

LITERATURE REVIEW OF POST-TRAUMATIC STRESS DISORDER INTERVENTIONS AMONG PRISONERS

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ABSTRACT

Anyone, including prisoners, can experience traumatic events. Prison life with its many disputes, pressures and constraining restrictions, as well as the loss of freedom can cause prisoners to experience chronic stress. Prison related stressors can worsen PTSD symptoms in prisoners. Nurse can give appropriate interventions for prisoners suffering from PTSD as part of the endeavor to overcome this. The aim of this research study was to identify different PTSD therapies for convicts. A literature review was employed as the technique. Articles searched in databases and search engines PubMed, EBSCO, and Google Scholar with keywords in English: intervention, PTSD, prisoners, and keywords in Indonesian: intervention, PTSD, and prisoner, publication year 2015 - 2021, full text and open access. Mindfulness-based Relapse Prevention (MBRP), Eye Movement Desensitization and Reprocessing (EMDR), Evidence-Based Psychotherapy (EBPs), Interpersonal Psychotherapy (IPT), and Group Interpersonal Psychotherapy (IPT) were five papers discovered regarding therapies for inmates with PTSD. The study indicated that all therapies included in the analysis of the literature were effective in reducing PTSD symptoms in inmates.

Keywords: intervention; prisoners; ptsd

INTRODUCTION

Crime or often referred to as criminality is a sensitive issue involving social regulations, moral aspects, ethics in society and rules in religion. In Indonesia, the crime rate has not shown any signs of decreasing. In 2021 the total number of prisoners in Indonesia will be 252,384 people. The increasing number of prisoners shows an increasing number of criminal cases, therefore the government must pay more attention to it, because crime causes problems that can cause unpleasant feelings in the community, as well as material and non-material losses (Wijayanti & Nisa Rachmah, 2019).

According to Corrections Law No. 12 of 1995, a prisoner is someone who has been convicted based on a court judgment that has permanent legal effect. According to Wilson (2005) prisoners are people with problems who are separated from society to be nurtured so that they can live in a better society. Someone who is serving a prison sentence, is required to be able to adapt and socialize with very scary prison regulations. In addition, they are far from their families and loved ones, they live not free and the negative stigma of society about the status of prisoners, so that it becomes a separate trauma for prisoners. It is not impossible that after inmates are released from detention, they will experience some psychological pressures such as anxiety, fear, lack of confidence, and a stressful life (Julia, 2018; Siswati, 2009).

This traumatic occurrence is sometimes referred to as PTSD among inmates. PTSD (post-traumatic stress disorder) is characterized by anxiety, autonomic lability, and flashbacks to severely unhappy situations following physical or emotional stress that surpasses the boundaries of ordinary people's tolerance. People with PTSD have had traumatic experiences, such as life-threatening or physical that left them unable to do anything. A person with PTSD will usually experience the same events over and over with various

perceptions such as visual hallucinations, dreams, illusions, hallucinations, or good flashes. If it is not treated immediately, a more severe mental disorder will occur (Hairina & Komalasari, 2017).

In studies of jail populations, high levels of lifetime traumatic exposure have been observed (Abram et al., 2004; N. Wolff, Huening, Shi, & Frueh, 2014). A recent international meta-analysis found that, like other mental diseases, the incidence of PTSD in prison populations is higher than in community populations, with a pooled point prevalence of 6% in male inmates and 21% in female prisoners (Baranyi, Cassidy, Fazel, Priebe, & Mundt, 2018). Other mental problems, as well as problematic behaviors such as suicidal and aggressive behavior, are prevalent in prison populations (Fazel, Hayes, Bartellas, Clerici, & Trestman, 2016; Hawton, Linsell, Adeniji, Sariaslan, & Fazel, 2014). The link between PTSD and these outcomes is unclear, which may contribute to under-diagnosis and under-treatment of PTSD in prisons (Jakobowitz et al., 2017). According to community and military population research, PTSD is an illness that is strongly associated with other mental health disorders (Nancy Wolff et al., 2010), such as depression (Stander, Thomsen, & Highfill-McRoy, 2014) and substance abuse (Debell et al., 2014; Stewart, Pihl, Conrod, & Dongier, 1998) are two examples. In community, clinical, and military population studies, PTSD has also been associated to suicidality (Panagioti, Gooding, Triantafyllou, & Tarrier, 2015), self-harm (Mellesdal et al., 2015), crime (Donley et al., 2012), violence, and aggressive behavior (Gillikin et al., 2016; Macmanus et al., 2012; Macmanus et al., 2013; Taft, Watkins, Stafford, Street, & Monson, 2011).

