiological effects of being underweight that impact on patient's ability to make decisions.

I was interested in whether the topic of ward round piqued service users' interest. I had since discussed the topic with one of the members from the partners in experience group at the DClinPsy training course and two former patients of an ED service. The COVID-19 pandemic brought challenges to the project. The ward was closed to visitors and staff turnover increased: my external supervisor changed three times. Research was less of a priority due to the service being in a business continuity mode, which meant I did not receive as many staff responses as I anticipated. Although the participant size was small (six patients and seven staff members), the project took longer to carry out than either of the other two due to delays in the various phases from data collection, analyses (qualitative feedback and quantitative ethnographical analyses of ward rounds) and application. I felt very grateful, and learnt a lot from the patients' valuable suggestions they made about how the service could be improved.

Main Research Project

I was interested in continuing to research on internet interventions having been a research assistant on a trial on online CBT for binge eating disorders. I also wanted to learn more advanced statistical techniques. My first clinical placement was in an IAPT service where I met a psychologist with a research interest in digital treatments. However, due to restrictions from funders and the fact that the data of the digital treatments were held by the wider research group, it took quite a few iterations of the research proposal in order for the final topic to be agreed. In fact, the topic was only agreed four months before my submission deadline, which meant I had to intensively learn how to use the R software in order to familiarise with programme and the statistics. Doing statistical analyses and using R were outside of my comfort zone. Nevertheless, despite the challenges, I am now glad I know how to use R; I realised what a powerful research tool it is. I have also learnt to analyse the data with a tight deadline without compromising the research rigor and quality. My supervisors have been very helpful and supportive throughout the process.

Clinically, I have learnt to be more aware of sudden gains and meaningful cognitive changes in therapy, and to pay attention to routine data where sudden gains occur. Although the research was on social anxiety, I am now interested in understanding trajectories of change in other psychological conditions. I would like to know more about the phenomena in younger populations.

General reflections

I am grateful to have the opportunity to carry out research in areas I am interested in and which fit my learning needs. I am also grateful for the expertise of my supervisors and their help when we needed to tighten the research questions and analyses. I have learnt a great deal from them and will carry these skills forward with me in my future career. I hope to carry out more service user involvement work and to work with refugees. Apart from learning about effectiveness, my systematic review taught me to consider feasibility in research (as most included studies were conducted in low-resource, conflict-ridden settings). I look forward to disseminating the findings at my clinical placement, to consider how we can work with refugees who are still facing ongoing threat.

Acknowledgements

Thank you to all my supervisors, Paul, Myra, Graham and David for all their time and guidance in the design, analysis and write-up of my three projects.

Thank you to Sarah, my course tutor, for always being supportive and prompt in her responses when I have any questions and concerns.

I thank all the kind participants and former patients who gave up their time and to take part in the research me, and thank you for believing in the value of the research as well.

I would also like to thank the cohort for their practical and moral support throughout the DClinPsy journey despite the challenges brought by COVID-19.

Last but not least, I can’t thank my partner Phil enough for his programming and research knowledge, as well as his calming presence especially during late nights when we were both working on our own research.

Appendix A: Instructors for authors of the proposed journals

Clinical Psychology: Science and Practice

The journal publishes papers from all theoretical perspectives in clinical psychology and considers all methods and approaches to research. Manuscripts covering theory, psychopathology, assessment, psychotherapy, process research, outcome research, professional issues, service delivery, education, and training, related ethical issues, and similar topics are appropriate for the journal.

On occasion, empirical papers (e.g., surveys) primarily concerned with broad education and/or clinical research are published if directly related to the society's mission and projects. However, papers describing individual research studies or investigations are generally not considered for peer review. Theoretical/clinical descriptions without a sound empirical basis are also not appropriate for the journal. If unsure, authors are encouraged to directly contact the editor-in-chief.

Manuscripts are expected to conclude with a clear summary of what is known on the topic, as well as a section on the concrete and practical application of that knowledge in clinical practice. The journal is always seeking suggestions for special issues or sections that contain articles related to a similar topic.

Clinical Psychology: Science and Practice welcomes submissions. Please refer to the submission guidelines section for details on types of submissions and editorial requirements.

Disclaimer: APA and the editors of *Clinical Psychology: Science and Practice* assume no responsibility for statements and opinions advanced by the authors of its articles.

Manuscripts should be prepared according to the 7th edition of the *Publication Manual of the American Psychological Association*. APA Style and Grammar Guidelines for the 7th edition are available.

Review APA's Journal Manuscript Preparation Guidelines before submitting your article.

Double-space all copy. Other formatting instructions, as well as instructions on preparing tables, figures, references, metrics, and abstracts, appear in the *Manual*. Instructions regarding the preparation of display equations, computer code, and tables appear at the end of these submission instructions.

Additional guidance on APA Style is available on the APA Style website.

Authors who think that their submission may benefit from additional academic writing or language editing should seek out such services at their host institutions, engage with colleagues and subject matter experts, and/or consider several vendors that offer discounts to APA authors.

Please note that APA does not endorse or take responsibility for the service providers listed. It is strictly a referral service.

Use of such service is not required for publication in an APA journal and does not guarantee selection for peer review, manuscript acceptance, or preference for publication.

Page limits

There is no word count, but the maximum page limit is 50 pages, double spaced, including all references, figures, and tables.

Author contribution statements using CRediT

The APA *Publication Manual (7th ed.)* stipulates that "authorship encompasses…not only persons who do the writing but also those who have made substantial scientific contributions to a study." In the spirit of transparency and openness, *CP:SP* has adopted the Contributor Roles Taxonomy (CRediT) to describe each author's individual contributions to the work. CRediT offers authors the opportunity to share an accurate and detailed description of their diverse contributions to a manuscript.

Public health significance statements
CPSP publishes public health significance statements for each article (not the commentaries). These are designed to increase dissemination and usage by larger and diverse audiences, such as other health professionals and the lay public.
These 2-3 sentence statements should be user-friendly and geared to be informative and useful for all types of readers. They would include a basic message regarding the importance of the paper’s topic and the essential findings with regard to public health issues. If the manuscript is accepted for publication the statements will be boxed on the first page of the article, beneath the abstract, for immediate recognition.
Authors should include such statements on the abstract page below the keywords. Please refer to the Guidance for Translational Abstracts and Public Significance Statements page to help you write this text.

Eating disorders

We publish four types of articles: 1) Research Articles, 2) Brief Reports, 3) Last Word, 4) How I Practice.

1) Research Articles
These contributions report substantive research that is novel, definitive, or complex enough to require a longer communication.
• Word Limit: 6000 (including abstract, references, tables or figures)
• Abstract: 200 words.
When preparing their manuscript, authors should follow the IMRaD guidelines (Introduction, Methods, Results, and Discussion), which are recommended by the International Committee of Medical Journal Editors (ICMJE) (J. Pharmacol. Pharmacother. 2010, 1, 42–58). When preparing the Methods section, authors should refer to the Editorial Policy on Sample Size and Statistics.
2) Brief Reports.
This contribution type is intended for manuscripts describing studies with straightforward research designs, pilot or "proof of concept" studies, and replications.
• Word Limit: 2,500 (including abstract, references, tables or figures).
• Abstract: 150 words.
When preparing brief reports, authors should follow the IMRaD guidelines and comply with the Editorial Policy on Sample Size and Statistics.
3) Last Word
This contribution type is intended for manuscripts written in a more editorial tone, generally first person, addressing innovation or debate in the field. Last Word articles should be theoretical, practice, or policy pieces that integrate recent and rigorous research.

• Word Limit: 1000-3000 (including abstract, references, tables or figures).
• Abstract: 150 words.
4) How I Practice
Last Word pieces are written in the first person, and are intended to explore a specific area of treatment, practice technique, or treatment strategy. These are not intended to be case studies.
• Word Limit: 1000-3000 (including abstract, references, tables or figures).
• Abstract: 150 words.

Formatting and Templates

Papers may be submitted in Word format. Figures should be saved separately from the text. To assist you in preparing your paper, we provide formatting template(s).

Word templates are available for this journal. Please save the template to your hard drive, ready for use.

If you are not able to use the template via the links (or if you have any other template queries) please contact us here.

