REVIEW

# "Empowering Hope: Non-Pharmacological Interventions for Borderline Personality Disorder (BPD) Communities": Scoping Review

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Aim: Borderline personality disorder (BPD) is defined by impulsive behaviour and instability in interpersonal relationships, selfimage, mood, and emotions. BPD can be prevented and treated using a mix of medication and psychotherapy. Non-pharmacological interventions are essential for maintaining stable interpersonal interactions in individuals with BPD.

Goal: The literature review tries to identify different methods of non-pharmacological management. Psychotherapy, particularly tailored to aid in the recovery from emotional disorders in individuals with BPD. The methodology employed is a scoping review that integrates papers from Semantic Scholars, Pubmed, and CINAHL databases. The keyword utilised is PICO.

Outcomes: Four pieces of literature aligned with the research goals based on the literature review results. Three articles discuss therapies that focus on cognitive processes, such as mindfulness therapy, schema therapy, Dialectical Behavioural Therapy (DBT), and therapy groups that incorporate supplementing with Omega-3.

Conclusion: Non-pharmacological therapies for patients with Borderline Personality Disorder (BPD) can enhance good psychosocial outcomes, dialectical effects, and decrease emotional instability.

**Keywords:** borderline personality disorder, intervention, psychosis

## Introduction

Borderline Personality Disorder (BPD) is characterised by signs of impulsivity and instability in interpersonal relationships, self-image and mood and emotional affect. BPD typically presents in early adolescents, but can be diagnosed in early adulthood, and manifests in a variety of life situations.<sup>1,2</sup>

Impulsivity and emotional Impulsivity and emotional dysregulation in people with BPD often lead to vulnerability to rule-breaking behaviours such as self-harm.<sup>3</sup>

People with BPD tend to have doubts about their personal identity, such as life values, goals and even sexual orientation, if there is a recurrence of BPD in times of stress. If there is a relapse of BPD during a stressful period, psychotic symptoms such as hallucinations or delusions may occur.<sup>3</sup> The prevalence of BPD is not known for certain, but it is estimated to occur in 2% of the general population, about 10% as an outpatient, and 20% as an inpatient.

Approximately 10% of BPD patients are seen as outpatients, and 20% are known to be treated by psychiatrist.<sup>4</sup>

According to Raharja et al,<sup>5</sup> both pharmacotherapy and psychotherapy are essential for enhancing individual healing with borderline personality disorder (BPD). Target therapy from pharmacotherapy aims to achieve physiologically perfect condition of the patient, especially the working part of the brain. Meanwhile, BPD's strategy is to overcome interpersonal connection difficulties through psychotherapy.<sup>5</sup> BPD is also a multimodal therapy, namely therapy which refers to therapy communication, and is a non-pharmacological intervention which really needs to be done.

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According to Soler et al,<sup>6</sup> an effective BPD intervention combines Dialectical Behavioral Therapy (DBT) methodologies, positive psychology, context-based skills, group-based approaches, and participant feedback. Another tendency focuses on psychological techniques, such as mentalization-based therapy (MBT), which aims to improve emotional understanding and interpersonal interactions. A meta-analysis found that, while individual studies of these therapies differ, techniques such as DBT and MBT have showed promise in treating BPD symptoms.<sup>7</sup> Additionally, research is expanding into mindfulness and compassion-based therapies, suggesting that these interventions help in addressing emotional dysregulation, a core issue in BPD.<sup>3</sup> From the information above, BPD intervention combines BT, positive psychology, and participant feedback. Consequently, nurses as one competent health personnel non-pharmacological approaches, necessary Find out what therapies can be done for handling clients with Borderline Personality Disorder (BPD).

# **Methods**

The scoping review analysis method was utilized in this investigation. A scoping review is a form of literature review used to systematically map a certain topic. The main objectives of conducting a study using the scoping review method are to examine the scope and nature of research activities, assess the importance of conducting full systematic observations, summarize and share research findings, and identify any research deviations in existing literature. When researching nursing interventions/ non-pharmacological interventions for patients with borderline personality disorders, the researcher utilized databases such as EBSCO, PubMed, and Semantic. The search terms included borderline personality disorder OR BPD OR borderline personality AND nursing nonpharmacological OR intervention AND treatment OR therapy OR intervention OR best practice.

# Criteria for Eligibility

Full papers in English and Indonesian, free full-text publications, research articles specifically Randomized Controlled Trials (RCT), published within the last 5 years (2017–2022).

# **Data Selection Process**

Researchers utilized a prism diagram to choose papers. Selecting articles using Prisma is shown in Figure 1. Article selection results are decided by keywords, inclusion criteria, and the title abstract of the articles.

