# Walden University

College of Nursing

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has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

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#### Abstract

Development of an Insomnia Assessment Guideline for Bipolar Disorder

by

Daniel Oyewusi Oyewole

MSN, Walden University 2020

BSN, American Sentinel University 2012

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

November 2022

#### **Abstract**

Bipolar disorder (BD) affects more than 1% of the world's population regardless of race, sex, ethnicity, or socioeconomic status. BD is a severe and chronic mental illness characterized by insomnia, depressed and elevated mood, racing thoughts, mood swings, anxiety and depression, and suicide. Insomnia is prevalent in BD and occurs across all stages of BD, yet no guidelines exist. The clinical practice guideline entitled the Insomnia Assessment Guideline for Bipolar Disorder (IAGBD) was developed using best-practice evidence from the published literature. The IAGBD is a step-by-step process for assessing insomnia in bipolar patients. Clinicians follow a series of questions in the guideline to obtain the necessary information for evaluating and treating insomnia in bipolar patients. The IAGBD designed to measure different domains such as physical health, psychological health, social relationships, and environment. A series of questions focusing on each domain of the clinical guideline from the American College of Physicians were used as a guide for the development of IAGBD. The parts identified in the IAGBD are the areas that clinicians can use to gather information from patients to plan their care appropriately. Each domain on the IAGBD has targeted questions that clinicians can ask patients to obtain responses regarding the severity of their symptoms. The IAGBD is not for patients' personal use. This evidence-based approach will need to be piloted and refined based on validation with a psychometrician. The project study fulfilled Walden University's social change mission in clinical practice by gathering information and creating assessment guidelines on insomnia for BD that may translate into improved therapies for those experiencing this mental health disorder.

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## Dedication

"Unless the Lord builds the house, the scripture says its builders labor in vain." I want to dedicate this project to the God of the heavens who gave me the ability, inspiration, strength, and knowledge to carry out this work. I also dedicate this project to my lovely wife, Ladun Oyewole, and children, Victor, Josh, Mercy, and Goodness Oyewole, for their support and encouragement throughout the entire journey.

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#### Section 1: Nature of the Project

Bipolar disorder (BD), defined as mood swings from mania to depression, affects more than 1% of the world's population regardless of race, sex, ethnicity, or socioeconomic status (Marzani & Neff, 2021). Literature has shown that one fourth of patients presenting with depression or anxiety in all health care facilities have been diagnosed with BD (Marzani & Neff, 2021). Hypomania can occur in Bipolar I and II disorders, but mania, regarded as a symptom of psychosis, appears only in Bipolar I disorder (American Psychological Association, 2019). Steinan et al. (2016) reported that Bipolar I disorder has a higher lifetime incidence than Bipolar II disorder (0.6% and 0.4%, respectively). The mean age of onset is 18 years for Bipolar I disorder and 22 years for Bipolar II disorder (Pullen et al., 2021).

Studies have shown that sleep disturbances are a significant feature of BD and are one of the criteria used for diagnosis (Kanady et al., 2017). Patients going through manic episodes often experience sleeplessness because fewer sleep hours can trigger manic episodes. Insomnia or sleep disorder is a good predictor of the onset of mania (Marzani & Neff, 2021). It is also common to see patients with BD report excessive sleep during the depression phase and less need for sleep during a manic episode (Talih, 2018). Studies have also shown that most patients who suffered from sleep deprivation alternated from depression to the manic phase of BD (Talih et al., 2018). Similarly, 11 studies performed on 631 patients with BD revealed that insomnia was the most common precursor of mania and the sixth most common symptom associated with the condition (Travaglini et

al., 2019). Insomnia can trigger episodes of BD, worsen signs and symptoms, and increase the risks of developing the condition (Marzani & Neff, 2021).

Evidence suggested that sleep loss could be a risk factor for major chronic diseases (Steinan et al., 2016). Sleep disturbance is a common symptom of several mental health disorders and impacts patients' quality of life and clinical outcomes (Marzani & Neff, 2021). A rigorous and extensive literature review showed that untreated insomnia increases the risk for developing multiple mental health disorders (Talih., 2018). Insomnia is a common symptom associated with depression, anxiety, BD, attention deficit hyperactivity disorder, dementia, and substance abuse (Kanady et al., 2017). Due to the risk of developing mental health disorders, it is essential to create a guideline for treating insomnia as early as possible.

This project was conducted to develop an insomnia assessment guideline/pathway to serve as an evidence-based approach for assessing and treating patients diagnosed with BD. The inclusion of best-practice literature in these clinical pathways may increase the understanding of the role of insomnia in BDs. A well-developed assessment guideline provides a way to bridge the gap between policy, best practice, local contexts, and the choices of patients (Kredo et al., 2016). The utilization of this clinical practice guideline may yield a new understanding of the prevalence and significance of insomnia in treating BD. The evidence-based approach may also be helpful in the clinical pathways of other healthcare facilities.