The journal's peer-review process follows the journal program guidelines of the American Psychological Association (APA), Publication Manual, 6th Edition. As this manual is updated, Eating Disorders will adjust its processes to accommodate alterations made to this manual. The APA website include a range of resources, such as An overview of the Publication Manual of the American Psychological Association, Sixth Edition; and free tutorials on APA Style basics and an APA Style Blog.
Note, manuscripts submitted that are not in APA style will not be sent to reviewers and will be returned to the authors. All submissions will be screened using duplication software. All manuscripts with scores higher than 12% will be returned to the authors for editing to reduce replicated material.
The text should be presented in the following order:
I. Title Page
i. The full names of all authors
ii. The authors' institutional affiliations where the work was conducted, with a footnote for an author's present address if different to where the work was carried out
iii. Acknowledgements
II. Abstract and Keywords
The abstract should be running text without subheadings.
Please provide five to seven keywords. Keywords should be taken from those recommended by the US National Library of Medicine's Medical Subject Headings (MeSH) browser list at www.nlm.nih.gov/mesh
III. Clinical Implications
Clinical Implications are required for each article, in keeping with our journal's mission of publishing research that is clinically applicable and practical. They consist of a short list of bullet points that convey the core findings and clinical implications of the article. Authors should use the file designation 'Supplementary Material – not for review' as the file designation for uploading their Clinical Implications and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).
IV. Blinded Manuscript
i. Title
ii. A short running title of less than 40 characters
iii. Main text: double-spaced, with numbered manuscript pages
V. References
References in all manuscripts should follow the style of the American Psychological Association (6th edition). Please note APA referencing style requires that a Digital Object Identifier (DOI) be provided for all references where available.
VI. Tables, Figures, and Supplemental Material
Each table and figure should have a title and footnotes. Tables and figures should not be embedded in the text, but should be included as separate sheets or files. A short descriptive title should appear above each table with a clear legend and any footnotes suitably identified below. All units must be included. Figures should be completely labeled, taking into account necessary size reduction. Captions should be typed, double-spaced, on a separate sheet.

Official Journal of the *European Society for Research on Internet Interventions (ESRII)* and the *International Society for Research on Internet Interventions (ISRII)*.

The aim of *Internet Interventions* is to publish scientific, peer-reviewed, high-impact research on Internet interventions and related areas.

Internet interventions

Internet Interventions welcomes papers on the following subjects:

• Intervention studies targeting the promotion of mental health and featuring the Internet and/or technologies using the Internet as an underlying technology, e.g. computers, smartphone devices, tablets, sensors
• Implementation and dissemination of Internet interventions
• Integration of Internet interventions into existing systems of care
• Descriptions of development and deployment infrastructures
• Internet intervention methodology and theory papers
• Internet-based epidemiology
• Descriptions of new Internet-based technologies and experiments with clinical applications
• Economics of internet interventions (cost-effectiveness)
• Health care policy and Internet interventions
• The role of culture in Internet intervention
• Internet psychometrics
• Ethical issues pertaining to Internet interventions and measurements
• Human-computer interaction and usability research with clinical implications
• Systematic reviews and meta-analysis on Internet interventions

Types of article

Contributions falling into the following categories will be considered for publication:

- Original papers 6000 words for including tables and references
- Reviews 9000 words for including tables and references
- Short communications 1000-1500 words (excluding tables, figures and references)
- Letters to the Editor 600-800 words, 10 references, 1 figure or table

Please ensure that you select the appropriate article type from the list of options when making your submission. Authors contributing to special issues should ensure that they select the special issue article type from this list.

Contact details for submission

Authors may visit our support centre Support Center for queries concerning the submission process, manuscript status, or journal procedures.

Submission checklist

You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:
• E-mail address
• Full postal address

All necessary files have been uploaded:
Manuscript:
• Include keywords
• All figures (include relevant captions)
• All tables (including titles, description, footnotes)
• Ensure all figure and table citations in the text match the files provided
• Indicate clearly if color should be used for any figures in print
Graphical Abstracts / Highlights files (where applicable)
Supplemental files (where applicable)

Further considerations
• Manuscript has been 'spell checked' and 'grammar checked'
• All references mentioned in the Reference List are cited in the text, and vice versa
• Permission has been obtained for use of copyrighted material from other sources (including the Internet)
• A competing interests statement is provided, even if the authors have no competing interests to declare
• Journal policies detailed in this guide have been reviewed
• Referee suggestions and contact details provided, based on journal requirements

Article structure

Subdivision - numbered sections
Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

Introduction
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

Material and methods
Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

Theory/calculation
A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

Results
Results should be clear and concise.

Discussion
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Conclusions
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

Appendices
If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

Appendix B Search Strategy

Database: Embase <1974 to 2021 Week 17>, Ovid MEDLINE(R) and Epub Ahead of Print, In-Process, In-Data-Review & Other Non-Indexed Citations and Daily <1946 to May 05, 2021>, APA PsycInfo <1806 to April Week 4 2021>
Search Strategy:
----
1 (Continuous Traumatic Stress or Continuous Stress or continuous terror or continuous violence or continuous threat or Continuous trauma or continuous conflict or ongoing threat or ongoing terror or ongoing violence or ongoing conflict or prolonged exposure or chronic violence or chronic threat or Psychological Stress or chronic traumatic stress or ongoing Traumatic Stress or CTS or ongoing trauma).tw. (80646)
2 (Domestic Violence or Domestic Abuse or Intimate Partner Violence or Battered Female* or battered wom*n or battering or spouse abuse or Family Violence or Partner Violence or IPV or Violent Crime or Terrorism or Torture* or Violen* or community violen* or structured violence or War* or Conflict* or Terror or Threat*).tw. (2448235)
3 (Psychological Therap* or Psychotherap* or Treat* or Intervention* or Therap* or Counselling or Trauma Focused Cognitive Behavio* Therap* or Narrative Exposure Therap* or Cognitive Behavio* Therap* or CBT or Exposure Therap* or Narrative Therap* or Prolonged Exposure Therap* or Behavio* Therap* or Narrative* or Psychosocial or Psychoeducation or Community Intervention* or Psychosocial Intervention*).tw. (19904405)
4 1 and 2 and 3 (3264)
5 exp animals/ not humans.sh. (32493164)
6 (((Continuous Traumatic Stress or Continuous Stress or continuous terror or continuous violence or continuous threat or Continuous trauma or continuous conflict or ongoing threat or ongoing terror or ongoing violence or ongoing conflict or prolonged exposure or chronic violence or chronic threat or Psychological Stress or chronic traumatic stress or ongoing Traumatic Stress or CTS or ongoing trauma) and (Domestic Violence or Domestic Abuse or Intimate Partner Violence or Battered Female* or battered wom*n or battering or spouse abuse or Family Violence or Partner Violence or IPV or Violent Crime or Terrorism or Torture* or Violen* or community violen* or structured violence or War* or Conflict* or Terror or Threat*) and (Psychological Therap* or Psychotherap* or Treat* or Intervention* or Therap* or Counselling or Trauma Focused Cognitive Behavio* Therap* or Narrative Exposure Therap* or Cognitive Behavio* Therap* or CBT or Exposure Therap* or Narrative Therap* or Prolonged Exposure Therap* or Behavio* Therap* or Narrative* or Psychosocial or Psychoeducation or Community Intervention* or Psychosocial Intervention*)) not (animals not humans)).tw. (3202)
7 remove duplicates from 6 (2099)

Appendix C
Disputed studies that were excluded

Greene et al 2021
The criteria were people experiencing IPV in the last 12 months, but it was uncertain of the violence was still ongoing or recent but ceased.

Jordans et al 2020
The intervention was stated as a secondary prevention and not every participant experienced elevated level of distress. There was not enough description on ongoing conflict.

Appendix D - Quality appraisal

Bryant et al. (2011)	Yes/no/ can't tell (comments)
S1. Are there clear research questions?	There was no waitlist control (active control).
S2. Do the collected data allow to address the research questions?	No - Study was only 50% powered.
2.1. Is randomization appropriately performed?	Yes - random number system administered by an independent person.
2.2. Are the groups comparable at baseline?	Yes - comparable in age, gender, religion, number of therapy sessions, pre-treatment psychopathology.
2.3. Are there complete outcome data?	Yes.
2.4. Are outcome assessors blinded to the intervention provided?	Yes - assessors were blinded.
2.5 Did the participants adhere to the assigned intervention?	Yes – there was no dropout. Three patients did not receive in-vivo exposure which was an acceptable percentage.

Wagner et al. (2012)	Yes/ no/ can't tell/ comments
S1. Are there clear research questions?	Yes – pilot study, internet treatment due to difficult access into the region with the violence
S2. Do the collected data allow to address the research questions?	
4.1. Is the sampling strategy relevant to address the research question?/	Yes – the researchers recruited through Radio, TV, newspaper, however, it might be useful to target clinics or hospitals rather than media to reach the clinical population.
4.2. Is the sample representative of the target population?	No - Few males (2 males), small sample size (15).
4.3. Are the measurements appropriate?	Yes – validated questionnaires were used.
4.4. Is the risk of nonresponse bias low?	15 completed with 40 recruited, 12% doubted neutrality of website (CIA), 12 % poor internet, 76% lost to follow-up. Unknown fidelity of the therapists.
4.5. Is the statistical analysis appropriate to answer the research question?	Yes – t-test was used.

Knaevelsrud et al. (2015)	Yes/no/ can't tell /comments
S1. Are there clear research questions?	Yes – internet treatment due to difficult access into the region with the violence.

S2. Do the collected data allow to address the research questions?	
2.1. Is randomization appropriately performed?	Yes - Randomization was based on a computer-generated randomization list
2.2. Are the groups comparable at baseline?	Yes comparable regarding age, gender, professional status, types of trauma, time since trauma, treatment history
2.3. Are there complete outcome data?	No – relative large dropout rate though internet treatment might suffer from a higher dropout than face to face treatment Whenever posttreatment and follow-up scores were not available for a participant, the last observation data were carried forward 79 allocated to treatment condition, but 47 (59%) completed intervention, 28 completed follow up Waitlist (n= 80), 47 completed.
2.4. Are outcome assessors blinded to the intervention provided?	Can't tell - as they did not mention; Randomization was based on a computer-generated randomization list
2.5 Did the participants adhere to the assigned intervention?	No – slightly large drop-out rate - 59.5% of people in the intervention group were included in the completer analysis. No therapist fidelity measure.

