Artikel 2226

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Psychotherapies for Posttraumatic Stress Disorder Applied in Indonesia: A Scoping Review of Published Articles

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ABSTRACT

Background: Posttraumatic stress disorder (PTSD) occurs as triggered or exposure to traumatic events. Psychotherapies have been proven to be effective and superior for people with PTSD. several psychotherapies have been developed with different approaches. Yet the application of psychotherapy rarely found and provided by professionals to those who need it in Indonesia

Purpose: the purpose of this study is to figure out the application of PTSD psychotherapies provided for people with PTSD in Indonesia

Methods: This review was conducted following the PRISMA statement for scoping review. A systematic screening was performed in CINAHL, Cochrane library, Embase, Portal Garuda, PubMed, Scopus, as well as manual search language and date restriction. The quality of the study was determined based on the risk of bias. Cochrane risk of bias 2.0 (RoB 2.0) and MINORS were used to evaluate the risk of bias of RCT and quasi-experimental studies respectively.

Results: About five RCTs and four quasi-experimental studies published from 2008 to 2022 (n=465) were employee in this review. three types of therapies conducted for people with PTSD, five CBT studies, two EMDR studies, and two SHAFT studies were conducted in one day up to six weeks, one to 15 sessions, 30 to 60 minutes for each session. All studies evaluate PTSD as the primary outcomes, while the most measured secondary outcomes were depression and anxiety symptom.

Conclusions: CBT was the most frequent therapy delivered for Indonesian people with PTSD followed by EMDR and SHAT. The application of therapies varied in terms of frequency, duration, length of therapy, and the component. Further research on the implementation of various types of psychotherapy for people with PTSD will be required

Introduction

Psychological trauma arises from experiencing or witnessing traumatic events such as violence, abuse, assaults, natural disaster, war or political conflict, and accident. Posttraumatic stress disorder (PTSD) occurs as triggered or exposure to traumatic events (American Psychiatric Association, 2013). According to the Diagnostic and statistical manual for mental disorder fifth edition (DSM-5), a person can be diagnosed for having PTSD if symptoms remained more than a month after exposure (American Psychiatric Association, 2013). Even though some traumatized people respond with resilience without intervention, yet some of them develop PTSD (Koenen et al., 2017; National Institute of Mental Health, 2022). Indonesia is prone to natural disasters (TheJakartaPost, 2019); therefore, people have a greater risk to develop PTSD.

PTSD showed the highest prevalence (34.4%) of psychological problems among natural disasters' survivors followed by depression (25%), and prolonged grief disorder (Saeed & Gargano, 2022). About 3.9 % of 51,797 people exposed to traumatic events develop PTSD, with a higher number of cases identified in upper-middle countries (Koenen et al., 2017). Numerous studies have been conducted to evaluate the prevalence of PTSD following disasters. The prevalence of PTSD among survivors was

identified at 59.9% one year after an earthquake (Aurizki et al., 2019), 58.3% six months after the earthquake (Marthoenis et al., 2019), while 20.6% at five years after tsunami (Irwanto et al., 2015). Besides, the overall incidence of PTSD in Sumatera and West Java population was 20.9% (Downs et al., 2017).

The high prevalence of PTSD also comes along with consequences. Therefore, people with PTSD should be treated either using pharmacotherapies or non-pharmacotherapies. Untreated PTSD will lead to other mental health problems. People with untreated PTSD are more likely to conduct suicidal attempts, substance use, develop complex PTSD, have physical and mental health complications (Armenta et al., 2018; Flannery, 2001; Fox et al.), and tend to show poor prognosis once they pace to receive treatment (Priebe et al.). As a consequence, prolonged morbidity, low quality of life, and higher cost of care are some problems that emerged (Priebe et al.).

Psychotherapies have been proven to be effective and superior for people with PTSD (Coventry et al., 2020; Merz et al., 2019). Regarding to the American psychological association, several psychotherapies have been developed with different approaches. Cognitive behavior therapy (CBT), cognitive processing therapy (CPT), cognitive therapy (CT), and prolonged exposure (PE) are categorized as strongly recommended. On the second level, brief eclectic psychotherapy (BEP), eye movement desensitization and reprocessing (EMDR), and narrative exposure therapy (NET) are conditionally recommended. At the same time, seeking safety (SS) and relaxation (RLX) therapy is supported by limited evidence to be recommended as PTSD therapies (APA, 2017a). Most of the mentioned therapies for people with PTSD in APA are rarely found and provided by professionals to those who need it in Indonesia.

Therefore, the purpose of this study is to figure out the application of PTSD psychotherapies provided for people with PTSD in Indonesia.

Methods

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Search strategy

This review was conducted following the PRISMA statement for scoping review. The main idea of this scoping review was to determine the type of psychotherapy that had been applied and evaluated for people with PTSD in Indonesia. The terms were tailored to the specific databases using medical subject headings (MeSH) and emtree, combined with keywords and Boolean operators, to cover a broader yet relevant articles focus on "Indonesia", "psychotherapy", and "posttraumatic stress disorder" without language and date restriction. The search was conducted on August 2nd, 2022, in six databases including CINAHL, Cochrane library, Embase, Portal Garuda, PubMed, and Scopus. Manual or hand search was also performed in Google Scholar and citations from potentially relevant studies.