#### **Problem Statement**

Studies have shown that BD is one of the 10 most disabling mental health conditions worldwide (Kanady et al., 2017). BD has a lifetime prevalence of 0.4% to 2.4% (Kanady et al., 2017). Individuals with this mental health condition experience different symptoms including significant sleep disturbance (insomnia) and cognitive dysfunction (Robotham, 2011). Although the genetic-neuroendocrine physiology is poorly understood, insomnia appears to be of clinical significance in assessing and managing BD.

Research findings have shown that one third of patients who have been diagnosed with BD will attempt suicide in their lifetime, 16% will have attempted suicide within the past year, and 6% to 7% will have completed suicide (Marzani & Neff, 2021). Twenty-six percent of suicides occur within 6 weeks of a hospital discharge (Marzani & Neff, 2021). These findings showed the urgency and the need to develop a clinical practice guideline that will help in the effective treatment of this disorder. Patients with bipolar symptoms such as unstable mood, severe anxiety, depression, racing thoughts, and paranoia have a higher risk of suicide, longer illness duration, and poorer response to medication (Travaglini et al., 2019). BDs have a long history of frequent insomnia (Steinan et al., 2016). Chronic sleep problems affect about 80% of patients in a typical psychiatric practice compared to 18% of adults in the general population (Talih, 2018). Sleep problems are prevalent in depression, anxiety, BD, attention deficit hyperactivity disorder, dementia, and substance abuse (Steinan et al., 2016). Sleep problems may increase the risk of developing mental illnesses, and mental health problems can lead to

chronic sleep disorders (Zhang et al., 2021). BD is a severe mental health problem, and the most frequently seen symptom of this disorder is insomnia (Gold & Sylvia, 2016). An extensive literature review revealed that scholars have carried out different studies on multiple interventions to treat insomnia. Such interventions include pharmacological (e.g., the use of medications such as Ambien, Trazodone, Seroquel, Melatonin, some classes of benzodiazepine, and antihistamines such as Benadryl and hydroxyzine) and nonpharmacological approaches such as cognitive behavioral therapy (Koffel et al., 2018). Few steps have been taken to develop an insomnia assessment guideline to improve care and enhance positive outcomes (Lewis et al., 2017).

BD is not localized to one particular nation, race, color, nationality, or facility. It is a global problem, and insomnia is considered the number one symptom (Talih et al., 2018). Studies have shown that insomnia is not treated as it is supposed to be because some mental health facilities lack insomnia assessment guidelines. This project was conducted to develop an insomnia assessment guideline/pathway to serve as an evidence-based approach for assessing and treating patients diagnosed with BD. The inclusion of best-practice literature in these clinical pathways may increase the understanding of the role of insomnia in BDs.

A well-developed assessment guideline provides a way to bridge the gap between policy, best practice, local contexts, and the choices of patients (Kredo et al., 2016). Studies have shown that assessment guidelines are vital components of quality medical practice (Kredo et al., 2016). The Institute of Medicine and other credible clinical organizations see assessment guidelines as statements that consist of recommendations to

achieve positive patient outcomes (Kredo et al., 2016). An assessment guideline starts with a systematic review of research and assessing both the benefits and risks of alternative care (Kredo et al., 2016). This Insomnia Assessment Guideline for Bipolar Disorder (IAGBD) aims to help providers, clinicians, and other healthcare staff make informed decisions regarding the proper care of patients with BD and enhance quality patient care using evidence-based recommendations (Kredo et al., 2016). Insomnia is a common sleep disorder that can be missed during assessment by the physician, clinician, or assessor unless a guideline reminds or guides them during assessment (Bhaskar et al., 2016). Studies have shown that it is often devastating not to treat insomnia, and the cost of treating it is less than not treating it (Harvard Medical School, 2022). Because there is a higher incidence of patients with insomnia and comorbidities such as diabetes, cardiovascular diseases, depression, anxiety, and other physical and cognitive symptoms in mental health facilities, all patients should be screened for insomnia by the physician, clinician, assessor, or nurse with a clinical guideline (Bhaskar et al., 2016). The IAGBD may become a gold standard to promote positive patient outcomes and assist the clinician in the thorough assessment of every patient for insomnia.