Bonilla-Escobar et al. (2018)	Yes/no/ can't tell/comments
S1. Are there clear research questions? S2. Do the collected data allow to address the research questions?	Yes. 80% power However, they didn't mention the specifics of violence experienced by participants apart from mentioning conflict and torture. The measure used was called 'Total Mental Health Symptoms' (TMHS) which was a locally validated measure, however, the scores on each scale ranged from 0-3 and validation was done in 2011. However, there was no explanation why the inclusion criteria included people with score higher than 0.77 and how the cut-off was decided. As we did not know the clinical cut-off, we were not sure if the score of between 1.3-1.5 on TMHS meant whether that was clinically significant or not.
2.1. Is randomization appropriately performed?	Yes, there was an independent randomiser (trained social worker student) using blocked randomisation.
2.2. Are the groups comparable at baseline?	No Buenaventura: traumatic experiences was significantly higher in CETA than in the control group Quibdo: mean TMHS and anxiety scores were significantly higher in the control group than the CETA group; dysfunction score was significantly higher in CETA than in the control group
2.3. Are there complete outcome data?	Yes. Acceptable drop-out rate (34/175 withdrew voluntarily in the CETA intervention) (13.2% voluntarily withdrew) altogether, the dropout rate is 24%.

2.4. Are outcome assessors blinded to the intervention provided?	Yes
2.5 Did the participants adhere to the assigned intervention?	Can't tell – it also differs across the two municipalities - Number of sessions attended by participants was lower in Quibdo than in Buenaventura, approaching significance (p = -.06). Session attendance was average 5.9-7.2 out of 8-12 sessions, the range was too high to tell whether adherence was high. Other bias: Buenaventura's community workers (therapists) had more community-work experience, defined as number of years working in social projects, than those from Quibdo´ (8 and 7 years, respectively). Unknown fidelity, they simply mentioned that they had supervision and training to ensure fidelity

Hinsberger et al. (2017, 2020)	Yes/no/ can't tell/comments
S1. Are there clear research questions? S2. Do the collected data allow to address the research questions?	Yes – reduction of PTSD symptoms and appetitive aggression in young male ex-offenders in context of ongoing community violence using narrative exposure therapy versus CBT. Small sample size, inadequate power S2: majority of CBT and FORNET participants took part in another reintegration programme as a confounding variable.
2.1. Is randomization appropriately performed?	Yes, participants were randomly assigned to one of the three treatment conditions (FORNET, CBT, and the "camp" waiting list). Attendees were matched first in terms of posttraumatic stress symptom severity, second in their level of appetitive aggression, and third in the severity of their suicidality. They did not mention how randomisation was done.
2.2. Are the groups comparable at baseline?	Yes, groups did not differ significantly in terms of years of education, level of trauma exposure, severity of PTSD symptoms, suicidal ideation, attraction to aggressive behaviour or offenses. However, there was unequal group size. Those in CBT group were older than those on waiting list and people in FORNET and CBT group had been involved in the reintegration programme more
2.3. Are there complete outcome data?	Yes – acceptable drop-outs: FORNET: 3/20, FU: 2/17 = 5 dropouts CBT: 6/20, FU: 3/14 = 9 dropouts WL: 6/48, FU: 29/42 = 35 dropouts Eight participants' values missing from second follow-up (not attendance) (two from the FORNET, two from the CBT and four from the waiting list condition) The missing data was completed using the last-observation-carried-forward method (LOCF), which generally gives a conservative estimate of effect sizes.
2.4. Are outcome assessors blinded to the intervention provided?	Yes
2.5 Did the participants adhere to the assigned intervention?	70-85% completed the intervention in FORNET and CBT conditions

Barron et al. (2013)	Yes/no/ can't tell/comments

S1. Are there clear research questions? S2. Do the collected data allow to address the research questions?	Yes. 80% powered There were two subscales within the Strengths and Difficulties Questionnaire (SDQ) with low Cronbach alpha were removed from analyses (SDQT and SDQP).
2.1. Is randomization appropriately performed?	Can't tell - Twenty school counsellors were trained in TRT and then randomly assigned by the principal researcher (names on cards and blindly selected from a container) to intervention and wait-list control groups. The counsellor-based randomization with its small sample size may not have fully identified all of the significant effects.
2.2. Are the groups comparable at baseline?	No. Unequal group size in intervention and waitlist (WL) (90 and 50). No difference in terms of frequency of exposure to traumatic events, level of traumatic grief and depression. Significantly higher levels of posttraumatic stress, negative school impact, and mental health difficulties in the intervention group, regardless of inclusion or exclusion of the high exposure class in the analysis.
2.3. Are there complete outcome data?	Yes – acceptable attrition rate. 20 school counsellors recruited, 1 from intervention group, 5 from waitlist dropped out, trauma as reason for dropout 7 dropout in intervention group Seven intervention students were omitted due to incomplete pre-test data
2.4. Are outcome assessors blinded to the intervention provided?	Can't tell – only mentioned questionnaires were delivered two weeks following programme delivery but did not mention who the outcome assessors were
2.5 Did the participants adhere to the assigned intervention?	Yes - Fidelity was assessed by counsellors and observers using a fidelity questionnaire - discrepancy between counsellors and observing rater in objectives (94%, 60%) and guidelines adherence (79%, 74%).

Barron er al. (2016) S1. Are there clear research questions? S2. Do the collected data allow to address the research questions?	Yes/no/ can't tell/ comments 85% powered Yes – effectiveness of TRT in rural setting in Palestine.
2.1. Is randomization appropriately performed?	Yes, School counselors and participants were randomly selected from 10 randomly selected high schools. School counselors randomly allocated adolescents to TRT and wait list groups by tossing a coin for each participant.
2.2. Are the groups comparable at baseline?	No. Unequal group size in intervention and waitlist School counsellors and participants were randomly selected from 10 randomly selected high schools (70 in the geographical area) situated in 10 villages (tossing a coin) Similar war stressor exposure, age, depression, level of PTSD and dissociation across groups. However, in the wait list group, adolescent in private school at pre-test experienced fewer war stressors and females in WL group experienced higher level of war stressors at pre-test.
2.3. Are there complete outcome data?	Yes – reasonable rate of drop out.

	Attrition at post-test included 15 students, 4 from the intervention group and 11 from the wait list. The sample for analysis was n = 139 with n = 75 in the intervention and n = 64 in the waitlist.
2.4. Are outcome assessors blinded to the intervention provided?	Can't tell – only mentioned questionnaires were delivered two weeks following programme delivery but did not mention who the outcome assessors were
2.5 Did the participants adhere to the assigned intervention?	Yes. None discontinued intervention. Fidelity was assessed by counsellors and observers. Counsellors reported 96% of objectives were achieved and 81% of guidelines were followed. In contrast, observers reported 74% and 75%, respectively.

Dawson et al. (2018)	Yes/no/ can't tell/ comments
S1. Are there clear research questions?	S1: yes
S2. Do the collected data allow to address the research questions?	S2: There was no waitlist control (active control) Study was not adequately powered due to early termination of recruitment The measures used have not been validated in the local regions
2.1. Is randomization appropriately performed?	Yes, but did not specify the type of randomisation
2.2. Are the groups comparable at baseline?	Yes
2.3. Are there complete outcome data?	Yes - All participants completed the study.
2.4. Are outcome assessors blinded to the intervention provided?	Yes
2.5 Did the participants adhere to the assigned intervention?	Can't tell - All children completed the programme, though there was no fidelity rating due to retribution concerns in the communities - both counsellors providing the two interventions and there might be therapeutic drift across the conditions

Thabet et al. (2005)	Yes/ no/ can't tell/ comments
S1. Are there clear research questions? S2. Do the collected data allow to address the research questions?	Yes. Active intervention, psychoeducation and no intervention waitlist control group.
3.1. Are the participants representative of the target population?	No. Two of the six refugee camps allocated to groups. There was no boy in one of the groups. No randomisation but the bias was factored in the analysis as covariates
3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?	Yes - 'CPTSD-RI used in this study was based on DSM-IIIR but not based on DSM-IV criteria, as the CPTSD-RI had already been validated in the Arab culture.'
3.3. Are there complete outcome data?	Can't tell.

3.4. Are the confounders accounted for in the design and analysis?	Yes - Significant difference in age across groups, 'no intervention' group was younger. The three groups differed on children's age, gender (and no boys in the education group), and area of residence. The three variables became covariates in the linear regression analyses. No significant effect of covariates on changes in measures of psychopathology
3.5. During the study period, is the intervention administered (or exposure occurred) as intended?	Can't tell. The groups were of unequal size eg. the boys group included 31 people, whilst the girls group included 16 people.