In addition to the negative response of the surrounding community towards prisoners, causing stress, female prisoners have a high risk of stress due to self-restraint from all forms of social life, environment and behavior. Stress also causes the sympathetic nervous system in the body to work harder, resulting in increased muscular tension, blood pressure, dizziness, indigestion, weariness, anxiety, wrath, and dread. An increased risk of disease can occur in prison with stress triggers, such as ulcer disease, hypertension, anemia, infectious diseases (diarrhea, urinary tract infections) insomnia, dengue hemorrhagic fever, dysentery and diseases related to clean and healthy living behavior (PHBS). such as scabies, while prison rooms are damp and crowded with inmates which can also trigger these infectious diseases. A stressor is a condition that is full of pressure and is at risk for an increased risk of disease that really disrupts the lives of prisoners. While stress is a negative emotional experience accompanied by biochemical, physiological, and cognitive changes, such as the toughest days when a person's life pressure will weaken, people who are experiencing stress cannot think long and try to find solutions (Anggraini & Kurniasari, 2020).

The role of nurses is needed in overcoming PTSD problems in prisoners so that they are not in a more severe condition. Nursing intervention as one way that can be given by nurses in overcoming PTSD in prisoners, one of which is the provision of nursing modality therapy. Modality therapy is the main mental nursing therapy that can change maladaptive behavior into adaptive behavior. Various modalities of therapy can be used to treat prisoners' problems such as PTSD. The aim of this literature review was to find several PTSD interventions for inmates.

METHODS

Article searches were carried out utilizing a variety of databases and search engines, including Google Scholar, PubMed, and EBSCO. PICO keywords were used to perform article

searches, notably P (Problem), I (Intervention), C (Comparison), and O (Outcome). The population used are prisoners, Intervention is independent nursing intervention in overcoming PTSD in prisoners, Comparison is not available, Outcome is getting intervention/therapy for prisoners with PTSD. Based on this technique, keywords in English were used in the search for articles: “intervention or treatment or therapy” AND “Post Traumatic Stress Disorder” AND “Convicts or felons or prisoners or offenders or criminals”. Meanwhile, the keywords used to search for articles in Indonesian were “intervention” AND “PTSD” AND “convicts”.

Tabel 1.
 Database dan Jumlah Artikel

Database	According to keywords	According to inclusion criteria	Reviewed articles
EBSCO	217	29	1
Google Scholar	1.487	530	1
PubMed	54.913	377	3

Table 1 after a search, the results are obtained as shown in table 1. The articles are then sorted using inclusion and exclusion criteria. The inclusion criteria used are articles published in the 2015-2021 range, articles available in Indonesian and English, as well as articles in full text and open access. The exclusion criteria were articles in the form of systematic reviews/literature studies, protocol studies, and articles that had nothing to do with PTSD in prisoners.

