Prevention Of Relapse in Bipolar Disorder

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Abstract

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Thesis Title:

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This thesis's purpose was to provide information that will guide nurses, multi-professional teams, health care providers and family members on bipolar disorder and relapse prevention.

The goal of the study is to find information about bipolar disorder and relapse prevention, including understanding what bipolar is, symptoms, pharmacological or nonpharmacological treatment methods and triggers of bipolar relapse and prevention.

This thesis is a literature review. The data was collected from relevant evidence-based studies and scholarly sources. The method of the study was a descriptive literature review to understand the subject and reasoning behind the findings. To analyse the collected data, inductive content analysis was employed; the findings are to be utilised by mental health professionals, mental health care providers, bipolar disorder patients, and all caregivers.

The findings from the research demonstrated that the experience of bipolar disorder and relapse triggers are unique for everyone. It also showed that pharmacological and nonpharmacological treatment are both crucial for proper management and relapse prevention. Inadequate medication adherence by patients was one major cause of frequent relapse. Thus, in order to effectively treat patients with bipolar disorder and their families, healthcare professionals and other members of the care team must collaborate with them.

Keywords:

Bipolar disorder, Bipolar relapse, prevention of relapse, Nurses in Bipolar and Medication Adherence.

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1 Introduction

Manic depression, another name for bipolar illness, is a significant mental health illness which leads to shifts in mood balance, activity and energy levels, resulting in an individual inability to effectively carry out activities of daily living (Brown et al.,2014). Bipolar disorder can be classified into two main types, according to the (DSM-IV-TR) fourth edition of the diagnostic and statistical mental health test manual: bipolar I and bipolar II disorder. Many patients experience relapse in their lifetime due to long episodes people of bipolar disorder that are common.

In 2018, the Finnish Institute of Health and Welfare (THL) reported approximately 11,000 bipolar disorder patients treated in specialised mental health care, of which 2,150 had an inpatient treatment episode (THL, 2023).
Bipolar disorder affects 4% of individuals in their lifetime, and the US spent $150 billion in 2009 treating it. Approximately 51% of people with this disorder do not receive treatment, the National Institute of Mental Health claims. It is estimated that 15–17% of those with bipolar disorder will commit suicide, making it the leading cause of early death. (NIMH, 2022.)

Patients recovering from bipolar disorder are at risk of frequent relapses regardless of medication or use of electroconvulsive therapy. According to Jelovac A. et al. 2013, 50% of patients with bipolar disorder following successful electroconvulsive therapy experienced a higher risk of relapse within the first six months, and a total relapse is the relapse occurrence within one year.

This thesis aims to provide information on bipolar and relapse prevention in bipolar patients through a descriptive literature review. This thesis's objective is to describe factors that are related to the prevention of bipolar relapse.

2 Bipolar Disorder

A long-term mood disorder, bipolar disorder is a recurrent mental health disease; an intense change in sentiment is one of the symptoms a patient experiences. The most significant cause of the decline in functionality, mortality, and disability is bipolar disorder, and this substantially lowers the patient's living standards (Wang M et al., 2014.) There are two primary categories of bipolar disorder, based on the (DSM-IV-TR) Manual for Diagnostic and Statistical Mental Health Testing, Fourth Edition: bipolar I and bipolar II disorder. Many patient experiences relapse in their lifetime due to prolonged episodes of Bipolar disorder that is common.

The most common burden brought on by bipolar disorder is depression, and it has been associated with an increased risk of suicide, excessive morbidity, and fatalities from concurrent general medical illnesses; however, the disorder is challenging to diagnose and treat bipolar depression (Yalin & Young, 2020).

2.1 Challenges of Relapse in Patients with Bipolar

The substantial morbidity and death rates linked to bipolar disorder make it a severe mental illness. Relapse poses a considerable challenge in treating patients with mental illness, particularly those with bipolar disorder, leading to significant economic and social burdens. Patients with psychiatric conditions may stop taking their medication against the recommendations of mental health specialists, resulting in delayed remission, residual symptoms, and mood episode recurrence, which often require hospitalisation and increase the risk of suicide or hinder psychosocial recovery. Therefore, comprehending the nature of relapse would aid in preventing recurrence and associated healthcare expenses. (Habte et al., 2020.)

2.2 Risk and Comorbidity of Bipolar Disorder

Brain structure and function: Several studies indicate that individuals with bipolar disorder exhibit specific brain distinctions compared to those without the dis-

order or other mental health conditions. Gaining a deeper understanding of these brain variances could aid scientists in comprehending bipolar disorder better and identifying the most effective treatment options. Presently, healthcare providers rely on a person's symptoms and medical history for diagnosis and treatment decisions instead of using neuroimaging or additional diagnostic procedures. (NIMH,2023.)

Several studies indicate that specific genes may increase the likelihood of developing bipolar disorder. Research also shows that people who have a parent, sibling, or other family member with a history of bipolar disorder are more likely to experience the disorder themselves. While there are several genes involved, no single gene is responsible for causing bipolar disorder. Advancing our knowledge of the role of genetics in bipolar disorder could facilitate the development of innovative treatments. (NIMH, 2023.)

Bipolar disorder has psychotic features and is connected with an increased percentage of alcohol consumption, smoking, and more episodes of mania; smoking causes several episodes of depression. The age at which the illness began, how long it lasted, and the course of the illness were separate causes of risks for comorbidities in BD patients. (Zhonggang et al. 2023.)

Medical conditions during an illness are associated with BD patients' risk factors for comorbidities, and appropriate steps are taken to lessen suffering and enhance treatment outcomes. Integrative medicine ought to be the standard in clinical practice. (Zhonggang et al. 2023.)

2.3 Criteria for Diagnosis

The ICD-10 and the DSM-V both provide prerequisites for diagnosing bipolar disorder, yet these requirements exhibit notable distinctions. The number of episodes required for diagnosis and the differentiation between bipolar I and bipolar II disorders are the main points of variation.

While DSM-V acknowledges a range of bipolar disorders, the recommendation above only addresses bipolar I and II disorders. Cyclothymia is a long-term mood disorder characterised by signs like hypomania and depression that do

not correspond to an entire episode. A manic episode must occur in order for bipolar I disorder to be diagnosed. It is common for individuals with bipolar disorder to have had one or more episodes of depression or occasionally a combination of the two, but this is not necessary for a diagnosis. One can identify whether they are hypomanic, manic, depressed, or mixed in terms of their most recent or current mood episode. The episode can be classified as mild, moderate, or severe depending on whether psychotic symptoms are fully or partially remitted. Additional classifiers pertaining to the existence of anxiety, depression type, psychosis type, fast cycling, catatonia, and seasonal or postnatal onset can also be specified. Combined affecting periods are now only used as a course specifier and are not used for diagnosis. A minimum of one severe depression and one hypomanic episode must be experienced in order to be diagnosed with bipolar II disorder. Bipolar II disorder cannot be diagnosed if there is a history of manic episodes. Similar mood specifications apply to bipolar I disorder. (NICE, 2014, 35,36.)

In order to diagnose bipolar affective disorder, mania or hypomania must have occurred during at least two of the previous mood episodes. In contrast to the DSM-V, a mania episode by itself does not provide a diagnosis of bipolar disorder; another mood episode (of any kind) must occur. These episodes fall into one of the following classifications: mixed episodes, remission periods, hypomanic, manic without psychotic features, manic with psychotic features, and severe depression with or without psychotic symptoms OR severe depression with psychotic features. Bipolar II disorder can be categorised under F.31.8 as "other bipolar disorders" even though the ICD-10 does not provide specific criteria for it as a separate diagnosis." (NICE, 2014, 36)

3 Mental Health Services and Current Care Guideline for Bipolar Disorder in Finland

The MSAH organises, directs, and oversees mental health initiatives on a national level. The goals of mental health work are to Strengthen the public's mental wellness and minimise the things that compromise it. Together with the provision of mental health services, this activity consists of initiatives to avoid dis-

orders associated with mental health and to improve mental health. Mental health services encompass assessment, treatment, and recovery for mental health illnesses, as well as counselling, advising, and social and psychological assistance when needed. Prevention of mental health issues, early diagnosis, treatment, and rehabilitation are the focus of municipality social and health services. (MSAH, ND.)

Primary health care and outpatient services are primarily used in treatment. Psychiatry hospitals and clinics offer specialist care under the same headings as mental health services. For those receiving mental health treatment, municipality social services set up home services, living expenses, and therapeutic work opportunities. (MSAH, ND.)