Screening

A systematic screening was performed by two authors independently. Disagreements between authors were discussed with third parties until a consensus was achieved. Study was eligible to be included in this review if it met the following criteria:

Population

This study focused to evaluate the effectiveness of psychotherapy on people with PTSD without age, gender, or trauma background restrictions. PTSD is diagnosis can be determined based on the clinical rated or self-reported instrument.

Interventions and comparisons

Referring to the PTSD guideline issued by APA, CBT, CPT, CT, PE, BEP, EMDR, NET, SS, and RLX have been mentioned as treatments for people with PTSD (APA, 2017a). However, in this study, we include all type of psychotherapies even though they were not listed in the APA guideline. The intervention was compared either active or passive comparisons.

Outcome

The primary outcome was PTSD symptoms at the treatment endpoint. The result from clinical rated is prioritized over self-reported if both data were provided in the article. While secondary outcomes depend on the availability of the included articles.

Study design

This study employed randomized controlled trial (RCT) and quasi-experiment studies with a control group without language and date of publication restriction. In case of duplicate publication with the same dataset, we will include the one with a higher sample size or the latest publication date.

Data extraction

All studies included in this review were extracted based on study characteristics (study ID, journal name, study setting, study design, purpose, and quality), participant characteristics (population, diagnostic criteria, sample size, age, gender, and trauma

background), intervention characteristics (psychotherapy name, frequency, duration, total time, content of the therapy, and therapist specification), and outcome characteristics (primary-secondary outcomes, instrument, and time measurement).

Quality assessment

The quality of the study was determined based on the risk of bias. Cochrane risk of bias 2.0 (RoB 2.0) and MINORS were used to evaluate the risk of bias of RCT and quasi-experimental studies respectively. Cochrane RoB 2.0 assessed the risk of bias related to the randomization process, deviation from intended intervention, missing outcome data, measurement of the outcomes, and selection of the reported results. The bias will be categorized into low, some concern, and high risk of bias (Higgins et al., 2022). While the risk of bias in non-randomized studies MINORS was used for quasi-experimental studies. The bias assessed using ROBIN-I desperate into two domains, pre-intervention, at-intervention, and post-intervention. Bias due to confounding and the selection of participants were assessed during the pre-intervention stage. Bias in the classification of interventions was determined during the treatment. While bias due to intervention deviation, missing data, outcome measurements, and selective reporting was evaluated post-intervention. The risk of bias judgment was categorized into four, low, moderate, serious, and critical risk (Sterne et al., 2016).

Results

Search outcomes

Thirty-three studies were retrieved from CINAHL, Cochrane library, Embase, Portal Garuda, PubMed, and Scopus. Using EndNote, about five duplicate articles were removed. The remaining records were screened based on title and abstract, yielded five articles. Manual search through google scholar also found four articles that meet the inclusion criteria. One article was excluded because of duplicate dataset, then leaving nine records in this scoping review (**Figure 1**).

Studies characteristics

The nine studies were published from 2008 to 2022, with most RCT (57.1%), and conducted in other than Java Island (83.3%) of Indonesia. Among 465 participants, most of them were male (285; 61.3%), children (292; 62.8%), exposed to civil-conflict or terrorist attacks (262, 56.3%), and diagnosed with PTSD using The University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index (UCLA-PTSD RI), Diagnostic and statistical manual for mental disorder IV text revision (DSM-IV-TR), Impact event scale revised (IES-R), Structured clinical interview diagnosis based on DSM-5 (SCID-5), Children posttraumatic stress scale (CPSS), Child trauma questionnaire (CTQ), and PTSD questionnaire by Weathers, Huska, and Keane (**Table 1**).

Interventions Content → The contents of the interventions (?)

We identify three types of therapies conducted for people with PTSD, including CBT (Dawson et al., 2017; Sarimin & Tololiu, 2017; Tol et al., 2008), EMDR (Rahmania & Moordiningsih, 2012; Susanty et al., 2022), and Spiritual-hypnosis Assisted therapy

(SHAT) (Lesmana et al., 2009; Lesmana et al., 2022). Regarding the content, although only CBT contains psychoeducation, most therapies involve trauma recall and cognitive restructuring in treating the PTSD. It brings back the traumatic experience through in vivo (Dawson et al., 2017; Lesmana et al., 2009; Lesmana et al., 2022), prolonged (Dawson et al., 2017), and narrative exposure (Tol et al., 2008) approaches.