Bass et al. (2013), Kaysen et al. (2020)	Yes/no/ can't tell/ comments
S1. Are there clear research questions?	S1 yes, effectiveness of CPT versus individual support (control condition) of female survivors of sexual violence in Congo
S2. Do the collected data allow to address the research questions?	S2 - the mental health symptom scale that was used as the primary outcome was not a validated scale, but was derived from longer measures that were locally validated. - due to logistical challenges, only total score data were collected, rather than item-level data. - the measure of setting-level insecurity was subjective based on supervisor's perceptions of incidents of insecurity rather than incident reports/ participants' perceptions - using visual inspection of slope to determine that sites with higher security level had a faster slope and hence possible more rapid reduction in mental health symptoms may not be a sufficient statistical technique
2.1. Is randomization appropriately performed?	No. Selection of villages based on accessibility, security level and availability of psychosocial assistants. Cluster randomisation of 2-4 villages on the basis of proximity and shared language. However, the assumption that the villages closer to one another would be more similar was not confirmed empirically and thus limited comparability. Highly biased recruitment: although research assistants were concealed of treatment allocation, the psychosocial assistants recruiting patients knew ahead of time whether they would be providing therapy or individual support.
2.2. Are the groups comparable at baseline?	No. Participants in the individual-support group having higher symptom scores at baseline than those in the therapy group across all measures.
2.3. Are there complete outcome data?	Yes – acceptable dropout rate. In terms of assessment completion rate, 57% completed all three assessments; 87% completed the baseline assessment and at least one follow-up assessment
2.4. Are outcome assessors blinded to the intervention provided?	Yes - outcome assessment done by research assistants
2.5 Did the participants adhere to the assigned intervention?	Yes - Participants in the CPT therapy group attended an average of 8.5 of 12 sessions offered, with 90% completing at least 9 sessions (defined as treatment completion) (12 sessions in total). 90% considered treatment completers However, those in individual support had a lower intake and less defined treatment completion. There was selective reporting that only 73% attended at least 1 session in individual support session and the average sessions attended was 5, there was no available information on the 'completion rate'.

Mpande et al. (2013)	Yes/ no/ can't tell/ comments

S1. Are there clear research questions?	Yes.
S2. Do the collected data allow to address the research questions?	There's no waitlist control condition for comparison. Community-initiated, bottom-up research to develop an evidence base of the tree of life community intervention RCT was not possible because the tight-knit communities would contaminate the treatments through sustained discussion, interaction, and possible responses about being in different interventions.
3.1. Are the participants representative of the target population?	Yes
3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?	Four final-year psychology students from Africa University joined the team as blind assessors. The SRQ results need to be interpreted with caution as there was a low reliability estimate of .492 (Cronbach's alpha). The ZCLQ was developed to reflect the culture and context of the target community. 25 people who were the past beneficiaries took part in the validation so it was unsure whether the scale was too small for a measure to be valid and reliable. They provided the Cronbach's Alpha but no measure on validity was shown.
3.3. Are there complete outcome data?	146 enrolled, 139 follow up data collected
3.4. Are the confounders accounted for in the design and analysis?	Yes (acceptable group differences) – No significant difference in the gender distribution, marital status, education level, age or mean number of children between the groups - more people in the PACS condition were employed. People in TOL condition more likely to report family problems, stressful life events and personal and financial problems during intake ANCOVA to control for confounders (different characteristics of the group)
3.5. During the study period, is the intervention administered (or exposure occurred) as intended?	Can't tell. They did not describe the tree of life intervention detailed enough and said some people were chatting around the fire in both groups because there were more common elements across conditions than the researchers had planned. The two interventions were conducted by the same set of trained and highly experienced facilitators – whilst we cannot conclude the therapist fidelity, there is a possibility of therapist drift.

Zaghrout-Hodali et al. (2008)	Yes/ no/ can't tell/ comments
S1. Are there clear research questions?	Not applicable. This is not a research. No ethic approval. Clinical case series.
S2. Do the collected data allow to address the research questions?	Effectiveness of group EMDR in children as a case study Yes – appropriate data though not enough power and no control group.
4.1. Is the sampling strategy relevant to address the research question?/	N/A as this is not a research.
4.2. Is the sample representative of the target population?	N/A. The authors did not give baseline characteristics or demographic characteristics of the participants – only children and a summary of their range of acute stress symptoms were mentioned.

4.3. Are the measurements appropriate?	No There was missing data and they used subjective unit of distress instead of a validated measure.
4.4. Is the risk of nonresponse bias low?	Yes
4.5. Is the statistical analysis appropriate to answer the research question?	No – no statistical analysis done.

Dinmohammadi et al. (2021)	Yes/no/ can't tell/comments
S1. Are there clear research questions? S2. Do the collected data allow to address the research questions?	Yes. 80% powered. There was no waitlist control for comparison (active control only) Nonparametric test used.
2.1. Is randomization appropriately performed?	Yes - Randomization was based on quadruple random blocks.
2.2. Are the groups comparable at baseline?	Yes with respect to the results of the conflict tactics subscales
2.3. Are there complete outcome data?	Yes – low rate of attrition. No lost to follow-up in treatment group, 4/45 lost to follow-up in control condition
2.4. Are outcome assessors blinded to the intervention provided?	Yes
2.5 Did the participants adhere to the assigned intervention?	Yes - Only 4 did not attend the sessions.

Orang et al. (2018)	Yes/no/ can't tell/comments
S1. Are there clear research questions? S2. Do the collected data allow to address the research questions?	Yes. The measures used have not been validated in the local regions. There was no waitlist control for comparison due to ethical reason (active control). Sample size was quite small.
2.1. Is randomization appropriately performed?	Yes - randomisation was implemented using a package in R.
2.2. Are the groups comparable at baseline?	Yes, although there were some discrepancies between two groups - no significant difference in number of sessions, sociodemographic variables between the two treatment groups except for client's education. NET participants scored higher on perceived stress scale at baseline compared to TAU group.
2.3. Are there complete outcome data?	No. Allocation 7/24 missing from intervention group, 3/21 missing from control group. Missing data were not imputed.

	The results of 2 scales which was pre-specified in the protocol were not reported.
2.4. Are outcome assessors blinded to the intervention provided?	Yes - interviewers were blinded but participants or therapists were not blinded.
2.5 Did the participants adhere to the assigned intervention?	Three dropped out (two NET and one TAU) due to ‘high IPV occurrences’ 10 did not begin or complete the treatment Three (two NET and one TAU) withdrew due to not being able to tolerate overwhelming emotions evoked through talking about the IPV experiences Two moved to another city to live Two (one NET and one TAU) withdrew due to lives became busy 22% did not complete therapy No measure on therapist fidelity.

Tiwari et al. (2005)	Yes/no/ can’t tell/ comments
S1. Are there clear research questions?	Yes. 80% power
S2. Do the collected data allow to address the research questions?	Very dubious standard deviation (eg. >30) when the max score was 100, and the SD was 13 on one of the scales at baseline but at 2.4 at post-intervention)
2.1. Is randomization appropriately performed?	Yes - Randomization was based on quadruple random blocks.
2.2. Are the groups comparable at baseline?	Yes with respect to the results of the conflict tactics subscales, but not for depression score: This study found that nearly one third of the abused women had Edinburgh Post-natal depression scale (EPDS) scores of greater than or equal to 10, and most of them came from the control group. However, researchers did not report pre-treatment EPDS score.
2.3. Are there complete outcome data?	Acceptable range of drop-out. Four lost to follow up Unreported pre-treatment EPDS score.
2.4. Are outcome assessors blinded to the intervention provided?	Yes, the randomisation allocation schedule was generated by computer and concealed in consecutively numbered, sealed envelopes by a researcher not involved in the study. The sequence was concealed until interventions were assigned. Women also blinded to the intervention
2.5 Did the participants adhere to the assigned intervention?	Yes, as it’s one session only.

Appendix E How Ongoing Threat was constructed

Authors (Year)	Type of threat	How ongoing threat was defined
Bryant et al. (2011)	Ongoing terrorist attacks	Participants had direct exposure to terrorist attacks.
Wagner et al. (2012) Knaevelsrud et al., (2015)	Ongoing political violence	Most participants reported kidnapping or killing of close relatives, exposure to bombings or random shootings. Women experienced rape or sexual abuse by armed groups.
Thabet et al. (2005)	Ongoing political violence	Ongoing political violence. Exposure to continuous direct (witnessing, shelling, raids or shouting) and indirect trauma (through adults or the media). The study was completed during 6 months of continuous armed conflict in the region.
Dawson et al. (2018)	Civil war, unstable political context	Self-report range of trauma events such as separated from caregivers, witnessing someone being killed.
Barron et al. (2013)	Ongoing political violence	Children experience a range of cumulative violence including beatings, sniper fire, military incursions, shelling, house demolitions, and detention. Exposure to war stressors questionnaire (EWSQ) for measuring traumatic event exposure.
Barron et al. (2016)	Ongoing political violence	Exposure to war stressors questionnaire (EWSQ) for measuring traumatic event exposure. High levels of war stressor exposure per adolescent ranging from 9-26 events. 19% of participants reported exposure to a potentially traumatic event during the study, for example, seeing a dead body, homes being bombed, being forced to stay in a basement during shelling, and family member(s) being injured due to violence.
Bonilla-Escobar et al. (2018)	Ongoing political and community violence	A total of 8,873,105 internally displaced persons (IDPs) were officially registered by the Colombian State's Victims Unit in 2018. Afro-Colombians account for nearly 40%. The violence in Buenaventura was related to drug cartels and armed groups surrounding the drug business; whereas in Quibdo, the main source was guerrilla warfare and armed groups on illegal mining. There was no measurement of re-exposure to traumatic events during the trial, but the authors provided anecdotal evidence that the neighborhoods of IDPs were blocked by armed groups and were not accessible to visitors for at least ¾ of the study.