Bipolar disorder patients are typically diagnosed and treated in specialised psychiatric hospitals during their acute periods. In the defined phase, primary health care, occupational health, student health, and specialist nursing care are all provided on an individual basis. Collaboration between various medical institutes is essential. Depending on the phase of the disease at which the patient is, mood stabilisers and more recent antipsychotics form the cornerstone of the treatment for bipolar disorder. When a woman is fertile and has the potential of getting pregnant, valproate should not be used unless she is part of a particular new pregnancy avoidance program. It is contraindicated in all other circumstances. Specific individual, group, and family care approaches are used in psychosocial therapy for bipolar disorder. (Käypä Hoito, 2021.)

4 Treatment and Management of Bipolar Disorder

Patients with BD remain to bear a heavy burden, as do their healthcare providers and society at large. All healthcare practitioners, especially APNs, face challenges when it comes to managing behavioural health. Suspicion of BD improves the chances of a correct diagnosis. Accurately recognising manic, hypomanic, and depressive phases needs to be emphasised. There are both medication and nonpharmacological therapies for both acute and ongoing conditions. To manage patients with BD as effectively as possible, healthcare pro-

fessionals should be knowledgeable about the safety and efficacy features of each of these medicines. Understanding these factors—disease burden, diagnostic challenges, and treatment options—can improve outcomes for a significant proportion of individuals with bipolar disorder. (Ursula et al. 2015.)

The most important thing in treatment is to prevent the recurrence of episodes. When planning treatment, it is essential to find out which stage of the disease it is at any given time and consider the lifetime course of the disease. Bipolar disorder treatment aims to help the patient recover and remain in a stable mood for as long as possible. The goal for recovery continues to prevent relapse of manic and depressive episodes. There are many purposes for using drugs in treatments. Some medication targets acute manic-depressive episodes, and some drugs aim at reducing symptoms and preventing episodes of relapse. Research has proven that in the administration of maintenance therapy, the initial medications used in the acute phase are continued. (Mary et al., 2018.)

5 Aim Purpose and Research Question

This study aims to provide information on relapse prevention in bipolar patients via a review of the descriptive literature. The result from the findings is to be utilised by mental health professionals, mental health caregivers and bipolar patients.

The research question of the thesis is the following:

- What is bipolar disorder?
- What are the key factors of bipolar disorder?

6 Implementation and Methodology

6.1 Literature Review

A literature review is an in-depth examination and evaluation of the body of research on a specific subject (Aveyard, 2014). A literature review is one of the steps in the research process; although it is primarily intended to inform and develop

practice, it also initiates discussion in academic research (Michael et al., 2007). There are various kinds of literature reviews, including systematic, narrative, and descriptive. The most appropriate research design for this thesis report is a descriptive literature review. The primary goal of a descriptive literature review, according to Paré & Kitsiou (2017), is to ascertain the information in a specific study field and analyse it, considering previous ideas, theories, approaches, and findings. A systematic and open process is followed while doing a descriptive review, which includes gathering data, screening studies, and classifying them. This methodical search technique is applied to create an instance of a more extensive set of published works.

Additionally, it contributes to knowledge collection by providing a theoretical basis (Lau & Kuziemsky, 2017). This thesis uses a descriptive literature review. This method is adopted to provide comprehensive coverage and detail to comprehend recent findings and studies connected to the thesis topic. Investigating using a literature review is well-planned and leads to clear solutions to the research question. (kean,2019.)

The first important step in research is to formulate research questions. In guiding the search methodology for the literature review, information gathering and interpretation of content data research questions are essential. The quality of study materials was assessed based on the research questions, and suitable materials were selected based on the research question, all the information collected was organised, summarised, compared, and clearly presented to provide a descriptive answer to the study's research question (Lau & Kuziemsky, 2017.)

6.2 Data Search and Collection:

The findings of prior scientific investigations served as the foundation for the literature review. The literature review materials were gathered from PubMed and EBSCO - Academic Search Elite; additionally, Google Scholar was utilised for manual searches of relevant studies.

The quest to seek appropriate resources and their retrieval began in the autumn of 2022. During the same summer, preliminary drafting and write-up were also started. Subsequently, the real process of gathering information, writing, revising, and editing primarily took place starting in the spring of 2023 after gaining familiarity with the research articles. Throughout the development of the thesis, manual searches supplemented the information obtained from the databases, contributing to the research and writing process.

The research questions guided the terms chosen for the search. In general, these search terms encompassed Pharmacological Therapies and Bipolar Disorder, Acute mania and treatment., relapse prevention AND bipolar disorder., Bipolar AND relapse AND treatment. Acute mania OR acute depression treatment. Episodes", "Bipolar disorder relapse AND risk factors", "Acute Mania And Treatment", "Bipolar relapse and nursing care", and "Bipolar disorder and psychotherapy".The search results were confined to the period from 2013 to 2023, yielding a total of 427 findings, of which 13 articles were chosen. These selected articles were in English and freely accessible in full text. A similar search was conducted in the EBSCO database using terms such as "Bipolar Relapse AND Health Care" and "Bipolar Relapse AND Pharmacological Treatment". The search was limited to the years 2013 to 2023, resulting in 546 findings, from which 3 English articles with full texts were selected. Using the search terms "bipolar disorder" and "risk factors," Google Scholar returned 436 review articles with a year restriction of 2015 to 2021. Due to its excellent fit with the topic, only one article was chosen. The search terms, delimitations, and outcomes are compiled in Table 1.

Database	**Searching words**	**Delimitations**	**Results**	**Selected articles**
PubMed	Bipolar Manic OR Depressive relapse AND pharmacological treatment	English, Free full text 2020–2023	25	3

	Treatment AND Acute bipolar depression	English, Free full text, 2015–2023	10	1
	Relapse prevention AND Bipolar Mood Episodes	English, Free full text, 2014–2023	16	4
	Bipolar disorder relapse AND risk factors.	English, Free full text, 2013–2023	90	1
	Acute Mania And Treatment	English, Free full text, 2014–2023, Review	40	1
	Bipolar relapse and nursing care	English, Free full text, 2014–2023	19	1
	Bipolar disorder and psychotherapy	English, Free full text, 2014–2023, Review	227	3
Ebsco Academic Search Elite (Cinahl)	Bipolar relapse AND Pharmacological treatment	English, Free full text, 2019–2023	161	2
	Bipolar Relapse AND Health Care	English, Free full text, 2013–2023	385	1
Manual Search (Google Scholar)	Bipolar disorder" and risk factors.	English, Free full text, Reviewed 2016–2023	436	1
Total				17

Table1. Searched databases

The studies included were selected based on inclusion and exclusion criteria. The results were obtained from articles, titles, abstracts, and full texts on differ-

ent related topics that were read. The year of publication from 2013-2023, in English, was the inclusion criteria. The article must answer the research question, and the whole text has to be available. For evidence-based information, reliable and current information, the collected material data were up to date and new. Some older references were used when information was relevant and cohesive to the research objectives. Some information from older studies was compared to the newest literature. Publications that did not answer the research questions were published more than ten years ago, text was not fully available, and tests in languages other than English were excluded. Inclusion and exclusion criteria are presented in Table 2.

Inclusion criteria	**Exclusion criteria**
Research released in between 2013-2023.	Research released prior to the year 2013
Language: English	Language: apart from English
Free, Available in full text	Purchased article, only abstract accessible
Studies that address research inquiries.	Studies that are not pertinent to research inquiries.

Table 2. Inclusion and exclusion criteria

6.3 Content Analysis

Content analysis is a procedure for replicable and systematic analysis of text. Through the application of a systematic coding scheme, a conclusion is drawn in a message when the content classification of a part of a text is done. Content analysis is an objective research methodology that is systemic in describing and quantifying phenomena. The main goal is to get a broad description of phenomena that are condensed and more understandable. Through categorisation, conceptual map making, and conceptual system interpretation of the phenomenon is possible using content analysis (Elo & kynges 2008.) The critical feature of content analysis is classifying text words into smaller content. In content analysis, there are no set guidelines for data analysis. Content analysis is divid-

ed into two categories: deductive and inductive. Inductive content analysis by open coding, forming abstraction and new categories was used in this thesis (Elo & Kyngäs,2008).

Abstraction refers to the broad categorisation of the research topic. To understand the main insights and theories, the selected materials were read more than once. According to Elo & Kyngäs, 2008, specific issues are first observed before it is combined into a more general statement. In open coding, while reading through text that answers research questions and fits the research topic, headings and notes are jutted down. This tool helps generate categories and simplifies and describes the most crucial aspect of the text. Following that, the data will be categorised into a list under higher-order headings. Through comparison and interpretation, dissimilarity and similarity of data are seen and then decided upon how to categorise the related findings together (upper and lower categories).