Intervention duration, session, & length of therapy

The duration of intervention ranged from one day to six weeks. Generally, the intervention session varied from one (Lesmana et al., 2009; Lesmana et al., 2022; Rahmania & Moordiningsih, 2012), three (Sarimin & Tololiu, 2017), six (Downs et al., 2017; Perangin-Angin et al., 2021; Susanty et al., 2022),12 (Efandi et al., 2020), to 15 (Tol et al., 2008) sessions. The length of the session ranged from 30 to 60 minutes. The frequencies were weekly (Dawson et al., 2017) and semiweekly (Tol et al., 2008). Most of the therapy was delivered by trained therapists with a wide range of qualifications, while one was provided (Lesmana et al., 2009) or might be provided (Lesmana et al., 2022; Sarimin & Tololiu, 2017) by the researcher itself and by non-professional trained health care therapists (Dawson et al., 2017; Tol et al., 2008).

Outcomes, tools, and measurement times

Participants were diagnosed with PTSD using various instruments, including The University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index (UCLA-PTSD RI), Diagnostic and statistical manual for mental disorder IV text revision (DSM-IV-TR), Impact event scale revised (IES-R), Structured clinical interview

diagnosis based on DSM-5 (SCID-5), Children posttraumatic stress scale (CPSS), PTSD checklist based on DSM-5 (PCL-5), Clinician-administered PTSD scale based on DSM-5 (CAPS-5). All nine included studies measured PTSD symptoms as the primary outcome. In addition, PTSD symptoms are also assessed from the parents' perspective (Dawson et al., 2017). Depression (Dawson et al., 2017; Susanty et al., 2022; Tol et al., 2008) and anxiety symptoms (Susanty et al., 2022; Tol et al., 2008) were the most common secondary outcomes measured.

Due to time measurement, almost all studies assessed the outcomes at immediate of one week posttreatment (Dawson et al., 2017; Rahmania & Moordiningsih, 2012; Sarimin & Tololiu, 2017; Susanty et al., 2022; Tol et al., 2008). The short-term and long-term longitudinal effect was measured at one month (Susanty et al., 2022), three months (Dawson et al., 2017; Susanty et al., 2022), six months (Tol et al., 2008), and 24 months (Lesmana et al., 2009) after treatment.

Discussions

To our knowledge, this is the first study that explored the adoption or application of various psychotherapies for Indonesian people with PTSD. Considering that Indonesian people are at having higher risk of developing PTSD because of being exposed to many disasters, the number of the study included in this review is quite low.

Among nine suggested psychotherapies for PTSD according to the APA guideline, only CBT and EMDR were applied, evaluated, and reported in peer review published journals. Although there was an improvement in Indonesian international publication rate within five years, the lack of studies conducted might be related to still low

publication rate among Indonesian scientists. Overall, all included studies showed a statistically significant effect of psychotherapy in decreasing PTSD symptoms with low to moderate effect size at immediate posttreatment, short-term, and long-term follow-up measurements. Psychotherapies also s significantly impacted anger, hope, anxiety, depression, quality of life, trauma idioms, aggressive behavior, and functional impairment.

Cognitive Behavior Therapy

This study found CBT as the most evaluated psychotherapy for people with PTSD in Indonesia. CBT has been shown as an effective psychotherapy with a moderate effect size in decreasing PTSD symptoms (Kliem & Kröger, 2013; Sijbrandij et al., 2016). Compared to the original version, among five studies included, some discrepancies were found in total sessions given, duration, content, and frequency. According to APA, CBT is typically delivered in 12 to 20 sessions either in individual or group format (APA, 2017b; Fenn & Byrne, 2013). Among three studies included that determine the effectiveness of CBT for PTSD, one study conducted CBT in 15 sessions (Tol et al., 2008), one study in 12 sessions (Elendi et al., 2020), two studies in six sessions (Dawson et al., 2017; Perangin-Angin et al., 2021), and one study in three sessions (Sarimin & Tololiu, 2017).

A varied number of sessions also found in many previously published studies, influenced by several considerations such as study participant's characteristics. Although the number of therapy sessions was shortened, yet the core component of therapy should be applied. The core component of trauma-focused CBT (TF-CBT) are

cognitive restructuring and exposure (Fenn & Byrne, 2013). This study found not all studies provide information due to the core component of psychotherapy delivered to the participants (Efendi et al., 2020; Sarimin & Tololiu, 2017).

The effect of CBT on PTSD symptoms was evaluated at immediate posttreatment as well as at three (Downs et al., 2017) and six months (Tol et al., 2008) follow-ups. Limited studies evaluated the longitudinal effect of CBT. Both were RCTs and included children as their participants. In addition to the primary outcome, depression was found as the most measured secondary outcome (Dawson et al., 2017; Efendi et al., 2020; Tol et al., 2008). People with PTSD were found to be comorbid with major depressive disorder (MDD) (Flory & Yehuda, 2015).

Eye Movement Desensitization and Reprocessing

This study also found EMDR therapy evaluated was different from the original version. EMDR was originally developed by Shapiro and consist of eight sessions (Shapiro, 1989). Yet in the studies included, one study conducted four to six sessions (Susanty et al., 2022) and one session of EMDR (Rahmania & Moordiningsih, 2012). The core component of EMDR is memory processing, bilateral stimulation, and the therapeutic relationship (Hase, 2021). The study by Rahmania and Moordiningsih (2012) delivered a one-session EMDR on three participants. This study also found very limited information, such as study setting, therapy content, therapist qualifications, and participant characteristics.