## **Purpose Statement**

Because BD is not a disease of one race or nationality and is not limited to one facility, all mental health facilities, whether local or national, should include an assessment of insomnia in their clinical pathway (Bhaskar et al., 2016). The practice-focused question in this project study was the following: What are the best clinical practice guidelines to assess insomnia for patients with bipolar disease that can be

incorporated into the psychiatric, nursing, and counseling practice? Gathering the data and assembling them into guidelines may add to the knowledge base on the relationship between insomnia and bipolar episodes. Further validation of this evidence-based approach may provide data to improve the clinical pathways for the treatment of insomnia in the care of bipolar patients.

#### **Nature of the Doctoral Project**

The doctoral project necessitated an extensive review of the literature to identify the necessary evidence-based information for developing the IAGBD. Evidence retrieved from the literature was analyzed for quality, validity, and reliability. Other sources of evidence included peer-reviewed journal articles that contained credible information on the concept of insomnia and BDs. Databases such as CINAHL, CINAHL Plus, Medline, ProQuest, PubMed, and Ebscohost were searched. Additional references from the World Health Organization, Centers for Disease Control and Prevention, and the National Institutes of Health were collected. Publications used were related to psychiatric and nursing practice.

#### **Approach or Procedural Steps**

This doctor nursing practice (DNP) project was conducted to develop best-clinical practice guidelines for assessing insomnia in patients diagnosed with BD that could be incorporated into the psychiatric, nursing, and counseling practice. An IAGBD was intended to bridge the gap in practice (Gold & Sylvia, 2016; Katie et al., 2017). A systematic review of the literature was conducted to examine mental health assessment guidelines and studies that had been used for certain mental health disorders. The sources

of evidence used to support the development of IAGBD were solely derived from the published literature. The Walden Institutional Review Board (IRB) approved this project to use the evidence from the literature with the approval number 11-30-21-0735710. The literature review and the appraisal of any existing guidelines related to BD and insomnia enable me to formulate a new guideline draft.

#### **Significance**

Research has focused on insomnia as a symptom of psychosis related to or caused by depression and anxiety, and how insomnia contributes to losing lives through suicidality (Gold & Sylvia, 2016; Katie et al., 2017). Research has addressed the merits of pharmacological and nonpharmacological intervention compared with no intervention to decrease insomnia symptoms (Koffel et al., 2018). Researchers have also questioned whether cognitive behavioral therapy is enough to treat insomnia in bipolar patients (Koffel et al., 2018). The gap found in the literature was that few clinical pathways/guidelines for BD include assessment for insomnia, which may contribute to increased symptoms of the condition (Gold & Sylvia, 2016; Katie et al., 2017). The benefit of IAGBD is not limited to the stakeholders such as assisted living facilities, community hospitals, state hospitals, nursing homes, elderly residential care homes, residential mental health facilities, recovery and wellness centers, Veterans Hospitals, dual diagnosis treatment services centers, and inpatient and outpatient treatment centers but also extends to society at large. Evidence has shown that insomnia affects 57% of older people in the United States, with impairment of quality of life, function, and health (Abad & Guilleminault, 2018). Chronic insomnia burdens society with billions of dollars

in direct and indirect care costs (Abad & Guilleminault, 2018). Insomnia costs much damage not only to the patient but also to the community. Any method to treat this disease should be considered crucial, and that is why IAGBD is the right tool to help patients and society at large.

This project fulfilled Walden University's mission of social change, which emphasizes solving societal problems and providing solutions to critical societal challenges to advance the greater global good. The social change in clinical practice of gathering information and creating assessment guidelines on insomnia has the potential to increase the scientific body of knowledge that may translate into improved therapies for those experiencing this mental health disorder. The information from this project has the potential to generate knowledge that may help in the effective treatment of bipolar patients. Clinicians and providers, including advance practice registered nurses (APRNs), can learn from the results. The guideline may help them better treat insomnia or sleep disorders in mentally ill patients. The outcome of this research may alleviate emotional pressure in the lives of families, friends, and parents of those who are mentally ill. The utilization of this evidence-based approach may yield a new understanding of the prevalence and significance of insomnia in treating BD. In that case, this project may be useful in developing clinical pathways in other health care facilities.

## **Summary**

BD is a severe mental health problem with a prevalence of 0.4% to 2.4% (Kanady et al., 2017). Insomnia and cognitive dysfunctions have been identified as the two most prominent symptoms of BD (Harvey et al., 2009). Although the genetic-neuroendocrine

physiology is poorly understood, insomnia appears to be of clinical significance in assessing and managing BD. Scholars have researched interventions for insomnia in bipolar patients. However, no one has taken the step to develop an evidence-based insomnia assessment guideline that will improve the treatment of insomnia in bipolar patients (Gold & Sylvia, 2016). This project was conducted to bridge this gap in practice through development of the IAGBD (see Gold & Sylvia, 2016). The practice-focused question was the following: What are the best clinical practice guidelines to assess insomnia for patients with BD that can be incorporated into the psychiatric, nursing, and counseling practice? The gathering of data adds to the knowledge base on the relationship between insomnia and bipolar episodes and improve mental health patient care practice.