A total of 17 articles from three databases were chosen for this study using a manual search method. Written notes were compiled into categories with the help of inductive content analysis. Before listing data under categories, the findings were compared. The subcategories included Bipolar disorder, Bipolar relapse, early signs of relapse, pharmacological treatment, nonpharmacological treatment, medication side effects, Nursing intervention, information sharing, daily routine and health care team collaboration. Simplified phrases from data were grouped according to the category that they fit. Lack of information was used to represent unreliable or incomplete information. Based on the subcategories, the primary themes were developed in order to respond to the research questions. Those themes include signs and triggers, medication adherence, family support, patient education and bipolar relapse prevention. Appendix 2 shows an example of inductive content analyses.

7 Results

7.1 What is bipolar disorder?

The American Psychiatry Association describes bipolar disorder as a brain disorder affecting mood, energy, and function. The mood episodes suffered by people with bipolar disorder can last from a few days to a few weeks. There are two kinds of mood episodes: hypomanic and manic. Manic patients have abnormally happy or irritable moods and are sometimes depressed. People with bipolar disorder can lead entire and productive lives when treated, as published in APA, 2023.

Bipolar disorder is frequently challenging to identify because of comorbid mental and physical illnesses, overlapping symptoms with other mental disorders, and patients' lack of understanding of their conditions, especially hypomania. Pharmacotherapy and psychosocial interventions are used in treatment, but incomplete responses and mood relapses are common, especially in depression. For the duration of these patients' long-term care, ongoing evaluations and treatment modifications are frequently necessary. It might also be required to manage coexisting medical and mental health issues. (Jain & Mitra 2023.)

7.1.1 Types of Bipolar Disorder

Bipolar I, II, and cyclothymic disorder is made up of the three distinct types of subtypes of bipolar disorder. 80 to 90 per cent of those who have bipolar disorder have a family who also has the condition. They can be exacerbated by people who are already predisposed to mood swings, stress, irregular sleep habits, drugs, and alcohol. Even though the precise causation of bipolar disease is uncertain, dysregulated brain activity may be brought on by a chemical imbalance. (APA,2023.)

7.1.2 Bipolar I Disorder.

The occurrence of a manic episode prompts the identification of bipolar I disorder. However, the majority of people with bipolar I disorder also experience neutral mood swings from time to time, and some of them also undergo hypomanic

or depressive episodes. (APA,2023.) Episodes of hypomania or major depression may have occurred or followed the manic episode (the diagnosis does not depend on the occurrence of these symptoms). An isolated period of consistently high or agitated mood accompanied by Sustained activity or energy lasting for a minimum of seven days or necessitates hospitalisation is referred to as a manic episode. For an episode to be considered manic, at least three of the following must occur. Four things need to be present for the mood to be irritable (DSM 5, 2013.)

- Exaggerated self-worth or conceit
- Reduced demand for sleep
- An urge to talk more than usual
- Thoughts racing or ideas taking off
- elevated distractibility
- Enhanced goal-oriented conduct (in social, professional, or academic contexts) or psychomotor instability (in non-goal-directed contexts)
- Too much engagement in activities carries a high risk of unpleasant outcomes, such as uncontrolled shopping sprees, inappropriate sexual behaviour, or risky business ventures. (DSM 5, 2013.)

Manic episodes cause symptoms that are noticeably worse than hypomanic episodes, which can impair social or professional functioning or necessitate hospitalisation (DSM 5, 2013).

7.1.3 Bipolar II Disorder

A diagnosis of bipolar II disorder may be established when there is a presence of at least one hypomanic episode and one episode of intense depression; this diagnosis is applicable for individuals who have experienced at least one hypomanic episode and a severe depressive episode**,** hypomanic episodes usually experience excitement and may even perform better at work or school. After their initial depressive episode, those with bipolar II disorder seek treatment on a regular basis. In addition, they frequently suffer from other mental illnesses, including substance abuse or anxiety disorders, both of which can exacerbate the symptoms of depression or hypomania. (APA, 2022.)

The requirement for a major depressive episode stipulates that there should be at least one hypomanic episode, whether it is current or occurred in the past, and that a manic episode should not accompan**y it.** (DSM 5, 2013).

An identifiable period of consistently high or agitated mood accompanied by elevated activity or energy persisting for a minimum of four days is called a hypomanic episode. For an episode to be considered hypomanic, three or more of the following must occur. Four things need to be present in order for the mood to be irritable (DSM 5, 2013.)

- Grandiosity or exaggerated self-esteem
- less necessity for sleep
- an obsession with speaking or an increased tendency to converse
- Racing thoughts or a flight of fancy
- high susceptibility to distraction

The incident is a clear shift in how the person functions that is out of character for them and visible to others. In addition, the episode does not reach the degree of severity critical enough to result in a noticeable loss of functioning, it is not the result of a general medical condition or the drug's physiological effects, and there is evidence of psychosis (it does refer to as mania based on the definition.). (DSM 5, 2013.)

7.1.4 Cyclothymic Bipolar Disorder

A more manageable subtype of bipolar disorder known as frequent fluctuations in mood distinguishes cyclothymic disease; cyclothymia has to do with recurring episodes of hypomania and symptoms of depression. Individuals with cyclothymia encounter emotional highs and lows, although the intensity of these signs is not as pronounced as in bipolar I or II disorders**.** (APA, 2022.)

7.1.5 Signs and Symptoms

A person who has bipolar disorder goes through periods of extreme emotion, adjustments to sleep and activity schedules, and behaves in a way that is out of character for them, often without realising the risks involved. Mood episodes are

distinct periods. An individual's mood and behaviour during a mood episode differ significantly from his or her usual mood and behaviours. An episode lasts most of the day, every day. It is also possible for episodes to last for several days or weeks at a time. (NIMH,2023.) Table 3 displays the signs and symptoms of bipolar disorder.

Symptoms of a Manic Episode	**Symptoms of a Depressive Episode**
Excessively irritable or touchy or feeling very up, high, or elevated.	A feeling of sadness or anxiety
More energetic than usual.	Is the sensation sluggish or restless?
Having a decreased need for sleep	Not being able to fall asleep, awakening early, or sleeping over
Babbling and covering a wide range of topics (a "flight of ideas")	speaking very slowly, feeling as though you have nothing to say, or frequently omitting
Rushing ideas	Maintaining difficulty focusing or making choices
Being able to multitask without becoming fatigued	experiencing incapable of performing even basic tasks
An overindulgence in food, alcohol, sexuality, or other enjoyable activities	displaying little enthusiasm for practically every activity
A sense of remarkably significant, gifted, or influential	Suicidal thoughts or feelings of worthlessness or hopelessness

Table 3. Signs and Symptoms of Bipolar Disorder

In a typical mild, moderate, or severe depressive episode, the individual experiences a decline in mood, decreased energy, and reduced activity. There is also a notable fluctuation in functional activities, interest, and concentration, often accompanied by pronounced fatigue even after minimal exertion (WHO, 2019).

Sleep patterns are frequently disrupted, and there is a decrease in appetite. Reduced optimism and self-worth are consistently reduced or lowered, even in minor circumstances, individuals may grapple with feelings of guilt or worthlessness. Regardless of the outside world, the depressed mood is constant, mainly from day to day. It may also be accompanied by physical symptoms like severe psychomotor slowing, restlessness, loss of interest and pleasure, early morning awakening, heightened depression specific to the morning, decreased appetite, weight loss, and decreased desire for sexual activity. A depressive episode can be categorised as light, moderate, or intense based on how many and how strong these manifestations are present. (WHO, 2019.)

7.2 Preventing Relapse in Bipolar Disorder Patient.

Understanding and treating factors associated with hospital readmission is paramount in helping BD patients maintain their typical level of psychosocial functioning and prevent relapses. The impediment of illness recurrence in BD patients suggests that an individualised, comprehensive approach is necessary to prevent relapse, considering all comorbidities. To improve the quality of life and lower hospital readmission rates for patients with BD, healthcare professionals—especially doctors and clinicians—should utilise this information as a guide to help them provide care. (Chadia et al. 2020.)

The role of loved ones, support groups, and family in preventing relapse is vital in treatment and recovery. Because loss of support, divorce, spouse death and traumatic events may trigger relapse in patients, some studies showed that the onset of bipolar relapse is affected by age. Patients whose first relapse occurred at a younger age were more likely to relapse than those whose relapse occurred at an older age; this implies that younger patients are more likely to relapse because of traumatic events or emotional crises that result in a manic or depressive phase. (Seyede et al. 2016.) Considering that bipolar treatment is long-term, most patients are likely to get tired of their health condition and not adhere to treatment instructions anymore, thereby relapsing again; another study showed that relapse rates in winter and spring are more common in women who gave birth in winter and spring relapsed more than those who gave

birth in summer and fall. This finding was not significant in some studies. (Roya et al. 2016.)