Compared to other types of psychotherapy, EMDR can be considered as a newly developed treatment for people with PTSD. However, EMDR showed aa an effective

treatment for PTSD symptoms with a high effect size either in adults (Mavranezouli et al., 2020a) or younger populations (Mavranezouli et al., 2020b).

Spiritual-Hypnosis Assisted Therapy

This study found SHAT as a new therapy developed by the author. As a newly developed therapy, detailed information about the core component of the therapy was provided. Limited studies evaluated the effectiveness of SHAT on people with PTSD. SHAT was delivered in one shoot in both studies (Lesmana et al., 2009; Lesmana et al., 2022). On the first study, the effect of SHAT on PTSD might be biased because it was measured two years after the treatment was delivered (Lesmana et al., 2009). However, a more advanced study design and procedure was adopted in the second study. The effectiveness of SHAFT was evaluated through an RCTs study, compared to a control group, and outcomes were measured at baseline and immediate posttreatment. Although not all outcomes showed significant results statistically, two outcomes measured in this study; PTSD symptoms and biomarker (cortisol) (Lesmana et al., 2022).

Conclusions

Limited studies have been published due to PTSD psychotherapy performance in Indonesia. CBT was the most frequent therapy delivered for Indonesian people with PTSD followed by EMDR and SHAT. The application of therapies varied in terms of frequency, duration, length of therapy, and the component. Therefore, there is a need to provide training about PTSD psychotherapy, but not limited to CBT, EMDR, and SHAT,

for health professionals as the first-line health service. International publications for the application of PTSD psychotherapy should be supported by the local government. Further research on the implementation of various types of psychotherapy for people with PTSD will be required.

Declaration of conflict of interest

The authors declare that there is no conflict of interest.

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None to be declare

Data availability

Data sharing is not applicable to this article as no datasets were generated or analysed during the current study

References

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

APA. (2017a). Clinical practice guideline for treatment of posttraumatic stress disorder (PTSD) in adults. In. https://www.apa.org/ptsd-guideline: American Psychological Association

APA. (2017b). *Cognitive Behavioral Therapy (CBT)*. Retrieved January, 9th from https://www.apa.org/ptsd-guideline/treatments/cognitive-behavioral-therapy

Armenta, R. F., Rush, T., LeardMann, C. A., Millegan, J., Cooper, A., Hoge, C. W., & Millennium Cohort Study, t. (2018). Factors associated with persistent posttraumatic stress disorder among U.S. military service members and veterans. *BMC Psychiatry, 18*(1), 48. https://doi.org/10.1186/s12888-018-1590-5

Aurizki, G. E., Elendi, F., & Indarwati, R. (2019). Factors associated with post-traumatic stress disorder (PTSD) following natural disaster among Indonesian elderly. *Working with Older People*, *24*(1), 27-38. https://doi.org/10.1108/wwop-08-2019-0020

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 Med*, *17*(8), e1003262. https://doi.org/10.1371/journal.pmed.1003262

Dawson, K., Joscelyne, A., Meijer, C., Steel, Z., Silove, D., & Bryant, R. (2017). 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*, 1-9.

Downs, L., Rahmadian, A., Noviawati, E., Vakil, G., Hendriani, S., Masril, & Kim, D. (2017). A DSM Comparative study of PTSD Incidence in Indonesia. *Advances in Social Science Research Journal*, *4*(12), 200-212. https://doi.org/10.14738/assrj.412.3414.

Elendi, F., Indarwati, R., & Aurizki, G. E. (2020). Effect of trauma-focused cognitive behavior therapy on depression and the quality of life of the elderly in Indonesia. *Working with Older People*, *24*(3), 149-157. https://doi.org/10.1108/WWOP-02-2020-0004

Fenn, K., & Byrne, M. (2013). The key principles of cognitive behavioural therapy. *InnovAiT*, *6*(9), 579-585. https://doi.org/10.1177/1755738012471029

Flannery, R. B. (2001). The employee victim of violence: Recognizing the impact of untreated psychological trauma. *American Journal of Alzheimer's Disease & Other Dementias®*, *16*(4), 230-233. https://doi.org/10.1177/153331750101600406

Flory, J. D., & Yehuda, R. (2015). Comorbidity between post-traumatic stress disorder and major depressive disorder: alternative explanations and treatment considerations. *Dialogues Clin Neurosci*, *17*(2), 141-150. https://doi.org/10.31887/DCNS.2015.17.2/jflory

Fox, V., Dalman, C., Dal, H., Hollander, A. C., Kirkbride, J. B., & Pitman, A. Suicide risk in people with post-traumatic stress disorder: A cohort study of 3.1 million people in Sweden. (1573-2517 (Electronic)).

Hase, M. (2021). The Structure of EMDR therapy: A guide for the therapist. *Frontiers in Psychology*, *12*, 660753.