Hinsberger et al. (2017), Hinsberger et al. (2020)	Ongoing community violence	Description of low-income area in South Africa where ongoing community and gang violence was prevalent.
Bass et al. (2013), Kaysen et al. (2020)	Sexual violence survivor in the context of ongoing political violence	Harvard Trauma Questionnaire used for measuring traumatic event exposure. The villages reported major security threat e.g., attacks, robbery by armed groups, targeted murder, kidnapping, looting, and outbursts of fighting between armed groups. Four children living in the sites and one group member were murdered.
Mpande et al. (2013)	Ongoing political violence	A brief history of exposure to violence/ torture of participants was asked at baseline. The authors described dramatic increase in violence during elections. Ongoing acts of organized violence such as sex slavery, food raids and mob violence.
Zaghrout-Hodali et al. (2008)	Ongoing political violence	Exposure to shootings. The children in the study were exposed to another violent event during the course of the therapy including military invasion to their homes and furniture in their homes was damaged. The study was conducted during continuous armed conflict.
Orang et al. (2018)	Ongoing IPV	Living with the abusive partner. Life Events Checklist (LEC-5) for measuring traumatic event exposure.
Dinmohammadi et al. (2021)	Ongoing IPV	Living with the abusive partner. Conflict tactics scale (CTS-2) used to measure domestic violence.
Tiwari et al. (2005)	Ongoing IPV	Living with the abusive partner. Conflict tactics scale (CTS) used to measure domestic violence.

Appendix F Summary Table showing key findings, measures and effect sizes of the included studies

Study on organized violence (N= participant number, % gender)	Type of study	Mean age (SD, range)	PTSD at baseline	Key findings	Analysis	Datapoints (M= months)	Assessment	Controlled effect sizes Uncontrolled effect sizes (FU= follow up) Cohen's *d*
Bryant et al. (2011) (N=28, 96% female)	RCT (CBT vs TAU - supportive counselling)	42.3 (6.3) Adult	All with clinical diagnosis and direct exposure to a terrorist attack measured by PSSI	Sig. PTSD reduction for CBT vs. supportive counselling at post and 3 M. Sig. more participants in CBT no longer met for diagnosis than in supportive counselling.	Completer	Post, 3M	PSS-I (clinician-administered)	Controlled effect sizes (post treatment and at 3M FU) Post: 0.96** 3M: 0.62*
							BDI	Post: 0.81* 3M: 0.37*
							IGF	Post: 0.58** 3M: 0.38*
Wagner et al. (2012)	case series	29.3 (7.1) 20-47 yo	86 % of participant met criteria for PTSD	Sig. reduction in PTSD at post treatment. 67% of participants did not meet for diagnosis at post-treatment	Completer	Post	PDS (self-report)	Uncontrolled effect size (post treatment) 1.57

(N= 15, 86.7% female)			(scoring 20 or above on PDS, mean score on PDS 29.13)						
							HSC-25	Depression 1.51** Anxiety 1.5**	
							EUROHIS-QOL	1.17**	
Knaevelsrud et al. (2015) (N= 159, 60% female)	RCT (internet CBT vs waitlist delayed control)	29.1 (8.2) Aged 18-56	All with probable diagnosis (min 11 on PDS, at least 1 intrusion, 3 avoidance and 2 hyperarousal)	Completer analysis showed 62% in the treatment group recovered from PTSD (PDS <20) versus 2% in the control group between post and 3M FU.	ITT	Post, 3M	PDS (self-report)	Controlled effect size Post intervention total: 0.92**	
							HSC-25	Anxiety: 0.79** Depression:1.03**	
							EUROHIS-QoL	0.84**	
							SCL-90R	0.56**	
Bonilla-Escobar et al. (2018) (N= 346, 13.6% male)	RCT (CETA versus symptom monitoring control)	43 (16.82)	Afro-Colombians who experienced at least one violent traumatic experience with elevated TMHS	In Buenaventura, participants in the CETA intervention experienced, on average, larger effects across all outcomes compared with control participants. In Quibdo´, small effects were seen only for improvement in the post-traumatic scale score.	ITT	Post (2 weeks after intervention)	TMHS	Controlled effect size difference post-intervention Buenaventura 0.82**	 Quibdo 0.22
							Depression scale	1.23**	0.27
							Anxiety scale	0.8**	0.2
							Post-traumatic stress	0.7**	0.31
							Dysfunction	0.7**	0.12

Bass et al. (2013), Kaysen et al. (2020) (N= 405, 100% female)	cluster RCT (Group CPT versus individual support)	36.9 (13.4)	All clinically significant; 73.8% probable diagnosis Women who had experienced or witnessed sexual violence (total symptoms score of at least 55 and impairment in daily functioning defined as a score of at least 10 on a locally developed measure)	Both groups had significant reductions in PTSD, maintained at 6M. CPT group had significantly greater reductions than control at post-treatment and 6M.	Completer	Post, 6M	HTQ HSC (combined depression and anxiety) Functional impairment (qualitative data)	Controlled effect sizes (post-intervention and 6M FU) Post: 1.4** 6M: 1.3** Post: 1.8** 6M: 1.6** Post: 1.1** 6M: 1.2**
Kaysen et al. (2020)				Symptom scores were significantly greater at the final CPT session at sites with high levels of insecurity (M = 2.5, SD = 2.0) compared to sites with low levels of insecurity (M = 0.8, SD = 1.1), t(131) = −6.02, p <.001.			Session monitoring questionnaire (11-item scale) on mental health symptoms used by Psychosocial assistants.	Not provided and there was not enough information to calculate the results
Mpande et al. (2013) (N= 139, 41% female)	Quasi-experimental pretest/posttest groups design TOL vs PACS	Age unknown	Experience at least one event of organized violence or torture, scored 7 or above on SRQ-20 or reported suicidal ideation	Both interventions reported large effect sizes decreases (SRQ-20). However, the outcomes were equivalent except for ZCLQ-contribution for lives of others subscale whilst PACS condition showed larger improvement than that of TOL.	Completer	Post (2M FU)	SRQ-20 ZCLQ	Uncontrolled effect sizes (2M FU) SRQ-20 Tree of life: -1.57** Psychoeducation: -2.21** Global Tree of life: 0.46** Psychoeducation: 0.57** Community engagement Tree of life: 0.44** Psychoeducation: 0.39**

								Contribution to the lives of others Tree of life: 0.27* Psychoeducation: 0.7** Attitudes to community healing Tree of life: 0.39** Psychoeducation: 0.39*
Hinsberger et al. (2020) (N=54, 100% male)	RCT (group FORNET versus TFAC-CBT versus waitlist)	23.0 (4.9)	Perpetrators/ former prisons with trauma 56.4% had PTSD diagnosis Elevated scores (8/51) of PSSI (PTSD) and AAS (appetitive aggression)	Only participants in FORNET had significant reduction in PTSD at post and 15-20 M. No significant reductions in TFAC (CBT) or WLC at post or 15-20 M. Reductions in FORNET significantly greater than WLC.	Completer	Post, 15-20M	PSS-I (clinician administered) AAS	Uncontrolled effect size 7-11M FU: FORNET -0.97*; CBT: ns; Controlled effect size FORNET vs WL: -1.03* 15-20M FU: FORNET -0.86*; CBT: ns; Not provided AAS: 7-11M FU: FORNET/ CBT/ WL: ns; 15-20M FU: FORNET: -1.0*; CBT/WL: ns
Zaghrout-Hodali et al. (2008) (N= 7, 42.9% female)	Case series (group EMDR)	8-12 year old	All exposed to military shooting. Four children harmed by shrapnel and another child (not in the study) was shot in his belly.	SUDs only. From SUD 8-10 to 0-1 final ratings for all children. Parent report: children got better, no longer had original symptoms, less afraid, concentrate at school, less aggressive. No longer had disturbed sleep/ nightmares.	Completer	Post	n/a	Only subjective unit of distress was used.
Thabet et al. (2005)	Quasi-experimental group Group 1/2/3	9-15 year old	Children reporting moderate to severe PTSD reactions, but	No significant difference between groups in CPTSD-RI and CDI scale.	Completer	Post	CPTSD-RI CDI	Non-significant (effect size not shown)