Therapy for co-occurring conditions and mild mood manifestations, as well as suitable cognitive behavioural and family-focused cognitive therapies, can decrease the danger associated with various clinical factors. The integration of social services that address environmental factors reduces the number of episodes and decreases the burden considerably**.** (Xavier et al., 2019.)

Combining pharmaceutical therapy with psychosocial interventions based on skills may be helpful for bipolar disorder patients. Conclusions are constrained by population diversity, treatment duration, and follow-up. (David et al. 2021.) some data supports the efficacies of psychoeducation in reducing mood events and relapses, but only in a subset of patients with early-stage disease who have complete or remission of the acute episode. At the same time, there is no insufficient evidence; nevertheless, some evidence suggests that interpersonal and social rhythm therapies, as well as cognitive behavioural therapies, may be beneficial during the acute phase. Mindfulness interventions appear to be more effective in lowering anxiety than in improving neurocognition. (Stella et al. 2015.)

7.2.1 Pharmacological Treatment and Management of Bipolar Disorder

Pharmaceutical treatments for this disorder encompass mood stabilisers, anti-seizure medications, and second-generation antipsychotics, often referred to as "atypical" antipsychotics. Therapy regimens may also incorporate medications designed to address sleep disturbances or anxiety. In instances of depressive episodes within bipolar disorder, antidepressant medication may be employed alongside a mood stabiliser as well as an antipsychotic in order to mitigate the risk of triggering a manic episode. Certain people may need to try multiple medications and work with their doctor to find the ones that work best for them. (NIMH, 2020.)

Treatment options for acute manic and depressive presentations can be separated from those for long-term remission; some patient groups may not be able to tolerate or benefit from antipsychotics due to their extensive side effect profiles. Although lithium proves to be an extremely effective maintenance medication, therapeutic drug monitoring remains necessary. Antiepileptics are essential for maintaining remission but have serious adverse effects. (Amol et al., 2019.)

Antiepileptic medications such as valproate, carbamazepine, and lamotrigine are critical in preserving remission in bipolar disorder by avoiding mood episodes and stabilising mood swings. Although these medications are effective, they may have rare yet severe side effects that must be carefully monitored. The mechanisms that make these drugs effective in bipolar disorder are unclear, and ongoing research aims to explain their neurobiological mechanisms of action. (Amol et al., 2019.)

Combining treatments such as antidepressants and psychotherapies is more effective than administering one treatment alone. Antidepressants should be continued after the acute phase for six months to prevent relapses, and after three-lifetime episodes, maintenance treatment should be considered. For mild to moderate depression, primary care is responsible for treatment. It is also recommended that a psychiatric nurse appointment service be used (Käypä Hoito, 2023.)

One recent development in the field is the emergence of Lamotrigine (LTG) as a potentially promising medication for managing the disorder. LTG has demonstrated favourable outcomes in various phases of bipolar disorder, particularly in preventing recurrence and relapse in stabilised patients. However, it is essential to note that LTG may not be the optimal choice for acute manic episodes or situations that demand swift symptom control. (Frank et al. 2021.)

7.2.2 Effect of Medication Adherence

Individuals diagnosed with bipolar disorder (BD) commonly struggle with poor adherence to their medication regimen, leading to frequent symptom relapses

throughout their lifetime. Because of the substantial amount of non-adherence in BD patients, Psychiatric-Mental Health Nurse Practitioners (PMHNPs) must be aware that their patients may not be taking their prescriptions as prescribed and may not readily disclose their medication-taking behaviours. Motivational Interviewing (MI) is a technique that PMHNPs can use in their clinical practice and medication management sessions. (McKenzie & Chang, 2015.)

7.2.3 Treatment of Manic Episodes

The drugs carbamazepine and oxcarbazepine are highly effective in treating manic episodes, meeting the gold standard Class A criteria for psychiatric medications. People with bipolar disorder may live much better lives as a result of these findings. The drugs have been shown to have acute antimanic efficacy and can prevent manic relapses, providing much-needed stability. Additionally, they do not cause or worsen depression, which makes them a safer and more comprehensive option for managing bipolar disorder. These groundbreaking results were published by Anna et al. in 2021.

7.2.4 Acute Depressive Episode

Managing bipolar depression remains a significant clinical challenge, particularly during the acute phase. During the acute stage, Inadequate effective acute therapy is a significant problem. Bipolar depression is partly attributable to the natural differences in viewpoint that result from considerable information gaps. Currently, there are only three approved medications for this condition: olanzapine/fluoxetine combination (OFC), quetiapine (immediate or extended-release), and lurasidone (either as a monotherapy treatment or adjunctive to lithium or valproate). While these three drugs exhibit similar effectiveness, their tolerability varies. (Yu-Chih, 2018.)

In cases where these approved options fall short, healthcare providers often resort to non-approved medications and nonpharmacological interventions like lamotrigine, antidepressants, modafinil, pramipexole, ketamine, as well as electroconvulsive therapy to deal with acute bipolar depression. (Yu-Chih, 2018.)

The various potential adverse effects that are more likely to occur with each treatment must be considered to personalise treatment options. Trials of new effective side effects are necessary in the future, even though there are much fewer therapeutic choices available for bipolar acute depression than for the manic and maintenance phases. (Yu-Chih, 2018.)

7.2.5 Multimodal Treatment Approach

Complex mental health conditions require a multimodal treatment approach. Other medication, such as lithium, is considered a primary medication for treating acute mania in individuals with bipolar disorder, but its effectiveness is limited in treating bipolar depression. (Frank et al. 2021.)

This drug is suitable for all age groups, including children with bipolar disorder, and can be used cautiously during pregnancy. However, it is not recommended during breastfeeding. Lithium is also effective in treating older individuals with bipolar disorder, but recommended serum levels are lower than those for younger adults. While generally well-tolerated, potential adverse effects such as hypothyroidism, renal dysfunction, and cognitive side effects should be considered alongside its benefits. Careful monitoring is necessary during the discontinuation of lithium to avoid severe side effects caused by rapid withdrawal. (Constantin et al. 2020.)

7.2.6 The Role of Electroconvulsive Therapy

Electroconvulsive therapy (ECT) is a rapid and highly effective method for managing manic episodes. Contemporary clinical guidelines endorse the use of ECT as a treatment option for cases of mania that do not respond to pharmacotherapy, often considering it as a second or third-line approach. (Giulio et al. 2017.)

For all stages of severe and drug-resistant BD, ECT proved to be a safe and effective treatment. About three-quarters of the incidents and 80% of the cata-

tonic patients showed positive responses. The primary indicator of nonresponse was how long the current episode lasted. There is almost no chance of ECT-induced mania, and mood instability is extremely unattainable. However, current treatment algorithms for catatonic, mixed, manic, and depressive states suggest that they should be adjusted, and ECT should not be viewed as a "last resort"—at least not for the sickest patients. (Giulio et al. 2017.)

7.2.7 Nonpharmacological Treatment Psychotherapy

For individuals who have bipolar disorder, the earlier research validates the results, showing that medication combined with manualised psychological treatment reduces recurrences more successfully than medication combined with treatment as usual (TAU). The use of medication is increasingly understood to be insufficient to completely relieve post-episode indicators, avoid cases of recurring bipolar disease, or maintain functionality. (G.M. Goodwin et al. 2016.)

Randomised clinical trials (RCTs) have demonstrated that when medication is combined with manualised psychological treatments, such as cognitive behavioural therapy (CBT), family-focused therapy, interpersonal and social rhythm therapy (IPSRT), and group psychological education, it is more successful in maintaining indications and lowering Recurrences in bipolar disorder patients than when medication is used alone. (G.M. Goodwin et al. 2016.)

7.2.8 Family support

When used in conjunction with medication, family psychoeducation helps prevent the recurrence of bipolar disorder. Clinicians who receive guidance and instruction can deliver FFT-CHR with a high level of fidelity. Future research should investigate whether there are any more affordable ways to supervise, train, and monitor FFT-CHR's faithfulness (Sarah et al. 2016).

In the FFT-CHR condition, for example, families are taught skills step-by-step, enabling them to practice new approaches on relatively non-conflicting subjects before tackling more delicate issues. The FFT model's versatility allows for the customisation of psychoeducation, communication, and problem-solving strate-

gies to each family's specific needs, addressing numerous grievances (Sarah et al. 2016).