Higgins, J., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M., & (editor), W. V. (2022). *Cochrane Handbook for Systematic Reviews of Interventions version 6.3* Cochrane. Retrieved October 31st from

Irwanto, Faisal, & Zulfa, H. (2015). Posttraumatic stress disorder among Indonesian children 5 years after the tsunami. *Southeast Asian J Trop Med Public Health*, *46*(5), 918-923.

Kliem, S., & Kröger, C. (2013). Prevention of chronic PTSD with early cognitive behavioral therapy. A meta-analysis using mixed-effects modeling. *Behaviour*

Research and Therapy, 51(11), 753-761. https://doi.org/https://doi.org/10.1016/j.brat.2013.08.005

Koenen, K. C., Ratanatharathorn, A., Ng, L., McLaughlin, K. A., Bromet, E. J., Stein, D. J., Karam, E. G., Meron Ruscio, A., Benjet, C., Scott, K., Atwoli, L., Petukhova, M., Lim, C. C. W., Aguilar-Gaxiola, S., Al-Hamzawi, A., Alonso, J., Bunting, B., Ciutan, M., de Girolamo, G., . . . Kessler, R. C. (2017). Posttraumatic stress disorder in the World Mental Health Surveys. *Psychol Med, 47*(13), 2260-2274. https://doi.org/10.1017/s0033291717000708

Lesmana, C. B., Suryani, L. K., Jensen, G. D., & Tiliopoulos, N. (2009). A spiritual-hypnosis assisted treatment of children with PTSD after the 2002 Bali terrorist attack. *Am J Clin Hypn, 52*(1), 23-34. https://doi.org/10.1080/00029157.2009.10401689

Lesmana, C. B. J., Suryani, L. K., & Tiliopoulos, N. (2022). The biobehavioural effectiveness of spiritual-hypnosis-assisted therapy in PTSD with childhood trauma. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery, 58*(1), 1-8.

Marthoenis, M., Ilyas, A., Sofyan, H., & Schouler-Ocak, M. (2019). Prevalence, comorbidity and predictors of post-traumatic stress disorder, depression, and anxiety in adolescents following an earthquake. *Asian Journal of Psychiatry, 43*, 154-159. https://doi.org/https://doi.org/10.1016/j.ajp.2019.05.030

Mavranezouli, I., Megnin-Viggars, O., Daly, C., Dias, S., Welton, N. J., Stockton, S., Bhutani, G., Grey, N., Leach, J., Greenberg, N., Katona, C., El-Leithy, S., & Pilling, S. (2020a). Psychological treatments for post-traumatic stress disorder in adults: a network meta-analysis. *Psychol Med, 50*(4), 542-555. https://doi.org/10.1017/s0033291720000070

Mavranezouli, I., Megnin-Viggars, O., Daly, C., Dias, S., Stockton, S., Meiser-Stedman, R., Trickey, D., & Pilling, S. (2020b). Research Review: Psychological and psychosocial treatments for children and young people with post-traumatic stress disorder: a network meta-analysis. *Journal of child psychology and psychiatry, 61*(1), 18-29.

Merz, J., Schwarzer, G., & Gerger, H. (2019). Comparative Efficacy and Acceptability of Pharmacological, Psychotherapeutic, and Combination Treatments in Adults With Posttraumatic Stress Disorder: A Network Meta-analysis. *JAMA Psychiatry, 76*(9), 904-913. https://doi.org/10.1001/jamapsychiatry.2019.0951

National Institute of Mental Health. (2022, May, 2022). *Post-Traumatic Stress Disorder*. Retrieved November 7th from https://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd

Perangin-Angin, S., Wijono, S., & Hunga, A. I. R. (2021). Applying Cognitive-Behavioral Therapy to Help Survivors of Dating Violence: A Pilot Study. *Jurnal Psikologi, 48*(1), 41.

Priebe, S., Matanov A Fau - Janković Gavrilović, J., Janković Gavrilović J Fau - McCrone, P., McCrone P Fau - Ljubotina, D., Ljubotina D Fau - Knezević, G., Knezević G Fau - Kucukalić, A., Kucukalić A Fau - Franciskovic, T., Franciskovic T Fau - Schützwohl, M., & Schützwohl, M. Consequences of untreated posttraumatic stress disorder following war in former Yugoslavia: morbidity, subjective quality of life, and care costs. (1332-8166 (Electronic)).

Rahmania, A., & Moordiningsih. (2012). Pengaruh eye movement desensitization and reprocessing (EMDR) dengan teknik stabilisasi untuk menurunkan posttraumatic stress disordder (PTSD). *Jurnal intervensi psikologi*, 4(2), 161-172.

Saeed, S. A., & Gargano, S. P. (2022). Natural disasters and mental health. *International Review of Psychiatry*, *34*(1), 16-25. https://doi.org/10.1080/09540261.2022.2037524

Sarimin, D. S., & Tololiu, T. A. (2017). Effectivenes of cognitive behavior therapy in comparison to CBT-Plus play therapy among children with post-traumatic stress disorder in manado, Indonesia. *International journal of research in medical sciences*, 1589-1593.