RESULTS

Tabel 2.
 Summary of Article Review

Authors, Year, Country	Interventions/The apies	Sample Size	Methods	Results
Lyons et all, 2019 USA	<i>Mindfulness-Based Relapse Prevention (MBRP)</i>	88	Quasi experiment	Mindfulness measures were substantially inversely associated to anxiety, PTSD symptoms, and drug addict symptoms at baseline. Anxiety, PTSD symptoms, and dependency symptoms all decreased considerably in both therapy groups, while mindfulness rose.
Susanty & Sari, 2017 Indonesi a	<i>Eye Movement Desensitization and Reprocessing (EMDR)</i>	13	Quasi experiment	The ratings of traumatic symptoms before and after EMDR therapy differ significantly, indicating that EMDR therapy helps lessen traumatic symptoms in female inmates.
Feingold & Galovski, 2018	<i>Evidence-Based Psychotherapy (EBPs)</i>	97	Quasi experiment	There was a significant reduction in PTSD and depressive symptoms during both

Authors, Year, Country	Interventions/The apies	Sample Size	Methods	Results
USA				complementary and non-complementary treatment.
Felton et al, 2020 USA	<i>Interpersonal Psychotherapy (IPT)</i>	181	RCT	Hopelessness, depressive symptoms, and loneliness, as well as greater social support, were all related with a reduction in PTSD symptoms. IPT's impact on despair and hopelessness may lead to a reduction in PTSD symptoms.
Johnson et al, 2019 USA	<i>Group Interpersonal Psychotherapy (IPT)</i>	235	RCT	Group IPT can reduce symptoms of depression, hopelessness, and PTSD symptoms.

DISCUSSION

Mindfulness-Based Relapse Prevention (MBRP)

Six-week Mindfulness-Based Relapse Prevention (MBRP) intervention conducted in a prison environment, showed that the intervention could reduce symptoms of drug dependence and PTSD. MBRP is a contemplative intervention that integrates mindfulness meditation with a relapse prevention (RP) component that has been shown to be effective for people recovering from drug dependence or other addictions, with the aim of helping them avoid drug relapse/reluctance to use drugs (Lyons, Womack, Cantrell, & Kenemore, 2019).

This intervention consists of six sessions. Each session is divided into two parts: mindfulness meditation exercises and conversation (about 40 minutes) and activities that apply awareness to everyday life and high-risk drug relapse scenarios (about 30 minutes). Based on feedback from the focus groups and facilitators, each session begins with 5 minutes of mindful movement/stretching/chair yoga activities. MBRP is an intervention that may be utilized as an extra intervention in the treatment of persons in jail who have drug addiction disorders. Because jail is a stressful situation, and inmates are less likely to use alcohol and drugs for a period of time, MBRP may be especially beneficial.

Eye Movement Desensitization and Reprocessing (EMDR)

Susanty & Sari (Susanty & Sari, 2017), conducted research on EMDR on female prisoners. At the initial stage, an assessment was carried out on 100 female inmates consisting of three legal cases, namely: drug cases, corruption and general crimes. Based on the results of the assessment, it was found that there were 16 prisoners who were diagnosed with high category traumatic symptoms. Furthermore, the intervention groups were divided into groups that received EMDR therapy (7 people) and groups that only received relaxation techniques (6 people).

The stages of EMDR therapy are as follows: a). explore the client's background and intervention planning (client history), b). preparation, where efforts are made to build a

therapeutic bond with the respondent, explain the EMDR process and its effects, make the respondent pay attention, and teach self-care techniques so that the respondent can overcome negative emotions that arise during or between therapy sessions., c). assessment, where the therapist identifies the respondent's strengths and weaknesses., d). During desensitization, the respondent will focus his attention on all negative sentiments, disturbed emotions, and body sensations that develop while the client focuses on the target picture while moving his eyes back and forth between the therapist's fingers. Respondents were also asked to record any reactions during the therapy process as positive, negative, or neutral, including the formation of insights, associations, or feelings, e). During the installation phase, participants are urged to concentrate on good concepts that have been found to replace negative beliefs or negative thoughts regarding trauma. f). After replacing negative thoughts about trauma with more optimistic beliefs, respondents focus on diverse bodily sensations in the following phase. The therapist will ask the respondent to think about the first aim while scanning the body from head to toe to detect any leftover tightness. Any remaining stress or unpleasant bodily feelings are subsequently exposed to bilateral stimulation, g). To conclude, whether or not reprocessing is finished, the responder must express the emotional balance at the end of each session, h). Each new session begins with a reevaluation of the progress made by responders. First, responders will be asked to concentrate on many completed goals. The therapist will go over the respondent's response to evaluate whether they were able to retain a favorable result. The therapist often inquiry about how the respondent thinks about past objectives and goes over any distractions that have arisen between sessions.