(N= 111, 46.8% female)	(CISM vs teacher education vs no intervention)		included children whose symptoms decreased to the 'mild' range as well when the Intervention started					
Barron et al. (2013) (N= 140, 45.1% female)	RCT (TRT versus usual school health education curriculum)	11.1 (1.2) Aged 11-14	All probable diagnosis (scoring higher than 17 on CRIES-13 [on the intrusion/ avoidance subscale - 8 items])	Significant PTSD reduction for TRT vs. WLC. Significant reduction in number of participants who met diagnosis from pre-to-post treatment (63.9% to 33.7%). Those in WLC was not significant.	Completer	Post	CRIE-13 (self-report) DSRS TGIC SDQ(teacher, parent and student report)	Controlled effect sizes (Post-intervention) 0.76* 1.24* Traumatic grief 0.96* Mental health difficulties 0.9*
Barron et al. (2016) (N= 154, 59.7% female)	RCT (TRT versus WLC)	13.6 (.8) Aged 11-15	All probable diagnosis (Scoring higher than 17 on CRIES intrusion/avoidance subscale)	Significant PTSD reduction for TRT vs. WLC. 41% of TRT participants no longer met PTSD diagnosis, Nonsignificant regarding depression and dissociation.	ITT	Post	CRIE-13 (self-report) DSRS ADES	Controlled effect size (Post-intervention) TRT: 0.67* 0.00 0.21
Dawson et al. (2018) (N= 64, 48.4% female)	RCT (TF-CBT vs problem-solving therapy [PST]	10.9 (1.3) 7-14 years old	All probable diagnosis	No significant between group differences on PTSD. Large within group PTSD reductions for both groups at post and 3M.	ITT	Post, 3M	UCLA-PTSD RI (Clinician-administered) CDI - short form (Kovacs, 1992)	Controlled effect sizes at 3M FU 0.17 0.18

							AESC PTSD caregiver report	0.19 0.03

Study on IPV **(N= participant number, % gender)**	**Type of study**	**Mean age (SD, range)**	**PTSD at baseline**	**Key findings**	**Analysis**	**datapoints**	**Assessment**	**Between group effect sizes at each timepoint** **post 3M 6M 12 M**
Orang et al. (2018) (N=45, 100% female)	RCT (NET vs TAU - individual non-trauma-focused therapy)	38.0 (9.7) (age 16-60)	Women living with abusive partners All with clinical diagnosis (at least min of 15 cut-off point on the post-traumatic stress symptom scale PSS-I)	Significant reduction in PTSD for NET vs. TAU at 3 and 6M. Percentage of people no longer meeting PTSD diagnosis was greater in NET (71%) than TAU (29%). Both groups improved daily functioning but no significant difference between groups. Traumatic events that occurred during therapy or between assessments did not affect the results when entered as a covariate.	Completer	3M, 6M	PSS-I (clinician-administered) PHQ-9 PSS-4 WSAS BSL-23	Controlled effect sizes (3M and 6M FU) 3M: 0.38^{*} 6M: 0.34^{*} 3M: 0.41^{*} 6M: 0.43^{**} 3M: 0.43^{**} 6M: 0.4^{*} 3M: 0.14 6M: 0.00 3M: 0.17 6M: 0.17
Dinmohammadi et	RCT (Solution-		Pregnant women	Significant changes in quality-of-life	Pre and post (6	6-week FU	SF-36	Controlled effect sizes (6-week follow-up)

al. (2021) (N=90, 100% female)	focused counselling versus routine care)	27.55 (5.13)	experiencing ongoing minor and medium levels of IPV measured by CTS-2 trauma symptoms not known	subscales including general quality of life (p < 0.001), vitality (p = 0.002), psychological health (p < 0.001), general health (p = 0.003), role limitation-emotional health (p = 0.006), and social functioning (p = 0.045).	weeks after the interventio n)			Mental health P= 0.004* Quality of life p=0.001** effect size unknown
Tiwari et al. (2005) (N= 110, 100% female)	RCT (empowermen t programme versus no treatment control)	Experimental group: 30 (5.1), Control: 31 (5.2)	Pregnant women experiencing IPV Trauma (PTSD) not measured They measure postpartum depression	No change in the mental health subscale of SF-36. Significantly fewer women in the intervention group had postnatal depression at follow up as assessed by the EPDS.	ITT	Post	SF-36 (health-related quality of life)	SF-36: More bodily pain in experimental group. No change on mental health subscale
							EPDS	Twenty-five women from the control group had EPDS scores of 10 compared with 9 from the experimental group (relative risk 0.36, 0.15–0.88) but baseline score was not stated.

Significant level: * = p<.05, ** = p< .001.
Interventions:

CBT= Cognitive Behavioural Therapy. CETA = Common Elements Treatment Approach. CISM = Critical Incident Stress Management. CPT = Cognitive Processing Therapy. EMDR = Eye Movement Desensitization and Reprocessing therapy. FORNET = Narrative Exposure Therapy for Forensic Offender Rehabilitation. NET = Narrative Exposure Therapy. TAU = Treatment as Usual. TFAC = Thinking for a Change. TRT = Teaching Recovery Technique. WLC = Waitlist Control

Measures:

AAS = Appetitive Aggression Scale. ADES = Adolescent Dissociative Experiences Scale. AESC = Anger Expression Scale for Children. BDI-II= Beck Depression Inventory-II. BSL-23 = Borderline Symptom-list-23. CDI = Children's Depression Inventory. CPTSD-RI = Child Post-traumatic Stress Reaction Index. CRIE-13 = Child Revised Impact of Event Scale. DSRS = Depression Self-rating Scale for Children. EPDS = Edinburgh Post-natal Depression Scale. EUROHIS-QOL= EUROHIS-Quality of Life index. HSC-25= Hopkins Symptom Checklist-25. HTQ = Harvard Trauma Questionnaire. IGF= Inventory of Complicated Grief. PACS = Psychoeducation and Coping Skills workshop. PDS= Post-traumatic Diagnostic Scale. PHQ-9 = Patient Health Questionnaire-9. PSS-4 = Perceived Stress Scale-4. PSSI = PTSD Symptom Scale-interview. SCL-90R = Somatisation Subscale of the Symptom Checklist-90 revised. SCQ = Strength and Difficulties Questionnaire. SF-36 = Short-form Health Survey. SRQ-20 = Self-reporting Questionnaire-20. TMHS =Total Mental Health Symptoms scores. TGIC = Traumatic Grief Inventory for Children. TOL = Tree of Life Healing Workshop. UCLA-PTSD RI = UCLA Child/Adolescent PTSD Reaction Index. WSAS = Work and Social Adjustment Scale. ZCLQ = Zimbabwe Community Life Questionnaire.

Appendix G

Plain language summary

This study focused on patients' and staff members' experiences of weekly clinical team meetings (CTMs) in an adult eating disorders inpatient ward. In the service, the CTM, historically known as the 'ward round', where patients meet with their consultants and other clinical staff, and decisions relating to their treatments are made. We were interested to explore this aspect of the service because patients expressed feeling anxious and stressed about the meetings. This also fitted with the implementation of a more psychologically informed service model - the Oxford Model of Integrated Cognitive Behavioural Therapy for Eating Disorders (I-CBTE) across the unit.

We used a combination of survey, focus group discussions and interviews to find out patients' and staff members' experiences and ideas for change. Six patients and seven staff members took part, and the wider staff team contributed in the team meetings. The main researcher also observed five CTMs and noted various attendees' participation and topics discussed. The data analysis and subsequent changes made were supported by former patients to ensure the improvements and viewpoints were relevant and meaningful.

We found that the average clinical team meeting lasted 14.3 minutes. Patients spoke roughly half of the time, and psychiatry colleagues spoke the most amongst all professionals. 'Request' was the topic that was discussed the most, which included issues such as time off the Unit. Psychological aspects of care were discussed 5% of the time. The analysis from the survey, focus group discussions and interviews show that patients perceived that CTMs could feel impersonal. They felt anxious about the meetings and held different views to the staff in relation to their roles and how much personal information is shared with all the professionals in the meeting. We improved the process by amending the induction booklet and CTM agenda sheet. We created a crib sheet for nurses so they could talk to patients about their CTMs. These documents were presented in a nurse training session and discussed with patients. We learnt that systemic changes and understanding about power dynamics and ward culture need to be achieved, so as to achieve shared decision making with patients and staff team.

Appendix H CTM observation record template

Date	Duration (min)	Patient identifier (type of section: compulsory [c] or voluntary [v]	Minutes spoken	Chair of the meeting	Time allocated to physical aspects of care management (weight, meal)/ proportion of discussion versus authoritative statements	Time allocated for decision making (eg. Leave)/ proportion of discussion versus authoritative statements	Time allocated for psychosocial aspect of care (eg. Formulation, maintaining mechanism/ proportion of discussion versus authoritative statements
			Who's present 1: Patient 2: 3: 4: 5: 6: 7: 8: 9: 10:				

Appendix I Interview topic guide

1. Consent to take part in the study - can leave without telling reason
2. Consent to record
3. Consent to attend ward round
4. Have a look at the questions
5. Ask questions
6. Validations

Interview guide and survey questions

Respondent/ interviewee (please indicate): Patient __ Professional: ___ (role: _________________)

Content

1. What do you think about CTMs? / What do you think the aim of a CTM is? What are CTMs for?
2. What works currently? In what ways are they good?
3. In an ideal CTM, what should be discussed? *Prompt:* Physical (eg. Weight, meal), psychosocial (formulation), decision making (eg. Leave))
4. Proportion of time spent on each item identified in Q3
5. What do you think the patient experience of CTM is (staff only)
6. What documents/aspects of medical record do you want to see in CTMs?
7. What are your goals for admission? (patient only)
8. How do CTMs help you to achieve your goals? (patient only)
9. How do you want to feel in CTMs? (patient only)

Structure:

1. How long is an ideal CTM?
2. How regular is an ideal CTM?
3. how do you want CTMs to be scheduled? (eg. What time, day etc)
4. Who should be in the CTM?
5. How long in advance do you prefer to be notified regarding the timeslot of the CTM?
6. Who should chair the CTM?
7. What is your ideal seating arrangement in CTMs?