Shapiro, F. (1989). Eye movement desensitization: A new treatment for post-traumatic stress disorder. *Journal of behavior therapy and experimental psychiatry*, *20*(3), 211-217.

Sijbrandij, M., Kunovski, I., & Cuijpers, P. (2016). Effectiveness of internet-delivered cognitive behavioral therapy for posttraumatic stress disorder: A systematic review and meta-analysis. *Depression and anxiety*, *33*(9), 783-791.

Sterne, J. A., Hernan, M. A., Reeves, B. C., Savovic, J., Berkman, N. D., Viswanathan, M., Henry, D., Altman, D. G., Ansari, M. T., Boutron, I., Carpenter, J. R., Chan, A. W., Churchill, R., Deeks, J. J., Hrobjartsson, A., Kirkham, J., Juni, P., Loke, Y. K., Pigott, T. D., . . . Higgins, J. P. (2016). ROBINS-I: a tool for assessing risk of bias in non-randomised studies of interventions. *BMJ*, *355*, i4919. https://doi.org/10.1136/bmj.i4919

Susanty, E., Sijbrandij, M., Srisayekti, W., Suparman, Y., & Huizink, A. C. (2022). The Effectiveness of Eye Movement Desensitization for Post-traumatic Stress Disorder in Indonesia: A Randomized Controlled Trial. *Front Psychol*, *13*, 845520. https://doi.org/10.3389/fpsyg.2022.845520

TheJakartaPost. (2019). 3,822 natural disasters occured in 2019: BNPB. *TheJakartaPost*. https://www.thejakartapost.com/news/2019/12/18/3822-natural-disasters-occurred-in-2019-bnpb.html

Tol, W., Komproe, I., Susanty, D., Jordans, M., Macy, R., & De Jong, J. (2008). School-based mental health intervention for children affected by political violence in Indonesia. *JAMA*, *300*(6), 655-662.

Figure 1

PRISMA flow

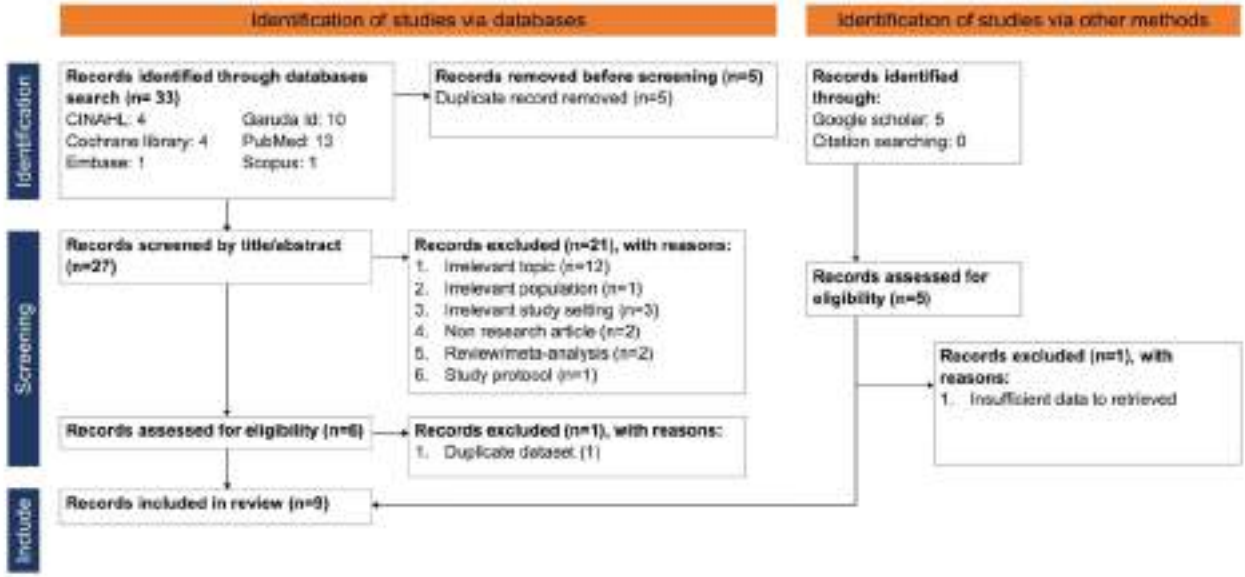

Table 1

Data extraction of included studies of psychotherapies for PTSD applied in Indonesia (n=9)