7.2.9 Lifestyle interventions, Dietary Habits and Exercise

A multimodal harm reduction strategy should be used in health psychosocial therapies for BD rather than just focusing on treatment adherence. This change would assist both patients and healthcare providers in working together to change and reduce the prevalence of unhealthy habits. Thus, better ongoing management of BD may arise from a targeted multimodal strategy that emphasises behavioural alterations related to physical activity and food habits and promotes a healthy lifestyle. The process of challenging maladaptive patterns of behaviour is intricate. It involves several elements, such as raising patients' readiness for change and raising their knowledge of the risks involved in their current habits and way of life, as well as effective ways for inducing healthy lifestyle adjustments. A strategy like this is likely to make it more probable for people with BD to start and keep up good habits, which will lower their risk of long-term health issues and eventually improve their general state of life and productive results. (Isabelle et al. 2015.)

Lifestyle interventions that focus on wellness, exercise, and nutrition, as well as coping mechanisms, beliefs, and attitudes toward health, show promise in lowering the incidence of co-occurring conditions. (Isabelle et al. 2015.)

7.3 Nursing Intervention in Bipolar Relapse Prevention

Psychiatric nurses can have a huge impact on the treatment of people with mental illnesses by utilising nurse-led, technology-driven techniques. Psychiatric-mental health nurse practitioners could enhance medication adherence and self-confidence by applying motivational interviewing techniques (McKenzie & Chang, 2015).

Nurse-led psychosocial interventions consistently yield favourable results that contribute to improving patients' well-being. In this study, a psychiatric nurse took a pioneering step by incorporating medication adherence therapy (MAT) to enhance medication adherence and reduce symptom severity in individuals with

bipolar affective disorder (BPAD). The study's findings offer practical evidence affirming the effectiveness of multiple interventions in promoting medication adherence and achieving better clinical outcomes (Shreedevi et al., 2022.)

The use of technology, particularly phone calls, proved to be advantageous in boosting medication adherence and managing a variety of long-term mental health conditions. Therefore, mental healthcare providers should prioritise the provision of psychoeducation, with a particular emphasis on technology-based interventions, to motivate subgroups of individuals with bipolar disorder to improve their medication adherence. (Shreedevi et al., 2022.)

8 Discussion

8.1 The Review of Thesis Results :

The purpose of this thesis was to furnish knowledge that can serve as a valuable guide for nurses, multi-professional teams, healthcare providers, and family members in understanding bipolar disorder and effectively preventing relapses. The research questions are mentioned below:

- What is bipolar disorder?
- What are the key factors in preventing relapses of bipolar disorder?

The research aim was fulfilled.

The literature review's findings could respond to the research questions; the results are considered in light of the research questions.

Bipolar disorder (BD) is a complicated mental health condition characterised by recurrent manic and depressive episodes. Preventing relapse is essential to help patients regain psychosocial functioning and improve their quality of life. (Chadia et al. 2020.)

The burden of recurrent illness in BD necessitates a personalised, comprehensive approach that considers comorbidities. Healthcare professionals, especially

physicians and clinicians, should understand the complexity of BD and its various contributing factors to provide more effective care. (Chadia et al. 2020.)

Family support and the role of loved ones are crucial in preventing relapse. Traumatic events, loss of support, and divorce can trigger relapses in BD patients. Age, as highlighted in the studies of Seyede et al. 2016 and Roja et al. 2016, also plays a role, with younger patients more susceptible to relapse due to emotional crises. Addressing the emotional well-being of patients and involving their support network can significantly impact relapse prevention.

Psychotherapy, including cognitive-behavioural therapy (CBT), family-focused therapy, and mindfulness-based interventions, plays an essential role in preventing relapse. Combining therapy for co-occurring conditions and mild mood symptoms with suitable CBT and family-focused therapies can reduce the risk associated with various clinical factors. Interventions like interpersonal and social rhythms therapy and CBT can be useful, particularly during the acute phase. (Xavier et al. 2019; David et al. 2021; Stella et al. 2015).

Pharmacological treatment is a fundamental component of BD management. Mood stabilisers, antipsychotics, and anti-seizure medications are commonly used to stabilise mood. The selection of the right medication and combination varies among patients, highlighting the need for a tailored approach. It is crucial to manage both manic and depressive episodes. Lithium stands out as an efficacious maintenance therapy. It is important to note the potential side effects of various antipsychotics and antiepileptics, which may not be well-tolerated by all patients. (NIMH, 2020; Amol et al. 2019).

Combining treatments such as antidepressants and psychotherapies can be more effective than administering a single treatment alone. Maintaining medication adherence is critical, and ongoing treatment is often necessary to prevent relapses. Collaboration between primary care and psychiatric nurse appointment services is recommended for patients with mild to moderate depression. (Kaypahoito, 2023.)

Lamotrigine as a Promising Medication: Lamotrigine (LTG) has emerged as a promising medication for managing BD. While not suitable for acute manic episodes, it has demonstrated favourable outcomes, particularly in preventing relapse in stabilised patients: this highlights the importance of having various treatment options to suit different phases of the disorder. (Frank et al. 2021.)

Poor medication adherence is common in BD patients, leading to frequent relapses. Psychiatric-mental health nurse practitioners (PMHNPs) play a vital role in enhancing medication adherence through motivational interviewing (MI) techniques. PMHNPs' ability to address medication adherence and educate patients about the importance of taking their medication can significantly reduce relapses (McKenzie & Chang, 2015).

Medications such as carbamazepine and oxcarbazepine have been shown to be highly effective in treating manic episodes. These findings provide hope for better managing this aspect of BD. In the case of acute depressive episodes, limited approved medications are available, and practitioners may need to explore non-approved options. (Yu-chih, 2018.)

The impact of electroconvulsive therapy is significant in the management of manic episodes. It is considered when other treatments do not yield results. The low risk of ECT-induced mania makes it a valuable option for the most severe cases. (Giulio et al. 2017.)

Nonpharmacological Treatment and Psychotherapy: Psychotherapy, especially when combined with medication, reduces recurrences more effectively than medication alone. Evidence supports the combination of psychological treatments with medication to maintain patient well-being and reduce the risk of recurrences. (G.M. Goodwin et al. 2016.) Family Support and Lifestyle Interventions: Incorporating family education and support is crucial in preventing relapse. Psychoeducation with family members helps individuals with BD prevent recurrences. Clinicians need to be well-trained and closely supervise these interventions. Additionally, lifestyle interventions focusing on wellness, exercise,

and nutrition, alongside cognitive-behavioural strategies, play a vital role in managing BD. (Sarah et al. 2016; Isabelle et al. 2015.)

Psychiatric nurses are in a prime position to make a significant impact on BD management. The application of techniques like Medication Adherence Therapy (MAT) by psychiatric nurses can enhance medication adherence and contribute to better clinical outcomes. The use of technology, such as phone calls, can be advantageous in improving medication adherence, highlighting the role of nurses in leveraging technology for better patient outcomes. (Shreedevi et al., 2023.)

9 Conclusion

The findings of this study provide detailed insights into bipolar disorder and the necessity of employing a comprehensive approach to preventing relapse. Critical components encompass personalised care, family backing, psychological therapy, suitable pharmaceutical treatment, medication adherence, and the investigation of diverse treatment alternatives. Notably, psychiatric nurses assume a central role in improving medication adherence and averting relapses. Effective collaboration between healthcare practitioners, patients, and their support systems is paramount for enhancing the management of bipolar disorder and achieving more favourable outcomes.

The research outcomes presented in this thesis offer an extensive exploration of bipolar disorder, encompassing its subtypes, symptoms, range of treatment strategies and relapse prevention.
The thesis underscores the significance of personalised care, the crucial role of adhering to medication regimens, and the potential advantages of nonpharmacological interventions. The conclusions highlight the requirement for a comprehensive and patient-focused strategy to efficiently address bipolar disorder, with the intention of improving the well-being of people impacted by this condition.

Continuing research and ongoing studies are imperative to further enhance treatment approaches and deepen comprehension of this intricate mental health disorder. Research is still desperately needed to a) create patient-informed therapies and b) use well-designed trials to test the efficacy of these interventions aimed at overall wellness.

10 Ethics and Reliability

An ethical review's objective is to evaluate the risk of harm or injury to individuals, their relatives, or those conducting the study themselves as it relates to the project's goal of providing useful value. Finnish law and specific-castigate rules both play a role in the regulation of ethical assessments for research. (TENK 2023).