Evidence-Based Psychotherapy (EBPs)

In Feingold & Galovski's study, 97 inmates with Severe Mental Illness (SMI), of which seventy-two participants started treatment and received Cognitive Processing Therapy (CPT; 53%), Cognitive Behavioral Therapy. (CBT; 39%), and Motivation Interview (MI; 8%). Inmates were also given therapy (56%), although they did not vary from non-treatment on any baseline parameters. Hierarchical Linear Modeling revealed a substantial reduction in PTSD and depression symptoms. The inclusion of emergency sessions or stressors to the EBPs protocol was linked to a higher chance of therapy completion. The study's findings point to the necessity for more research into the hurdles to treatment completion for inmates with SMI and PTSD. The findings also provide additional evidence for the efficacy of EBPs in PTSD when administered in an outpatient environment to people with SMI who have had encounter with the criminal system (Feingold, Fox, & Galovski, 2018).

Interpersonal Psychotherapy (IPT)

In the fourth article, 181 prisoners with PTSD symptoms showed good results. There are groups with IPT + TAU and groups with only TAU. Measured include increased social support, loneliness, hopelessness, depressive symptoms, and PTSD. Comparison of the group with IPT and treatment as usual (TAU) reduced hopelessness and relative depressive symptoms in the group with TAU alone. And did not have a significantly different effect between the IPT and TAU groups on social support or loneliness. The effects of IPT on PTSD symptoms were largely mediated by reductions in despair and depressive symptoms rather than social support and loneliness. Reduced PTSD symptoms were related with increased social support and decreased loneliness, but IPT did not predict improvements in social support or loneliness. Thus, IPT is a very simple intervention to provide and successfully spread by physicians, who are typically first-level care providers in jails (Felton et al., 2020).

Group Interpersonal Psychotherapy (IPT)

In this fifth article, the subjects were divided into two groups, namely the group with TAU and IPT + TAU. In the TAU group, referrals to prison mental health staff consisted of antidepressants and other medication adherence. The IPT + TAU group received an active therapeutic attitude from IPT, which was goal-oriented, semi-structured, positive support, focused on the present, and conducive to skill acquisition. This group received 20 group therapy sessions for 90 minutes, and 4 individual sessions (pre-group, middle group, post-group, and maintenance) over a 10-week period. The maintenance session was placed four weeks following the post-group session. The evaluation includes diagnostic and screening (depressive symptoms and suicidal ideation value measurement), functioning in jail (Exploratory Outcomes), and numerous other relevant tests. According to the study's findings, the IPT group reduced symptoms of despair, hopelessness, and PTSD symptoms while increasing the relative MDD remission rate. The cost per patient is quite economical and is more recommended for prisoners as well (Johnson et al., 2019).

CONCLUSION

A review of several articles revealed that several interventions, including Mindfulness-based Relapse Prevention (MBRP), Eye Movement Desensitization and Reprocessing (EMDR), Evidence-Based Psychotherapy (EBPs), Interpersonal Psychotherapy (IPT), and Group Interpersonal Psychotherapy (IPT), can be used to treat PTSD in prisoners. The five publications indicated that there were substantial effects in lowering PTSD (post-traumatic stress disorder) symptoms in inmates, therefore more study on the factors that impact PTSD in prisoners is needed.