# Extracting and Analysing Data

Author, year of publication, location study, title, population, objectives, inclusion and exclusion criteria, intervention, results/significance, and limits research based on the collected publications are all included in the manual data extraction and analysis procedure in Table 1. The acquired data is predicated on standards. The entire English/Indonesian article is the specified inclusion. The study is a controlled trial that is randomised, with a maximum of five years (2017–2022) and focuses on the group-focused literature about borderline personality disorder (BPD).

# Results

Various interventions can be implemented for groups of individuals with Borderline Personality Disorder (BPD). The literature review discusses four articles that are up part of cognitive behavioural therapy interventions. One article examines omega-3, another one focuses on Schema Therapy (ST), a third article covers Cognitive Behavioural Therapy (CBT), and a fourth item delves into dialectically connected therapy. All publications were analysed using the Randomised Controlled Trial (RCT) approach, and their feasibility was evaluated using JBI.

# Discussions

## **Cognitive Therapy**

## Schema Therapy (ST)

Schema therapy (ST) is a structured therapeutic approach provided by trained therapists following a specific protocol. In the case of the dominant group schema therapy (PGST), patients attend 2 group sessions per week in the first year, with up to 12 individual sessions available upon request. During the second year, a Schema Therapy (ST) group was conducted weekly



Figure I PRISMA flow diagram illustrating the process of study selection.

Notes: PRISMA figure adapted from Page MJ. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. 2021;372:n71. Creative Commons.

from the 13th to the 18th month, bi-weekly from the 19th to the 21st month, and monthly from the 22nd to the 24th month. Additionally, up to 5 individual Schema Therapy (ST) sessions could be requested.

The results indicate that IGST is more efficacious and has greater treatment retention compared to TAU and PGST. The results suggest that IGST is the most favourable format for ST, leading to sustained improvements in BPD severity post-treatment.

#### Cognitive Behavioural Therapy (CBT)

Cognitive Behavioural Therapy (CBT) is an individualised therapy consisting of three initial sessions focusing on breathing training for anxiety, safety planning, and psychoeducation about trauma and PTSD. This is followed by 9–13 sessions of cognitive restructuring, which involves identifying and correcting erroneous thoughts or beliefs.

Contribute to that feeling of discomfort. Cognitive restructuring is used to address thoughts and beliefs that stem from ordinary life and trauma.<sup>10</sup> The results indicate that in Study 1, Cognitive Behavioural Therapy (CBT) led to a significant improvement in PTSD symptoms, depression, and self-reported physical health. In Study 2, participants in CBT experienced a significant increase in PTSD symptoms, post-traumatic cognition, and depression, with those in CBT showing a greater improvement in PTSD symptoms. Cognitive Behavioural Therapy for Post-Traumatic Stress Disorder is viable and acceptable for those with Severe Mental Illness, Borderline Personality Disorder, and PTSD, and is linked to a reduction in PTSD symptoms. This aligns with the study. DBT, or dialectical behavioral therapy, Dialectical Behavioral Therapy (DBT) is a mindfulness approach backed by general care standards that cover awareness, emotional control, discomfort tolerance, and