No	Study ID	Journal	Study purpose	Study setting & design	Population & Diagnostic criteria	sample size, N Age Gender	Trauma Background, (%)	Outcomes (instrument)	Time measurement
1	**Dawson et al, 2017**	Australian and New Zealand journal of psychiatry	To evaluate the relative efficacies of Trauma-focused CBT and problem-solving therapy in treating PTSD in children affected by civil conflict in Aceh	Aceh RCT	Children UCLA PTSD RI	**Sample size:** 32 **Age**, *M* (SD): 10.5 (0.83) **Female**, *n* (%): 14 (43.75)	Civil conflict, 32 (100)	PTSD (Children report) PTSD (Caregiver report) Depression Anger	Baseline Posttreatment 3 months FU
2	**Efendi et al, 2020**	Working with older people	To determine the effect of TF-CBT on the level of depression and the quality of life of the elderly living in post-disaster areas such as in the districts of North Lombok in Indonesia	Nusa tenggara barat RCT	Elderly CAPS-5	**Sample size:** 90 **Age**, *M* (SD): 71.28 (-) **Female**, *n* (%): 70 (77.8)	Disaster, 90 (100)	PTSD (CAPS-5) Depression (GDS-15) Quality od life (WHOQoL-BREF)	Baseline Posttreatment
3	**Lesmana et al, 2011**	Frontiers in American journal of clinical psychosis	To assess the effectiveness of a SHAT for treatment of PTSD in children	Bali Quasi-experiment	Children DSM-IV-TR	**Sample size:** 48 **Age**, *M* (SD): 9.35 (1.33) **Female**, *n* (%): 23 (47.90)	Terrorist attacked, 48 (100)	PTSD (self-developed instrument)	Baseline 24 months FU
4	**Lesmana et al, 2022**	Egypt journal neural psychiatry neurosurgery	To assessed the biobehavioural effectiveness of Spiritual-Hypnosis-Assisted Therapy on the modification of cortisol levels and PTSD symptom	Bali RCT	Adults PCL-C CTO	**Sample size:** 29 **Age**, *M* (SD): 33.38 (5.66) **Female**, *n* (%): 16 (55.20)	NI	PTSD (PCL-C, Cortisol)	Baseline Posttreatment

			severity in adults with childhood trauma						
5	**Perangin angin et al, 2021**	Jurnal Psikologi.	To investigate the effectiveness of CBT in reducing PTSD symptoms in survivors of Dating violence	Salatiga Quasi-experiment	Adults PCL-5	**Sample size:** 4 **Age**, *M* (SD): 23.25 (NI) **Female**, *n* (%): 4 (100)	Dating partners, 4 (100)	PTSD (PCL-5)	Baseline Posttreatment
6	**Rahmania & Moordiningsih, 2012**	Jurnal intervensi psikologi	To examine the therapeutic effect of differences in EMDR and stabilization technique to people with PTSD	NI Quasi-experiment	Adults IES-R	**Sample size:** 3 **Age**, *M* (SD): NI **Female**, *n* (%): NI	Accident, 3 (100)	PTSD (IES)	Baseline Posttreatment
7	**Sarimin &Tololiu, 2017**	International journal of research in medical science	to determine the difference score of PTSD symptom after receiving CBT PLUS in school-age children	South Sulawesi Quasi-experiment	Children PTSD questionnaire by Weathers, Huska and Keane	**Sample size:** 30 **Age**, *M* (SD): NI **Female**, *n* (%): 18 (60%)	NI	PTSD (PTSD questionnaire by Weathers, Huska and Keane)	Baseline Posttreatment
8	**Susanty et al, 2022**	Frontiers in psychology	To evaluate the effectiveness of EMDR or EMD in reducing PTSD symptom compared to retrieval-only control condition among Indonesian adults diagnosed with PTSD	Bandung, Cimahi, & Jakarta RCT	Adults SCID-5	**Sample size:** 47 **Age**, *M* (SD): 26.15 (5.81) **Female**, *n* (%): 42 (89.4)	Violence, 27 (57.4) Abuse, 5 (10.6) Other, 15 (31.9)	PTSD diagnosis (SCID) PTSD symptoms (PCL-5) Anxiety (HSCL-25) Depression (HSCL-25) Quality of life (WHOQoL-BREF)	Baseline 1 week posttreatment 1 month FU 3 months FU
9	**Tol et al, 2008**	JAMA	To assess the efficacy of a CBT-school-based intervention designed for	Poso RCT	Children CPSS	**Sample size:** 182	Conflict-exposed, 182 (100)	PTSD symptoms (CPSS)	Baseline 1 week posttreatment

	conflict-exposed children implemented in a low-income setting	**Age**, M (SD): 10.08 (1.39) **Female**, *n* (%): 98 (54.4)	Anxiety (SCARED-5) Depression (DS-RS) Trauma idiom Function impairment Hope (CHS) Aggression (CAS-parent)	6 months FU

2 ...hnicity (ID); Sample size (n); Randomized controlled trial (RCT); 45 Mean (M); standard deviation (SD); 2 ...matic stress disorder (PTSD); Follow up (FU); Spiritual-Hypnosis Assisted Therapy (SHAT); 46 Diagnostic ...statistical manual for mental disorder IV text revision (DSM-IV TR); Follow up (FU); No information (...; 2 The University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index (UCLA PTSD RI); Clinician-administered PTSD scale based on DSM-5 (CAPS-5); Geriatric depression scale- 15 (GDS-15); Diagnostic and statistical manual for mental disorder IV text revision (DSM-IV-TR); Impact event scale-revised (IES-R); 28 ...ct event scale (IES); Structured clinical interview diagnosis based on DSM-5 (SCID-5), and Children posttraumatic ...stress scale (CPSS); PTSD checklist based on DSM-5 (PCL-5); PTSD checklist-civilian (PCL-C); Hopkins symptom checklist 56 (HSCL-56); The world health organization quality of life brief version (WHOQoL-Brief); Screen for Child Anxiety Related Emotional Disorders (SCARED-5); Birleson depression self-rating scale (DS-RS); Children's hope scale (CHS); Children's aggression scale (CAS); Childhood trauma questionnaire (CTQ).