Collaboration

1. How involved do you want to be during CTMs?
2. Who do you wish to involve more in your CTM?
3. What do you wish to prepare for before CTMs?
4. What do you need to know to help you prepare for CTMs better?
5. (What feedback do you wish to receive after the CTM?)

Implementation

1. What recommendations would you make? What suggestions would you make to improve CTMs?
2. Can you foresee any difficulties with these suggestions? Why might these suggestions be difficult to put into place?

3. What would you hope these recommendations would achieve? If these changes were made, how would CTMs be better?

Evaluation

1. What questions do you think should be included in the end-of-project survey to evaluate whether the changes improve the quality of CTMs?
2. What questions do you think should be included to evaluate whether the changes improve the patient experience of CTMs?

Appendix J Staff survey
Staff survey on views of clinical team meeting (CTM)

Thank you for taking part in my service improvement project as part of my doctorate in clinical psychology training. This project seeks to explore and improve patient and staff's experiences of CTM and to have both patients and staff actively involved in creating a new model of CTM. This survey is a baseline survey to explore staff's experiences and views of CTM.
This survey is revised after consulting with patients in the ward. Your participation is **voluntary and anonymous** but it is greatly appreciated if you can spend some time responding to the questions below. You can write as much or little was you like, and bullet points are fine too.

Please don't hesitate to email the researcher Vanessa Yim at see.yim@hmc.ox.ac.uk or her supervisors Dr Roshan Jones or Dr David Viljoen.

Role in the service : ____

Do you attend the weekly CTM? YES/NO

Content

1. Is the current model of CTM fit for purpose in your opinion?
2. In an ideal CTM, what should be discussed?
3. In your opinion, how can psychology contribute to CTM?
4. What documents/aspects of medical record do you want to see in CTMs? (eg. formulation diagram/ sketch?)

Collaboration

5. How involved do you want to be during CTMs?
6. Who do you wish to involve more in CTMs?
7. how confident do you feel about speaking up in CTM? What help do you think you will need to contribute more in CTMs?

Implementation

8. What recommendations would you make to improve CTM?
9. Can you foresee any difficulties with these suggestions and why?

Thank you very much for completing these questions. We greatly appreciate your time.

Vanessa Yim
Trainee clinical psychologist
see.yim@hmc.ox.ac.uk

Appendix K Information sheet and consent form

Information Sheet and consent form Oxford Institute of Clinical Psychology Training and Research

Oxford Health NHS Foundation Trust

Roshan Jones, Clinical Psychologist

Roshan.jones@oxfordhealth.nhs.uk

Vanessa Yim, Trainee Clinical Psychologist

see.yim@hmc.ox.ac.uk

OXICPT Phone Number: 01865 226431

Focus Group/interview for service improvement project: Information sheet for participants

Study title: **Improving the quality and patient experience of inpatient CTMs in the adult eating disorders service**

We would like to invite you to take part in our service improvement project. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what taking part will involve. Please read the following information carefully. Please ask a member of the research team if there is anything that is not clear or if you would like more information. You should only participate if you want to; choosing not to take part will not disadvantage you in anyway.

What is the study about?
CTMs are seen as a key component of care provision in in-patient psychiatric settings, yet studies have shown that it has not been an optimal environment for patients to discuss their care. In Cotswolds House, the project seeks to identify ways to improve the CTM experience and usefulness and fits into the service's vision to create a more psychological environment for patients and to increase patient's experience, satisfaction and treatment outcome.

This project will form part of the integrated thesis for the completion of the Doctorate of Clinical Psychology programme.

Who has been asked to take part?
We have invited adult females with a diagnosis of eating disorders who are currently receiving care as inpatients to take part in the project.

What will happen to me if I take part?
If you decide to take part, you will be given the option to participant in a telephone/online interview or focus group for a maximum of 60 minutes. We would like to hear your feedback on your experience, satisfaction and perception of utility of CTMs in progress towards your admission goals. You do not have to answer any questions that you do not want to. With your

permission, we will record the discussion to make sure we don't miss any important points. If you do decide to take part, you are still free to stop your participation at any time.
We also hope that you can consent to your CTMs being recorded at most 3 times in the course of your admission to monitor the changes being made as a result of implementation of suggestions of feedback to CTMs.

What are the possible benefits and risks of taking part?
Your participation in this study can make an important contribution to the improvement of CTMs in the service. We do not anticipate that there will be any risks associated with participating in the study

Will my responses be kept confidential?
For virtual focus groups, in order to take part, all participating group members will be asked to consent to maintaining confidentiality of group discussions. All information collected about you will be kept strictly confidential.

The audio recordings of the interview will be kept securely and will be used to create a transcript of the conversation. After transcription, the audio recording will be destroyed. We will remove your name and any other information that allows the identification of you or others. In accordance with the General Data Protection Regulation, all information gathered during the focus group/ interview will be held on password-protected computers. Data will not be accessed by anyone other than members of the research team.

Who has reviewed this study?

The project is reviewed and approved by the Doctorate in Clinical Psychology course and the consultant clinical psychologist in Cotswolds House.

What will happen to the results of the study?
We hope to present the findings to the staff in the service during meetings/ trainings and disseminate the results in reports, journals or conferences. No names or other identifiable information will be used in any reports or publications. The report will present a summary of all findings of this study and therefore it will not be possible to identify your individual responses. A poster will be created and displayed in the service for staff and patients to view.

Who should I contact for further information?
If you have any questions or would like any further information about this study, please don't hesitate to email Vanessa Yim at see.yim@hmc.ox.ac.uk.

What if something goes wrong?

If you have a concern about any aspect of the study, please ask the researcher (Vanessa Yim; email see.yim@hmc.ox.ac.uk) who will do their best to answer your questions. If you remain unhappy and wish to complain formally, please contact Dr David Viljoen (Consultant clinical psychologist; email: David.viljoen@oxfordhealth.nhs.uk) at Cotswolds House Specialist Eating Disorders Service, Warneford Hospital.

Thank you for reading this information sheet and for considering taking part in this project.

TELEPHONE/ONLINE INTERVIEW/FOCUS GROUP PARTICIPANT CONSENT FORM

Study title: Improving the quality and patient experience of inpatient CTMs in the adult eating disorders service

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the project

Thank you for considering taking part in this project. The person organising the research
must explain the project to you before you agree to take part. If you have any questions arising
from the Information Sheet or explanation already given to you, please ask the researcher
before you decide whether to partake in the telephone interview.

I confirm that I understand that by ticking each box I am consenting to this element of the study. I understand that it will be assumed that unticked boxes mean that I **do not** consent to that part of the study. I understand that by not giving consent for any one element I may be deemed ineligible for the study. ☐

1. I confirm that I have read and understood the information sheet dated for the above study. I have had the opportunity to consider the information and asked questions, which have been answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. Furthermore, I understand it will be possible for me to withdraw my data (without giving a reason) up to the point of transcription. ☐

3. I consent to the processing of my personal information for the purposes explained to me. I understand that such information will be handled in accordance with the terms of the General Data Protection Regulation. ☐

4. I understand that my information may be subject to review by responsible individuals from the Trust for monitoring and audit purposes. ☐

5. I understand that confidentiality and anonymity will be maintained by the researchers and it will not be possible to identify me in any publications. ☐

7. I consent to this telephone/online interview/focus group being audio recorded. ☐

8. I consent for the CTM to be recorded. ☐

____________________	____________________	____________________
Name of participant	**Date**	**Signature**
____________________	____________________	____________________

Name of person taking consent	**Date**	**Signature**

Enquiries:
Vanessa Yim
Email: see.yim@hmc.ox.ac.uk

Appendix L

Process and outcome of former patients’ involvement in the study

Research stage	Patient/service user involvement	Outcome
Conceptualisation	The topic of the study was inspired by discussion of the care experience of a member of the ‘partners in experience’ group on the DClinPsych course who had lived experience of being an inpatient. The project proposal was discussed in an eating disorders patient forum that occurred monthly within the Trust.	To understand that the topic was relevant and impactful to patients’ experiences.
Data analysis	CTM observation data: One set of the observation data from the CTMs was rated by the team’s peer support worker to establish inter-rater reliability. A former patient and the researcher met virtually to discuss the purpose of thematic analysis, followed by discussing the qualitative data and refining the themes. The researcher coded and developed themes initially, and the themes were discussed and refined collaboratively.	A former patient indicated experiences that echoed with her own. This revealed inherent power dynamics on the ward and particularly the nuances of certain language used.
Service improvement	One session and subsequent email exchanges focussed on how the data informed improvement; the researcher and the former patient co-produced the revised documents (e.g. agenda sheet, description in the induction booklet)	New suggestions for improvements emerged, including the creation of a crib sheet for nurses
Dissemination	A former patient was involved through reading, writing a section on reflections of this work, and revising the final report. Results of the project were presented on the ward during a community meeting.	Jargon was reduced.