## Table I Characteristics of included studies in the Scoping Review

No	Title/Author/Year	Country	Population and Sample	Research purposes	Intervention	Result
I	Omega-3 Fatty Acid supplementation in Adolescents With Borderline Personality Disorder and Ultra-High Risk Criteria for Psychosis: A Post Hoc Subgroup Analysis of a Double-Blind, Randomized Controlled Trial G Paul Amminger, MD; Andrew M Chanen, MD; Susanne Ohmann, PhD; Claudia M Klier, MD; Nilufar Mossaheb, MD; Andreas Bechdolf, MD; Barnaby Nelson, PhD; Andrew Thompson, MD; Patrick D McGorry, MD, PhD; Alison R Yung, MD; Miriam R Schäfer, MD 2013 <sup>8</sup>	Australia	Aged individuals 13 to 25 year with history of bpd, as many as 15 person	To test whether unsaturated fatty acids double omega-3 (n-3) chain long (PUFA) improve function and psychiatric symptoms in people youth with disorders personality threshold (BPD) which Also meet risk criteria Very high for psychosis	Given a supplement of 0.5 g gelatin capsule yellow Which contains concentrated marine fish oil, with a daily dose of 4 capsules. Compliance with treatment The study was monitored by pill counts and self-report, as well as by acid quantification fat gas chromatography in erythrocytes. while the research was taking place, medicines antipsychotics or mood stabilizers are not permitted for consumption. However, all patients were offered 7 sessions of needs-based psychological and psychosocial intervention, along with research follow-up interviews at baseline, 1, 2, 3, 4, 8, and 12 weeks.	In patients with BPD, erythrocyte n-3 PUFA correlated with GAF scores ( $r = 0.54$ , P = 0.04), score PANSS negative ( $r = -0.74$ , P = 0.002), and total score PANSS ( $r = -0.55$ , P = 0.04). At the beginning, levels erythrocyte n-3 PUFA positively correlated with psychosocial and negative functions with psychopathology. On end of intervention, n-3 PUFA significantly improve function and reduce psychiatric symptoms in people with BPD, compared with placebo. There are no side effects different between groups treatment
2	Effectiveness of Predominantly Group Schema Therapy and Combined Individual and Group Schema Therapy for Borderlines Personality Disorder A Randomized Clinical Trial Arnoud Arntz, Gitta A. Jacob, Christopher W. Lee, Odette Manon Brand-de Wilde, Eva Fassbinder, R-Patrick Harper, Anna Lavender, George Lockwood, Ioannis A. Malogiannis, Florian A. Ruths, Ulrich Schweiger, Ida A.Shaw, Gerhard Zarbock, Joan M. Farrell Year: 2022 <sup>9</sup>	(Australia, Germany, Greece, the Netherlands, and the UK)	There were 495 individuals with the primary diagnosis inclusion criteria of BPD, ages 18 to 65, Disorders Borderline Personality Severity Index Score IV (BPDSI-IV) greater than 20 (range, 0–90; a score >20 indicates BPD is clear; 15 is the limit for BPD, and <15 is used as recovery criterion), and the willingness and ability to participated in 2 years of treatment	Dominated group or a combination of individual and group formats and what Schema Therapy (ST) more effective than Treatment as Usual (TAU) which is optimal for BPD.	Predominantly group scheme therapy (PGST), 2 group sessions per week provided in year 1, with a maximum of 12 individual sessions available upon request patient. In year 2, the Schema Therapy (ST) group is given once per week in months 13 to 18, once per 2 weeks in months 13 to 18, once per 2 weeks in months 19 to 21, and once a month in months 22 up to 24, with a maximum of 5 individual Schema Therapy (ST) sessions available upon request. For Individual Group Schema Therapy (IGST) 2 sessions (1 individual and 1 group) per week sent in year 1. In the first 6 months of year 2 (month 13 to 18), the frequency of both individual and group ST was biweekly. On months 19 to 21, the ST group was given once every two weeks. and individual ST is given monthly. In months 22 to 24, both are offered monthly. The ST group was closed and provided by 2 therapists. For IGST, mostly patients have individual therapists. All ST therapists have a mental health license health professionals trained in individual ST for BPD. Treatment as Usual (TAU) is the optimal psychological treatment available on site. The most frequently offered is dialectical behavioral therapy, with an intensity that corresponds to Schema Therapy (ST)	Associated with reduced severity of BPD (Cohen's d, 0.73; 95% Cl, 0.29–1.18; P <0.001). For this result, IGST superior to TAU (Cohen's d, 1.14; 95% Cl, 0.57–1.71; P < 0.001) and PGST (Cohen's d, 0.84; 95% Cl, 0.09–1.59; P = 0.03), whereas PGST did not significantly different from TAU (Cohen's d, 0.30; 95% Cl, 0.29 to 0.89; P = 0.32). More treatment retention larger on IGST than on PGST (1 year: 0.82 vs 0.72; 2 years: 0.74 vs 0.62) and TAU (1 year: 0.82 vs 0.73; 2 years: 0.74 vs 0.64), and there was no significant difference between TAU and PGST groups (1 year: 0.73 vs 0.72; 2 years: 0.64 vs 0.62)