REFERENCES

- Abram, K. M., Teplin, L. A., Charles, D. R., Longworth, S. L., McClelland, G. M., & Dulcan, M. K. (2004). Posttraumatic stress disorder and trauma in youth in juvenile detention. *Arch Gen Psychiatry*, *61*(4), 403-410. doi:10.1001/archpsyc.61.4.403
- Anggraini, S., & Kurniasari, L. (2020). Hubungan Masa Hukuman dengan Tingkat Stres pada Narapidana di Lapas Perempuan Kelas II A Samarinda. *Borneo Student Research (BSR)*, *2*(1), 365-370.
- Baranyi, G., Cassidy, M., Fazel, S., Priebe, S., & Mundt, A. P. (2018). Prevalence of Posttraumatic Stress Disorder in Prisoners. *Epidemiol Rev*, *40*(1), 134-145. doi:10.1093/epirev/mxx015
- Debell, F., Fear, N. T., Head, M., Batt-Rawden, S., Greenberg, N., Wessely, S., & Goodwin, L. (2014). A systematic review of the comorbidity between PTSD and alcohol misuse. *Soc Psychiatry Psychiatr Epidemiol*, *49*(9), 1401-1425. doi:10.1007/s00127-014-0855-7
- Donley, S., Habib, L., Jovanovic, T., Kamkwala, A., Evces, M., Egan, G., . . . Ressler, K. J. (2012). Civilian PTSD symptoms and risk for involvement in the criminal justice system. *J Am Acad Psychiatry Law*, *40*(4), 522-529.
- Fazel, S., Hayes, A. J., Bartellas, K., Clerici, M., & Trestman, R. (2016). Mental health of prisoners: prevalence, adverse outcomes, and interventions. *Lancet Psychiatry*, *3*(9), 871-881. doi:10.1016/s2215-0366(16)30142-0

- Feingold, Z. R., Fox, A. B., & Galovski, T. E. (2018). Effectiveness of evidence-based psychotherapy for posttraumatic distress within a jail diversion program. *Psychological Services, 15*(4), 409.
- Felton, J. W., Hailemariam, M., Richie, F., Reddy, M. K., Edukere, S., Zlotnick, C., & Johnson, J. E. (2020). Preliminary efficacy and mediators of interpersonal psychotherapy for reducing posttraumatic stress symptoms in an incarcerated population. *Psychotherapy Research, 30*(2), 239-250.
- Gillikin, C., Habib, L., Evces, M., Bradley, B., Ressler, K. J., & Sanders, J. (2016). Trauma exposure and PTSD symptoms associate with violence in inner city civilians. *J Psychiatr Res, 83*, 1-7. doi:10.1016/j.jpsychires.2016.07.027
- Hairina, Y., & Komalasari, S. (2017). Kondisi Psikologis Narapidana Narkotika Di Lembaga Pemasyarakatan Narkotika Klas II Karang Intan, Martapura, Kalimantan Selatan. *Jurnal Studia Insania, 5*(1), 94-104.
- Hawton, K., Linsell, L., Adeniji, T., Sariaslan, A., & Fazel, S. (2014). Self-harm in prisons in England and Wales: an epidemiological study of prevalence, risk factors, clustering, and subsequent suicide. *Lancet, 383*(9923), 1147-1154. doi:10.1016/s0140-6736(13)62118-2
- Jakobowitz, S., Bebbington, P., McKenzie, N., Iveson, R., Duffield, G., Kerr, M., & Killaspy, H. (2017). Assessing needs for psychiatric treatment in prisoners: 2. Met and unmet need. *Soc Psychiatry Psychiatr Epidemiol, 52*(2), 231-240. doi:10.1007/s00127-016-1313-5
- Johnson, J. E., Stout, R. L., Miller, T. R., Zlotnick, C., Cerbo, L. A., Andrade, J. T., . . . Wiltsey-Stirman, S. (2019). Randomized cost-effectiveness trial of group interpersonal psychotherapy (IPT) for prisoners with major depression. *Journal of consulting and clinical psychology, 87*(4), 392.
- Julia, N. C. (2018). *HUBUNGAN OPTIMISME DENGAN POST TRAUMATIC GROWTH PADA NARAPIDANA REMAJA*. Universitas Islam Negeri Sultan Syarif Kasim Riau,
- Lyons, T., Womack, V. Y., Cantrell, W. D., & Kenemore, T. (2019). Mindfulness-based relapse prevention in a jail drug treatment program. *Substance use & misuse, 54*(1), 57-64.
- Macmanus, D., Dean, K., Al Bakir, M., Iversen, A. C., Hull, L., Fahy, T., . . . Fear, N. T. (2012). Violent behaviour in U.K. military personnel returning home after deployment. *Psychol Med, 42*(8), 1663-1673. doi:10.1017/s0033291711002327
- Macmanus, D., Dean, K., Jones, M., Rona, R. J., Greenberg, N., Hull, L., . . . Fear, N. T. (2013). Violent offending by UK military personnel deployed to Iraq and Afghanistan: a data linkage cohort study. *Lancet, 381*(9870), 907-917. doi:10.1016/s0140-6736(13)60354-2
- Mellesdal, L., Gjestad, R., Johnsen, E., Jørgensen, H. A., Oedegaard, K. J., Kroken, R. A., & Mehlum, L. (2015). Borderline Personality Disorder and Posttraumatic Stress Disorder at Psychiatric Discharge Predict General Hospital Admission for Self-Harm. *J Trauma Stress, 28*(6), 556-562. doi:10.1002/jts.22053