This study was done in accordance with European rules, which state that excellent research practices call for the use of eight contexts: 1) The Study territory, 2) advising, guidance, and instruction, 3) Research Methods, 4) Protections, 5) Management data and Procedures, 6) Working in Collaboration, 7) Publication, and 8) Examining, analysing, and rewriting. (TENK, 2023). The research was carried out by carefully planning, conducting, and documenting all research data. Wherever attainable, we followed the guidelines of open scientific inquiry, and the sources used for the research data were primarily recent sources and evidence-based. For the legitimacy of our research, we used PubMed, EBSCO (Cinahl) and Google Scholar libraries. The information we discovered is still presented more logically than in some more current publications. Thus, we added some older resources to our work. The information dependability, correctness, and validity were reviewed in comparison to other more current research to confirm its application. The goal was to find the most recent data that addressed the research questions and supplied readers with more information on the issue while determining the outcome of the research questions. Data protection and agreements were followed to avoid the violation. Data search and gathering were meticulously carried out over a long period. We took safety precautions while performing our research in accordance with the RI Principles and the rules pertaining to our educational discipline. Prior to the start of data

collection for this study, we obtained all relevant approvals, consents, and ethical evaluations. It ensured that neither the researchers' health nor their safety were compromised. (TENK 2023).

Jonna Briggs Institute (JBI) critical evaluation instruments were employed to analyse and improve the reliability of this thesis. JBI is an international organisation that develops evidence-based educational tools targeted at improving healthcare practices and outcomes (Aromataris et al. 2015). The JBI tools for systematic review, text and opinion writings were found suitable for the evaluation of this descriptive literature review study materials, as seen in the Appendix. This tool contains questions about the choices of methodology and answer choices to these questions. It determines potential bias in the analysis of the study, design, and conduct, as well as evaluates the quality of the methodology used. Research studies were included based on the JBI questions. (Luciani et al. 2019; JBI 2023.). The chosen papers were examined by six appraisers in order to be included. The descriptive qualitative study used a scale of 1-11 to assess quality, a scale of 1-11 used to assess systematic review and research synthesis, a scale of 1-12 used to assess cohort studies, a scale of 1-10 used to assess case-control studies, a scale of 1-13 used to assess randomised controlled studies, and a scale of 1-6 used to assess for narrative publications. If the conditions were met, one point was awarded; otherwise, no point was awarded for unmet criteria, uncertain situations, or inapplicable criteria. Criteria were introduced based on criteria fulfilment.

The goal was to achieve as high a quality assessment score as feasible for each study. The minimum score percentage evaluated for inclusion was 60%. The scores were with each other, and the quality assessment was performed separately. Re-evaluation was done for unclear studies. By discussing and evaluating together, an agreement was reached on the scoring quality, although there were few dissenting opinions. As shown in Appendix 1, a total of 17 studies were chosen and evaluated for quality evaluation.

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Appendices

Appendix 1. Articles covered in reviews of the literature
Appendix 2. An illustration of inductive content analysis
Appendix 3. JBL Critical Appraisal Checklist for Systematic Review and Research Syntheses
Appendix 4. Evaluation of the quality of the research that is part of the literature review

Appendix 1. Articles covered in reviews of the literature.

Authors, publication, year	**Purpose of the study**	**Research design**	**Main results**

Amol Joshi, Alexander Bow & Mark Agius PHARMACOLOGICAL THERAPIES IN BIPOLAR DISORDER: A REVIEW OF CURRENT TREATMENT OPTIONS	The main pharmaceutical treatments that are frequently used to treat and prevent relapses in this condition are examined in this study.	systemic review	Managing acute manic and depressive presentations and preserving long-term remission are two categories of management techniques. Some patient groups may find certain antipsychotics intolerable or contraindicated due to the extensive side effect profile of these medications. Although lithium is a very effective maintenance medication, therapeutic drug monitoring is still necessary. Antiepileptic drugs are essential for preserving remission, but they can have major, though uncommon, adverse effects.
Anna Grunze , Benedikt L. Amann and Heinz Grunze Efficacy of Carbamazepine and Its Derivatives in the Treatment of Bipolar Disorder.	The purpose of the study is to assess the efficacy of various drugs, especially mood stabilisers, in the management and avoidance of bipolar disorder.	Narrative	Two of the drugs, carbamazepine and oxcarbazepine, meet the Ketter and Calabrese criteria for Class A, which includes acute antimanic efficacy, preventing manic relapses, and not aggravating or causing depression.
Chadia Haddad MPH, Hala Sacre Pharm D, Souheil Hallit Pharm D, MSc, MPH PhD, Sahar Obeid PhD, Darine Al-Zein MSc, Rita Nabout PhD, Marouan Zoghbi MD, MSc, Georges Haddad MD Prevalence of comorbidities and correlates of hospital readmission	This article studies to determine the correlates of the readmission rate and the prevalence of medical comorbidities in acutely manic patients over a one-year period.	Retrospective observational (case-control study)	Comprehending and addressing the variables linked to hospital readmission is crucial in enabling manic patients to return to their typical psychosocial functioning and avert relapse. To aid medical professionals in comprehending the risk of illness recurrence in BD-I patients

rate in patients with acute mania			and in developing practical relapse prevention plans that take into account all comorbidities.
Constantin Volkmann, Tom Bschor and Stephan Köhler Lithium Treatment Over the Lifespan in Bipolar Disorders."	The purpose of the study is to evaluate the effectiveness and tolerance of lithium treatment in patients with bipolar disorder (BD) at all stages of life, from young children to elderly adults.	Narrative Literature review	For BD, lithium is still a useful and generally well-tolerated treatment option. Lithium should be safely administered to all psychiatrists who are actively practising medicine so that the risks are reduced and the advantages exceed the disadvantages.
Frank M.C. Besag, Michael J. Vasey , Aditya N. Sharma and Ivan C.H. Lam Efficacy and safety of lamotrigine in the treatment of bipolar disorder across the lifespan.	To review the evidence for the safety and effectiveness of LTG in treating BD in all of its stages.	A systematic review	The best available data demonstrates its value in preventing recurrence and relapse in stabilised patients, especially depressive relapse. There is evidence that it works well for acute bipolar depression.

G.M. Goodwin, P.M. Haddad, I.N. Ferrier, J.K Aronson, T.R.H. Barnes, A. Cipriani, D.R. Coghill, S. Fazerl, J.R Geddes, H. Grunze, E.A. Holmes, O. Howes, S. Hudson, N. Hunt, I. Jones, I.C. Macmillan, H. McAllisster- Williams, D.M. Miklowitz, R. Morriss, M. Munafö, C. Paton, B.J. Saharkian. K.E.A. Saunders, J.M.A Sinclair, D. Taylor, E.Vieta, and A.H. Young Evidence-based guidelines for treating bipolar disorder: revised third edition Recommendations from the British Association for Psychopharmacology	The article explores through a narrative literature review. Recommendations, when followed, assist clinicians in making clinical decisions. They can also be used as a source of information for patients and caregivers and facilitate audits.	A narrative literature review.	This research covers clinical management and medication use strategies for treating episodes temporarily, preventing relapses, and discontinuing treatment. A cogent strategy for psychoeducation and behaviour modification is combined with the use of medication.
Giulio Perugia,b,, Pierpaolo Meddaa , Cristina Tonib , Michela Giorgi Mariania , Chiara Soccia and Mauro Mauria The Role of Electroconvulsive Therapy (ECT) in bipolar disorder: Effectiveness in 522 Patients with Bipolar Depression, Mixed-state, Mania and Catatonic Features	This article evaluates the efficacy of Electroconvulsive Therapy (ECT) in treating Bipolar Disorder (BD) in a sizable cohort of patients with catatonic features, drug-resistant depression, mania, and mixed states.	Descriptive analyses, Case-control	The results clearly indicate that the current treatment algorithms for catatonic, manic, depressive, and mixed states should be changed, and ECT should not be regarded as a "last resort"—at least not for the most severely affected patients.

ISABELLE E. BAUER, PhD, JUAN F.GÁLVEZ, MD, JANE E.HAMILTON, PhD, MPH, VICENT BALANZÁ-MARTÍNEZ, MD, PhD, GIOVANA ZUNTA-SOARES, MD, JAIR C. SOARES, MD, PhD, and THOMAS D. MEYER, PhD. Lifestyle interventions targeting dietary habits and exercise in bipolar disorder	The article, through a systematic review, indicates that lifestyle modifications are beneficial for BD patients' mood, blood pressure, weight, lipid profile, physical activity, and general well-being.	Systematic Review	Interventions with lifestyle in BD Reducing the risk of comorbid illnesses in BD may be accomplished by focusing on nutrition, exercise, well-being, beliefs, coping mechanisms, and attitudes toward health.
Kristin McKenzie, DNP, PMHNP-BC, and Yu-Ping Chang, PhD, RN The Effect of Nurse-Led Motivational Interviewing on Medication Adherence in Patients With Bipolar Disorder	The purpose of this study was to evaluate the impact of motivational interviewing (MI) in an outpatient setting on medication adherence in individuals with bipolar disorder (BD).	Control trail studies. (Qualitative)	a notable increase in self-efficacy, motivation to change, and medication adherence following the MI treatment.
Miklowitz, D. J., Efthimiou, O., Furukawa, T. A., Scott, J., McLaren, R., Geddes, J. R., & Cipriani, A. (2021). Adjunctive Psychotherapy for Bipolar Disorder	to assess the relationship between stabilising symptoms and lowering recurrences in bipolar disorder patients by employing manualised psychotherapies and therapy components.	Systematic review and network meta-analysis	This study suggests that Pharmacotherapy and skills-based psychosocial interventions may be beneficial for outpatients with bipolar disorder—heterogeneity in populations, length of treatment, and follow-up all temper conclusions.