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3	Cognitive Behavioral Therapy for Posttraumatic Stress Disorder in Individuals with Severe Mental Illness and Borderline Personality Disorder M. Alexandra Kredlowa, Kristin L. Szuhanya, Stephen Loa, Haiyi Xieb, Jennifer D. Gottliebc, Stanley D. Rosenbergb, and Kim T. Mueserc Year: 2017 <sup>10</sup>	Boston (USA)	A total of 108 people participated in Study I, where the current analysis examined 27 individuals who met criteria for BPD, 15 were randomized to CBT and 12 to TAU. A total of 201 individuals participated in Study 2, in which the current analysis examined 55 individuals with BPD, of whom 29 were randomized to CBT and 26 to the Brief intervention	To determine feasibility, tolerability and effectiveness behavioral therapy (CBT) program for post-traumatic stress disorder (PTSD) in individuals with severe mental illness (SMI) for individuals with borderline personality disorder (BPD).	Cognitive Behavior Therapy (CBT): CBT is provided on an individual basis format and consists of three sessions that teach breathing training for anxiety, planning safety, and psychoeducation about trauma and PTSD, followed by 9–13 sessions cognitive restructuring (ie, identifying and correcting erroneous thoughts or beliefs) contributing to disturbing feelings). Cognitive restructuring is applied to thoughts that arise from everyday life as well as thoughts and beliefs related to trauma. Programs include handouts, worksheets, and homework tailored to individual needs with severe mental illness Treatment as Usual (TAU): The client continues to receive usual services from community mental health. Intervention Brief: Respiratory retraining and psychoeducation about trauma and PTSD. and utilizing video to facilitate	Study 1: CBT improved significantly more in PTSD symptoms, depression, and self-reported physical health Study 2: participants in CBT and Brief improved significantly in PTSD symptoms, posttraumatic cognition, depression, and overall functioning, with those in CBT gaining significantly more PTSD knowledge, and having slightly greater improvements in PTSD symptoms. CBT for PTSD is feasible and tolerable in individuals with SMI, BPD, and PTSD, and is associated with profound improvements PTSD symptoms and related outcomes
4	Mindfulness Component in a Dialectical Behavioural Therapy Group Intervention for Family Members of Borderline Personality Disorder Patients Guillén Botella, V., Marco Salvador, J. H., Fonseca	Madrid, Spanyol	83 patients with BPD in Specialized Unit for Personality Disorders, Madrid	Review strategy DBT intervention on patients with BPD and family + compare with DBT-M	and psychoeducation about trauma and PTSD, and utilizing video to facilitate discussions about PTSD, but does not involve cognitive restructuring Intervention with DTM done with strategy psychoeducation, validation, acceptance, completion problems, for peers, and contingency management, the results are assessed with using Level of	There was a significant decrease in LEE-S components, such as behavior negativity $(1.21 \rightarrow 1.07)$ , disruptive habits $(2.94 \rightarrow 2.48)$ , loss of tolerance $(4.00 \rightarrow 2.85)$ , hostility $(2.30 \rightarrow 2.07)$ on DTM
	Baeza, S., Fernández Martínez, I., Jorquera Rodero, M., Cebolla Martí, A. J., and Baños Rivera, R. M. (2022) <sup>11</sup>				Expressed Emotion Scale (LEES)	intervention

interpersonal effectiveness. DBT intervention was conducted in Guillén's research<sup>11</sup> by having group discussions on several techniques, such as psychoeducation, validation, acceptance, problem resolution, and management contingencies. The family's function in this method is crucial to the success of DBT. In order to measure each person's negative emotional changes, the effectiveness of DBT was then evaluated in this study using the Level of Expressed Emotion Scale (LEE-S). Between before treatment and after maintenance, there was a drop as a result.

For instance, the LEE-S instrument's components disturbance (intrusiveness) decreased on average by 2.94 SD. can forecast the symptomatology of a developing client.

# Therapy Involving Ingestion Supplement

### Omega-3

Administering lipid supplements Omega 3 plays a role in modulating neurotransmitters in the system of depressed individuals, including malfunctioning neurotransmitters, as a non-pharmacological therapeutic. Amminger et al<sup>8</sup> conducted research involving the administration of a 0.5-gram supplement in yellow gelatin capsules. This product includes potent marine fish oil with 700 mg of EPA, 480 mg of DHA, and 7.6 mg of vitamin E. The recommended dosage is 4 capsules daily. Coconut oil was selected as a placebo due to its lack of polyunsaturated fatty acids (PUFA) and its little effect on n-3 PUFA metabolism. The capsule placebos were meticulously designed to closely resemble the active medication in both appearance and taste. They also contain significant levels of vitamin E, equivalent to n-3 capsules, and 1% fish oil to replicate the taste. Compliance with study therapy is assessed using pill counts, self-reports, and acid quantification. Analyze fats in red blood cells using gas chromatography.

Participants are prohibited from taking antipsychotics or mood stabilizers during the research. The trial results indicated a notable rise in scores in the n-3 PUFA group compared to the placebo group. Omega-3 polyunsaturated fatty acids, particularly eicosapentaenoic acid (EPA), have been shown to be useful in treating depressive disorders both on their own and in combination with other therapies. Another study by Chang et al<sup>12</sup> supports the effectiveness of omega-3s in alleviating symptoms of major depression in individuals with severe major depressive disorder.

## Conclusion

Non-pharmacological therapies for patients with Borderline Personality Disorder (BPD) are beneficial in providing emotional stability related to psychotic symptoms like depression. The non-pharmacological interventions outlined in this research primarily focus on cognitive therapy, which can be administered by healthcare professionals. Based on the research results, several non-pharmacological interventions are effective for treating patients with borderline personality disorder, such as cognitive therapy, schema therapy (ST), cognitive behavioural therapy (CBT), and therapy involving ingestion supplemental intake (Omega 3). Implementing these therapies can help patients improve their emotional regulation abilities and overcome harmful behaviours.

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# Disclosure

The authors declare that no conflicts of interest in this research.

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