Appendix M

Reflections from a former patient in Cotswolds House who helped with the data analysis and service improvement aspects of the project

I was a patient at Cotswold House from February 2020-July 2020, and the treatment and subsequent outpatient support have completely changed my way of living. Whilst a patient, however, I did find the CTMs anxiety-provoking. To me they were important meetings – perhaps too important – but their brevity, the number of people present, and the difficulty in feeling listened to (whether or not this was the case or only my perception), often left me feeling frustrated. Now that I've been able to consider the CTMs from more of a distance, I see that there are wider issues at play that detract from the meeting's success. For instance, staff hierarchy, who takes the lead, which nursing staff members actively attend and which don't, the day of the meetings (weigh day), the culture of CTMs being an 'ordeal' amongst patients and staff, all build up the CTM into this 'make-or-break' weekly meeting, and feed-in to perhaps unrealistic expectations from the patient perspective. I hope that by changing how CTMs are presented to new patients, more positive staff and patient ward-speak around CTMs, and clarity on their purpose and content, patients will both feel more actively involved in the direction of their care, and thus more empowered to continue to use the CBT-E tools of recovery when discharged.

Appendix N

Inter-rater reliability ratings

Researcher’s and peer support worker’s measurements of duration of discussion per category.

Category	Researcher’s measurement (in seconds)	Peer support worker’s measurement (in seconds)
Update and review of progress	45	40
Goal	100	91
Validation	0	0
Request	113	336
Follow-up	70	47
Raising questions	45	8
Medication	30	32
Meal planning	0	0
Mood	0	0
Psychology-related (eg. formulation, therapy)	0	0
Weight	0	0
Risk	0	0

The inter-rater reliability as indicated by Interclass Correlation (ICC) using single-measurement, absolute agreement, two-way mixed effects model, ICC = 0.60 with 95% confidence interval 0.06 < ICC < 0.86. This indicates a moderate reliability (Koo and Li, 2016). The main discrepancy was about ‘request’. As the recording was only audio-recorded, the peer support worker mentioned that she could not differentiate two of the female speakers’ voices and some of the timings might be ‘double-counted’ as some speakers interrupted another speaker and the time was counted twice, which led to the total being a minute longer than the actual recording time. Unfortunately, the peer support worker left the service subsequently and could not re-do the timings.

Appendix O

Amendment of the CTM section in the induction booklet

Description about CTM in the induction booklet

Original:

> We will review your treatment with you at a weekly Clinical Team Meeting (**CTM**) and at agreed points in time at your formal review called a **CPA** (Care Programme Approach).
>
> During your weekly CTM slot you will meet with members of the team for 10-15 minutes to discuss your individual care plan. We listen to your thoughts and share ours with you. We also review your weight chart together so we can talk about your progress, achievements and any barriers that you may be facing. We aim for this to be patient-led and your Nurse can help you prepare what you would like to say and ask in this meeting.
>
> At this meeting we update your care plan for the coming week. You will receive a copy of your care plan following the meeting.

Revised:

We will review your treatment with you at a weekly Clinical Team Meeting (**CTM**) and at a more in-depth, formal review called a **CPA** (Care Programme Approach), which usually take place every 6-8 weeks.

During your weekly CTM you will meet with members of the team for 10-15 minutes to discuss your individual care plan. This is a meeting where decisions are made jointly with you and the team. The meeting agenda will be guided by you and your needs. This will usually include discussions on your progress and challenges you face. A CTM agenda sheet will be given to you in advance to help you prepare for the meeting. Some of the topics typically discussed in a CTM are:

- how you are overcoming certain challenges
- things you are still finding difficult
- your meal plan
- your physical progress / any medication issues
- any leave off the unit

You may see staff members that you may not have met before at the meeting. They are part of your wider care team to support the different aspects of your needs. As well as the doctors, nurses, and dieticians that you usually see on the ward, there may sometimes be an occupational therapist, a pharmacist, or a mental health advocate at your CTM. Occasionally students (eg. medical and psychology students) will join the meeting as part of their trainings. If you don’t feel comfortable about them joining, you can choose not to give consent and/or ask them to turn their camera off if the meeting is virtual.

Whilst you may have thought about your goals for admission, the weekly CTM gives you a chance to discuss your short-term goals with the wider team.

We recommend that you talk to your named nurse prior to the meeting to help you prepare for the CTM. The nursing team is there to support you.

- *"I think it's important that all the professions get together with you at some point because obviously it's very multidisciplinary the way it works, the dietician, the doctors talking about drugs, and the nursing staff in the ward etc." From a former patient.*
- *"CTM can be quite anxiety-provoking but don't feel like it's the end of the world if the CTM doesn't go too well that week. Sometimes Staff members may disagree as they may think what you want may be different from what you need at that moment in time. We will work collaboratively with you and we are there to support you and there are other activities to support your recovery." - From the staff team*

Visitor policy:

During the week, visiting hours are between 4:30pm - 9.00pm. At weekends, visiting hours are between 9:00am – 9.00pm. Visitors are not allowed to stay on the ward during mealtimes. They are welcome to wait in reception. If you require visitors outside of these times due to certain circumstances, you will need to discuss with the team in CTM. Please note that due to COVID-19 restrictions, the visitor policy is subject to change.

Appendix P

Revised CTM agenda sheet

This CTM agenda is a guide to empower you to discuss anything you feel that's important for your care and recovery, but you can bring up any topics you feel are important that are not on this template. We recommend that you talk to your named nurse prior to the meeting to help you prepare. The nursing team is there to support you to work through the agenda and discuss your goals and challenges ahead of the meeting. Prior to the meeting, you can ask your named nurse for feedback about your weekly progress.

The team that is involved in your care, and who usually attend the CTMs are, for example, dieticians, psychiatrists, nurses, and doctors. At times there may also be psychologists, occupational therapists, pharmacists, and Independent Mental Health Advocates.

Week number:	Next CPA:
Discharge date:	

1. Admission goals

2. Goals achieved last week, and any positive feedback from staff
    - this could include the groups you've attended
    - skills and strategies that were helpful

3. My challenges over the past week in relation to my formulation, goals and recovery

4. Support I need from the team to overcome the challenges (this could be in relation to implementing skills and strategies, your meal plan; ways of coping with difficult emotions; etc)

5. My goals for the next week (you can think about your short-term goals and how they fit with goals for admission). Discussion for time away from the unit, or leave within the hospital grounds

Appendix Q

CTM guidance sheet for named nurses

This guidance sheet intends to support named nurse when discussing CTM with their patients as CTM can be quite anxiety-provoking to patients when important decisions are made during the meetings.

Before the CTM:

1. Have a 1:1 session with patients to support agenda planning before the CTM, especially before their first-ever CTM, as they may be worried and unsure about what to discuss and who will be attending
2. Use the notes and patients' formulations for goal-planning
3. As there is limited time during the CTM, the team decided that the named nurse will be the key person to collate feedback and patient's progress from the team's point of view and relay to the patients during the 1:1. It seems that the nursing team has already been actively giving positive feedback so it may be good to recap their positive progress during the 1:1.
4. Give the CTM agenda sheet to patients (the suggested agenda items are listed below) *To discuss in community group meetings if patients do not want to complete the form. There may be reasons for not completing the form eg. struggling to understand*
5. Nurse attending CTM to check who's attending the meeting and consent to have guests/ visitors

CTM agenda

6. Admission goals

7. Goals achieved last week, and any positive feedback from staff
    - this could include the groups you've attended
    - skills and strategies that were helpful

8. My challenges over the past week in relation to my formulation, goals and recovery

9. Support I need from the team to overcome the challenges (this could be in relation to implementing skills and strategies, your meal plan; ways of coping with difficult emotions; etc)

10. My goals for the next week (you can think about your short-term goals and how they fit with goals for admission). Discussion for time away from the unit, or leave within the hospital grounds

Notes:

1. The team tries to move away from the culture of 'requests' during CTM as it seems to create a power imbalance which is different from the value of Cotswolds House in empowering the patients to own their treatment. We encourage to reframe the 'requests' as 'goals'. For example, if the patient wants to increase their leave, the goal might be about increasing social interactions with family through having more time off the unit.

2. Patients might be upset about how the CTMs went. We encourage the allocated nurse/ the nurse who attended CTM to explain the rationale behind disagreeing with the patients eg. relevant guidelines on their physical health/ risks etc, to facilitate the understanding that the staff team works collaboratively with the patients but at times there may be discrepancies regarding their wants and needs. It may be helpful to have a 1:1 session after a CTM or plan relaxing activities on Monday afternoons.