Table 2

Characteristics of psychotherapies for PTSD applied in Indonesia

Type of the intervention	Therapy sessions, duration, & frequency	Therapist	Content & format	Effectiveness	Study
CBT/TF-CBT	Length of therapy: 6-15 sessions Duration: 30-60 min Frequency: 1-3x/week	High school or higher level with CBT training for five to 14 weeks	Although the number of sessions of CBT in both studies were different, there are some common topics in such as psychoeducation, cognitive restructuring, trauma exposure either in vivo, prolonged, or narratively. The therapy was delivered in child-friendly format (games, video, school-based intervention). **Dawson et al, 2017** Therapy was delivered in child-friendly activities, games, and videos. **Session 1**: Children, Psychoeducation about trauma and stress management **Session 2**: Children, Introduction to basic cognitive restructuring **Session 3**: Children & caregiver, In vivo exposure **Session 4**: Children, In vivo exposure **Session 5**: Children, Modified prolonged exposure **Session 6**: Children, Modified prolonged exposure **Sarimin & Tololiu, 2017** cognitive restructuring method (writing negative thinking and problem solving **Toi et al, 2008** **Session 1-3**: Treatment information, safety-control, psychoeducation **Session 4-6**: Stabilization, awareness, self-esteem **Session 7-9**: Trauma narrative **Session 10-12**: Trauma narrative **Session 13-15**: Reconnecting child and group **Efendi et al, 2020** NI **Perangin angin et al, 2021**	CBT significantly decreased the symptom of PTSD, anger function impairment, hope, and quality of life overtime with low to moderate effect size at immediate posttreatment and short-term follow up	1,2, 5, 7, & 9

			Phase 1: Psychoeducation **Phase 2:** Cognitive restructuring and behavior therapy **Phase 3:** Relaxation technique		
EMDR	Length of therapy: 1-6 sessions Duration: 45-120 min Frequency: NI	Clinical psychologist with one-year training experience	Only Susanty et al, 2022 provide complete information due to content of EMDR therapy, which are: • Client history and treatment planning • Preparation • Assessment • Desensitization • Closure	EMDR showed significant effect to decrease PTSD symptom, anxiety, depression, and quality of life ($p<.05$) at immediate posttreatment and short-term follow ups Lower attrition rate (74.5%) for the EMDR group might affect the results	6, 8
SHAFT	Length of therapy: 1 session Duration: 30 min Frequency: 1x/week	The researcher	Therapy was delivered as follow: • Meditation trance induction • Deep breath for 5 times • Guided suggestion and reframe the meaning of traumatic memories • Express the emotion and visualized the past • Express undesirable feeling with crying, shouting, or inhale/exhale • Guided to understand and accept the past trauma	SHAT showed larger PTSD symptoms reduction ($p<.05$) at immediate posttreatment and two years with effect size 0.52. In addition, more than half (77.1%) children received SHAFT showed an improvement at two years follow up.	3, 4

Tabel 3

Quality assessment of psychotherapies for PTSD applied in Indonesia

Study ID	Domain ROB)					Overall bias
	1		3	4	5	
Dawson et al, 2021	S	L	L	L	L	Some concern
Effendi et al, 2020	L	S	L	L	L	Some concern
Lesmana et al, 2020	L	L	L	L	L	Low
Susanty et al, 2022	L	L	L	L	L	Low
Tol et al, 2008	L	L	L	L	L	Low

Study ID	Items MINORS								Overall score	Quality
	1	2	3	4	5	6	7	8		
Lesmana et al, 2009	2	2	2	2	1	2	2	2	15	High
Peraning et al, 2021	2	2	2	2	1	2	2	1	14	High
Rahmania, et al, 2012	2	2	2	2	0	2	1	2	13	High
Sarimin et al, 2017	2	2	2	1	0	2	1	2	12	Modera

Abbreviation: Identity (ID); Cochrane risk of bias 2 (ROB 2); Methodological index for non-randomized study (MINORS); Low risk of bias (L); Some concern (S); High risk of bias (H)

Note: The RCTs studies were assessed using Cochrane RoB 2 while quasi-experimental studies were use MONIRS. Cochrane RoB 2 devided the study into low risk of bias, some concern and high risk of bias according to five domains. In MINORS, eight items were used to evaluate the quality of non-randomized study. The items are scored 0 if not reported, 1 if reported but inadequate, 2 if reported as well as adequate. The total score was categorized into very low quality (0-4), low quality (5-8), moderate quality (9-12), and high quality (13-16).

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