Miziou, S., Tsitsipa, E., Moysidou, S., Karavelas, V., Dimelis, D., Polyzoidou, V., & Fountoulakis, K. N. (2015). Psychosocial treatment and interventions for bipolar disorder:	To look into cost-effective and individualised adjunctive psychosocial interventions for patients.	Systematic Reviews and Meta-Analyses Statement	Psychoeducation has shown exclusive benefits in preventing mood episode relapses, particularly in early-stage patients with substantial remission. More research is needed. Cognitive-behavioural therapy and social rhythms therapy may help during acute episodes. Mindfulness interventions reduce anxiety, while efforts to improve neurocognition seem primarily ineffective. Family intervention benefits caregivers more than patients, but this is uncertain.
Roya Najafi-Vosough, MSc1 Ali Ghaleiha, MD2 Javad Faradmal, PhD1, 3 Hossein Mahjub, PhD1, Recurrence in Patients with Bipolar Disorder and Its Risk Factors	This study explores to determine the prognostic factors linked to bipolar disorder patients' recurrence.	Retrospective cohort study	The primary factors associated with a rise in bipolar disorder relapses were the type of the illness and stopping medication. Additionally, the recurrence risk was lower for patients who received both medication and electroconvulsive therapy.
Sarah E. Marvin, David J. Miklowitz, Mary P. O'Brien, and Tyrone D. Cannon. Family-centered treatment for people with a high clinical risk of psychosis: A structured interview. 2016.	Through a randomised trial, the article investigates whether psychoeducation can help bipolar disorder patients delay relapse in addition to medication.	A randomised trial	Fidelity ratings showed that FFT-CHR placed more of a focus on teaching problem-solving and communication skills than did EC; however, ratings of general clinical skills, like upholding rapport and pacing sessions appropriately, were similar in both conditions.

Seyede Solmaz Taheri , Mohammad Reza Khodaie Ardakani , Masoud Karimlou and Mehdi Rahgozar Applying the Frailty Model of Survival Analysis to Determine a Few Risk Factors for the Duration of Recurrent Relapses in Patients with Bipolar I Disorder	The Journal explores a few time-related risk factors for recurrent relapses in bipolar I disorder patients using a recurrent event model in survival analysis.	Cohort study	Three key risk factors—substance abuse, marital status, and RF—should be considered when making plans to delay future relapses.
Shreedevi I. Balikai MSc1, Sreevani Rentala MSc2, Irasangappa Basavaraj Mudakavi MSc3, Raghavendra Bheemappa Nayak MD Impact of nurse-led medication adherence therapy on bipolar affective disorder: A randomised controlled trial	This article studies the effect of nurse-led medication adherence therapy (MAT) on bipolar disorder patients' medication adherence practices and the intensity of their symptoms.	Randomised controlled trial	The severity of the bipolar disorder participants' symptoms significantly decreased as a result of MAT's improvement of medication adherence behaviour.
Xavier Estrada-Prat, MD, PhD, Anna R. Van Meter, PhD, Ester Camprodon-Rosanas, PhD, Santiago Batlle-Vila4, Benjamin I. Goldstein, MD, PhD, Boris Birmaher, MD "Childhood characteristics linked to an increased chance of bipolar disorder mood episode recurrences	This paper reviews the body of research on the variables linked to mood recurrences in BD.	A systematic review	Due to several factors, mood episode recurrence is more likely in BD. Modifiable factor-focused interventions may lessen BD's effects. For instance, managing co-occurring conditions and subsyndromal mood symptoms in conjunction with suitable cognitive behavioural and family-centred therapies may reduce the risk associated with numerous clinical variables. When combined with social services to address environmental factors, these interventions could decrease the number of episodes and greatly improve the course of

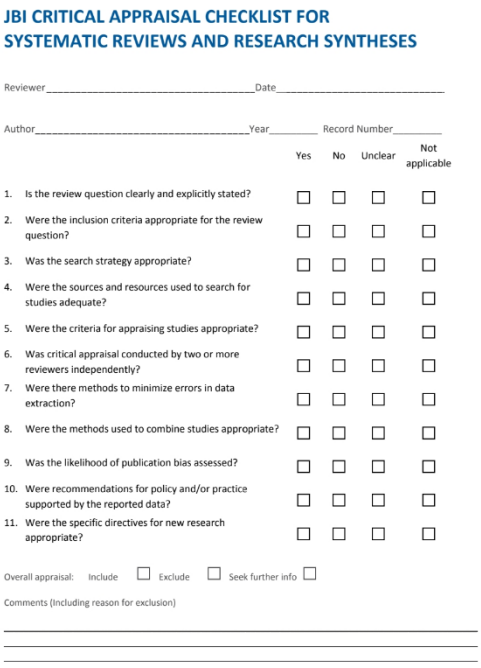
			BD.
Yu-Chih Shen Treatment of acute bipolar depression	This article covers the treatments mentioned above for acute bipolar depression as well as the challenges in diagnosing bipolar depression.	Systematic Review	Approved medications for ongoing treatment of bipolar disorder include lithium, lamotrigine, olanzapine, aripiprazole, quetiapine, long-acting injectable risperidone and aripiprazole, and ziprasidone (when used with lithium or valproate). When patients predominantly suffer from depressive episodes, the recommended treatment options are lamotrigine or quetiapine.

Appendix 2. An illustration of inductive content analysis

Order	**Themes**	**Subthemes**	**Code example**
1	knowledge about the disorder	General knowledge	The name of the disorder is not known Knowledge of different phases Knowledge of the depressive phase Insufficient knowledge about disorder outcome Misunderstanding medication effects and recovery
		Knowledge about signs and symptoms of the mania phase	Having two states of personality, insomnia, social isolation, aggressiveness, irritability, grandeur delusion
		Knowledge about signs and symptoms of depression phase	Suicidal ideation, loss of libido, anorexia, dying ideation, insomnia
		Knowledge about the origin	Brain disorder, childhood family treatment, gene abnormality, divorce, too much re-

		of the disorder	sponsibility stress,
		Knowledge about the reasons for the relapse of the disorder	Death of loved one, financial crisis, discontinuation of medication, non-medication prescription adherence, lack of support, unemployment
2	Information about medications	Effect of medication Knowledge administered on the patient	Mood stability, reduced lying, cessation of delusion, reduction in aggression,
		Knowledge about medication side effects	Increased sleep, loss of memory, gastrointestinal complications, addiction to medication, reduced energy and activities, obesity, increased appetite
3	Information about treatment	Treatment Knowledge	Incomplete and prolonged recovery, the importance of taking medication, the need to be monitored by a doctor, the advantages of medication more to the disadvantages, patient education and participation in insight development about the disorder, the negative perspective of medication from family, benefits of psychological counselling and consultation, evaluation of treatment progression
4	Information about family role in the treatment		Empathy and sympathy, understanding and bearing with the patient, constant support, helping the patient with daily plan and routine, social group support, skill acquisition, taking the patient to appointments, helping a patient stop drug use or abuse, not creating a sense of guilt in the patient, taking note of symptoms and episodes.
5	Non-medication adherence reasons		Comments from trusted people, symptoms worsening, missing medication, tired of taking medication for their whole life, lack of disorder knowledge among family members, hostile ideation about medication, a side effect of medication among patients, change in patient-doctor, media presentation about medication effects, alcohol use, poor understanding about the disorder, low-income family support,

Appendix 3. JBI Critical Appraisal for Systematic Review and Research Syntheses (We also found these tools appropriate for evaluating this descriptive literature review).