- Panagioti, M., Gooding, P. A., Triantafyllou, K., & Tarrier, N. (2015). Suicidality and posttraumatic stress disorder (PTSD) in adolescents: a systematic review and meta-analysis. *Social psychiatry and psychiatric epidemiology*, *50*, 525-537.
- Siswati, T. I. (2009). Masa Hukuman dan Stres Pada Narapidana. *Jurnal Proyeksi*, *4*(2), 95-106.
- Stander, V. A., Thomsen, C. J., & Highfill-McRoy, R. M. (2014). Etiology of depression comorbidity in combat-related PTSD: a review of the literature. *Clin Psychol Rev*, *34*(2), 87-98. doi:10.1016/j.cpr.2013.12.002
- Stewart, S. H., Pihl, R. O., Conrod, P. J., & Dongier, M. (1998). Functional associations among trauma, PTSD, and substance-related disorders. *Addict Behav*, *23*(6), 797-812. doi:10.1016/s0306-4603(98)00070-7
- Susanty, E., & Sari, D. I. (2017). Penanganan Gejala Traumatik dengan Terapi Emdr (Eye Movement Desensitization And Reprocessing) pada Narapidana Wanita di Lapas Kelas Iia Bandung, Jawa Barat. *INQUIRY: Jurnal Ilmiah Psikologi*, *8*(1), 1-15.
- Taft, C. T., Watkins, L. E., Stafford, J., Street, A. E., & Monson, C. M. (2011). Posttraumatic stress disorder and intimate relationship problems: a meta-analysis. *J Consult Clin Psychol*, *79*(1), 22-33. doi:10.1037/a0022196
- Wijayanti, S., & Nisa Rachmah, N. (2019). *Efektivitas Psikoterapi Interpersonal Area Transisi Peran Untuk Menurunkan Depresi Pada Narapidana Di Rumah Tahanan Kelas I Surakarta*. Universitas Muhammadiyah Surakarta,
- Wolff, N., Huening, J., Shi, J., & Frueh, B. C. (2014). Trauma exposure and posttraumatic stress disorder among incarcerated men. *J Urban Health*, *91*(4), 707-719. doi:10.1007/s11524-014-9871-x
- Wolff, N., Vazquez, R., Frueh, B. C., Shi, J., Schumann, B. E., & Gerardi, D. (2010). Traumatic event exposure and behavioral health disorders among incarcerated females self-referred to treatment. *Psychological Injury and Law*, *3*, 155-163.