JBI CRITICAL APPRAISAL CHECKLIST FOR SYSTEMATIC REVIEWS AND RESEARCH SYNTHESES

Reviewer_____Date_____

Author_____Year_____ Record Number_____

	Yes	No	Unclear	Not applicable
1. Is the review question clearly and explicitly stated?	☐	☐	☐	☐
2. Were the inclusion criteria appropriate for the review question?	☐	☐	☐	☐
3. Was the search strategy appropriate?	☐	☐	☐	☐
4. Were the sources and resources used to search for studies adequate?	☐	☐	☐	☐
5. Were the criteria for appraising studies appropriate?	☐	☐	☐	☐
6. Was critical appraisal conducted by two or more reviewers independently?	☐	☐	☐	☐
7. Were there methods to minimize errors in data extraction?	☐	☐	☐	☐
8. Were the methods used to combine studies appropriate?	☐	☐	☐	☐
9. Was the likelihood of publication bias assessed?	☐	☐	☐	☐
10. Were recommendations for policy and/or practice supported by the reported data?	☐	☐	☐	☐
11. Were the specific directives for new research appropriate?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

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JBI CRITICAL APPRAISAL CHECKLIST FOR QUALITATIVE RESEARCH

Reviewer_____Date_____

Author_____Year_____ Record Number_____

	Yes	No	Unclear	Not applicable
1. Is there congruity between the stated philosophical perspective and the research methodology?	☐	☐	☐	☐
2. Is there congruity between the research methodology and the research question or objectives?	☐	☐	☐	☐
3. Is there congruity between the research methodology and the methods used to collect data?	☐	☐	☐	☐
4. Is there congruity between the research methodology and the representation and analysis of data?	☐	☐	☐	☐
5. Is there congruity between the research methodology and the interpretation of results?	☐	☐	☐	☐
6. Is there a statement locating the researcher culturally or theoretically?	☐	☐	☐	☐
7. Is the influence of the researcher on the research, and vice- versa, addressed?	☐	☐	☐	☐
8. Are participants, and their voices, adequately represented?	☐	☐	☐	☐
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	☐	☐	☐	☐
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

JBI CRITICAL APPRAISAL CHECKLIST FOR COHORT STUDIES

Reviewer_____Date_____

Author_____Year_____ Record Number_____

	Yes	No	Unclear	Not applicable
1. Were the two groups similar and recruited from the same population?	☐	☐	☐	☐
2. Were the exposures measured similarly to assign people 3. to both exposed and unexposed groups?	☐	☐	☐	☐
4. Was the exposure measured in a valid and reliable way?	☐	☐	☐	☐
5. Were confounding factors identified?	☐	☐	☐	☐
6. Were strategies to deal with confounding factors stated?	☐	☐	☐	☐
7. Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)?	☐	☐	☐	☐
8. Were the outcomes measured in a valid and reliable way?	☐	☐	☐	☐
9. Was the follow up time reported and sufficient to be long enough for outcomes to occur?	☐	☐	☐	☐
10. Was follow up complete, and if not, were the reasons to loss to follow up described and explored?	☐	☐	☐	☐
11. Were strategies to address incomplete follow up utilized?	☐	☐	☐	☐
12. Was appropriate statistical analysis used?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

JBI CRITICAL APPRAISAL CHECKLIST FOR CASE CONTROL STUDIES

Reviewer_____Date_____

Author_____Year_____ Record Number_____

	Yes	No	Unclear	Not applicable
1. Were the groups comparable other than the presence of disease in cases or the absence of disease in controls?	☐	☐	☐	☐
2. Were cases and controls matched appropriately?	☐	☐	☐	☐
3. Were the same criteria used for identification of cases and controls?	☐	☐	☐	☐
4. Was exposure measured in a standard, valid and reliable way?	☐	☐	☐	☐
5. Was exposure measured in the same way for cases and controls?	☐	☐	☐	☐
6. Were confounding factors identified?	☐	☐	☐	☐
7. Were strategies to deal with confounding factors stated?	☐	☐	☐	☐
8. Were outcomes assessed in a standard, valid and reliable way for cases and controls?	☐	☐	☐	☐
9. Was the exposure period of interest long enough to be meaningful?	☐	☐	☐	☐
10. Was appropriate statistical analysis used?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

JBI CRITICAL APPRAISAL CHECKLIST FOR RANDOMIZED CONTROLLED TRIALS

Reviewer_____Date_____

Author_____Year_____ Record Number_____

		Yes	No	Unclear	NA
1.	Was true randomization used for assignment of participants to treatment groups?	☐	☐	☐	☐
2.	Was allocation to treatment groups concealed?	☐	☐	☐	☐
3.	Were treatment groups similar at the baseline?	☐	☐	☐	☐
4.	Were participants blind to treatment assignment?	☐	☐	☐	☐
5.	Were those delivering treatment blind to treatment assignment?	☐	☐	☐	☐
6.	Were outcomes assessors blind to treatment assignment?	☐	☐	☐	☐
7.	Were treatment groups treated identically other than the intervention of interest?	☐	☐	☐	☐
8.	Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	☐	☐	☐	☐
9.	Were participants analyzed in the groups to which they were randomized?	☐	☐	☐	☐
10.	Were outcomes measured in the same way for treatment groups?	☐	☐	☐	☐
11.	Were outcomes measured in a reliable way?	☐	☐	☐	☐
12.	Was appropriate statistical analysis used?	☐	☐	☐	☐
13.	Was the trial design appropriate, and any deviations from the standard RCT design (individual randomization, parallel groups) accounted for in the conduct and analysis of the trial?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

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JBI CRITICAL APPRAISAL CHECKLIST FOR TEXTUAL EVIDENCE: NARRATIVE

Reviewer_____Date_____

Author_____Year_____ Record Number_____

		Yes	No	Unclear	Not applicable
1.	Is the generator of the narrative a credible or appropriate source?	☐	☐	☐	☐
2.	Is the relationship between the text and its context explained? (where, when, who with, how)	☐	☐	☐	☐
3.	Does the narrative present the events using a logical sequence so the reader or listener can understand how it unfolds?	☐	☐	☐	☐
4.	Do you, as reader or listener of the narrative, arrive at similar conclusions to those drawn by the narrator?	☐	☐	☐	☐
5.	Do the conclusions flow from the narrative account?	☐	☐	☐	☐
6.	Do you consider this account to be a narrative?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

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Appendix 3. JBI Critical Appraisal for Text and Opinion papers.

JBI QUESTIONARY

Study		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Total
Anna et al. 2021	+	Y	Y	Y	Y	Y	Y								6/6
Amol et al. 2019.	@	Y	Y	Y	Y	Y	Y	Y	?	N	Y	Y			9/11
Chadia et al. 2019	#	Y	Y	Y	Y	Y	N	Y	Y	Y	Y				9/10
Con-stantin et al. 2020	+	Y	Y	Y	Y	Y	Y								6/6
David et al. 2021	@	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			11/11
Frank et al.2021	@	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			11/11
Giulio et al. 2017	#	Y	Y	Y	Y	Y	N	Y	Y	Y	Y				9/10
G.M Godwin et al., 2016	+	Y	Y	Y	Y	Y	Y								6/6
Isabelle et al., 2015	@	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			11/11
McKen zie & Chang, 2015	¤	Y	Y	Y	Y	Y	N	Y	Y	Y	Y				9/10
Roya et al. 2016.	%	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y			10/11

Sarah et al. 2016	^	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	12/13
Seyede et al. 2016	%	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			11/11
Shreedevi et al. 2022	^	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	13/13
Stella et al 2015	@	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y			10/11
Xavier et al. 2019.	@	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				11/11
Yu-Chih, 2018	@	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y		10/11

Q = question, Y = yes, N = no,? = Unclear, JBI checklist for critical appraisal qualitative research (¤) / Case-control study (#) / cohort study (%) / systematic reviews and research syntheses (@), Randomised control trial (^), Narrative review (+)

Appendix 4. Current Treatment model for bipolar disorder and relapse prevention in Finland

Appendix 4. Medication Possible Side effect

Table 1. Side effects of antipsychotics.

Side effects of antipsychotics

Extrapyramidal side effects	1. ***Acute dystonia: oculogyric crisis*** 2. ***Opistotonus*** 3. ***jaw lock, muscle spasms and laryngeal spasm*** 4. ***drug parkinsonism (hypo- and akinesia, tremor)*** 5. ***akathisia*** 6. ***tardive dyskinesia***
Other neurological side effects	1. ***neuroleptic malignant syndrome*** 2. ***epileptic seizures*** 3. ***cognitive impairment***
Metabolic side effects	1. ***weight gain*** 2. ***increase in blood lipid levels***
Cardiovascular symptoms	1. ***hypotension*** 2. ***QTc conduction time increase*** 3. ***torsade de pointes tachycardia***

Sexual side effects	OBJ
Hyperprolactinemia	OBJ
Liver dysfunction	OBJ
Anticholinergic symptoms	1. ***difficulty urinating*** 2. ***constipation***
Changes in blood count	OBJ
Skin symptoms	OBJ
Eye changes	OBJ
Psychiatric side effects	***inability to feel pleasure***