#### Section 2: Background and Context

The development of IAGBD occurred after an extensive review of the literature. This study was built on a theoretical framework to ensure validity, dependability, and reliability (Watkins, 2020). Many scholars have viewed theory differently and have different definitions, but the most significant thing is that their views and reports are pointing in the same direction. These scholars see theory as a belief, policy, or procedure proposed or followed as the basis of action (Watkins, 2020). Nursing theory is creative and rigorous in structuring ideas that project a tentative, purposeful, and systematic view of phenomena (Letoumeau et al., 2017). Nursing theories provide the foundational knowledge that enables nurses to care for their patients and guide their actions (Letoumeau et al., 2017). Regardless of nursing specialization, theories are in place to establish general and specific nursing practices (Younas, 2019). Numerous nursing theories have been introduced since Florence Nightingale's environmental theory (Younas, 2019). What these theories have in common is that they are centered around the nursing metaparadigm (Younas, 2019). A metaparadigm is a set of theories or ideas that provide a clear structure for how a discipline should function (Younas, 2019). Two of these nursing theories were chosen as suitable for this project: Peplau's theory of interpersonal relations and Watson's (1985) theory of human caring.

## Concepts, Models, and Theories

## **Peplau's Theory of Interpersonal Relations**

Peplau's theory is a middle-range theory of interpersonal relations that emphasizes the importance of patients' nursing care experiences (William, 2016). In this

theory, the patient is considered the priority. Peplau (1952 and 1968) asserted that scientific research in nursing should focus on patients, their needs, and their perceptions about their care. This assertion aligned with the purpose of the current project. This project was conducted to create a guideline for insomnia assessment to meet the needs of bipolar patients. Despite the theory of interpersonal relations being formed in 1952, it remains iconic, relevant, and valuable in the psychiatric setting and other areas of nursing specialization (Sundean et al., 2021). Peplau's dedication to the care of the psychiatric patient has provided practicing clinicians in the psychiatric specialty and beyond with guidance in treating this vulnerable and stigmatized group of patients (Sundean et al., 2021). According to Peplau's theory of interpersonal relations, nursing is "an interpersonal, therapeutic process when professionals, especially educated to be nurses, engage in meaningful and therapeutic relationships with sick people or need health services" (Sundean et al., 2021,39(4)). The development of the IAGBD was intended to help bipolar patients who are sick and in need of health services receive quality care that will enhance the restabilization of their mental state. While rendering health services, the health care providers must build therapeutic relationships that respect and protect the privacy of their clients (William, 2016).

Peplau (1952 as cited in Hagerty et al., 2017) suggested that the nurse–patient relationship must undergo three phases to succeed in this theory: (a) orientation, (b) working, and (c) termination. Only two of these phases were considered relevant to the current project. I used the orientation and the working phases to support the development of a clinical guideline for assessing BD. In the orientation phase, the nurse who wants to

use IAGBD would meet and greet the patient seeking assistance with a perceived health problem (see Adams, 2017). This phase determines whether there would be a positive outcome or not. In this phase, nurses meet patients to obtain information about their health issues (Hagerty et al., 2017). The nurses are expected to show respect and courtesy when interacting with the patient (Hagerty et al., 2017). This helps make the patient feel comfortable and ready to provide all of the necessary information about their disease process (insomnia). In the working phase of Peplau's theory, nurses are expected to spend a reasonable amount of time with the patient conducting an assessment using the IAGBD that will help treat the symptom (see Hagerty et al., 2017). In the working or operational phase, nurses assume the role of health educators, resource personnel, counselors, and care providers (Adams, 2017). These two phases of Peplau's theory were essential to developing a clinical guideline for insomnia assessment in BD. The assessment tool may achieve its purpose if clinicians and providers consider Peplau's theory as guidance when asking patients questions outlined in the clinical assessment tool. The orientation phase of Peplau's approach encourages nurses to show respect and courtesy when interacting with patients (Adams, 2017).

When clinicians ask questions in the assessment process, they are encouraged to be respectful and courteous to acquire helpful information. In the operational phase, assessment is conducted to influence patient care (Adams, 2017). Clinicians and providers are encouraged to apply the active phase of Peplau's theory when conducting an assessment using a clinical assessment tool. The nurse brings to a professional relationship the knowledge, skills, and attitude needed to aid the patient in finding a

means to resolve or deal with their illness. Peplau's interpersonal theory as a framework for this project was a novel approach. With its three interweaving phases, the theory can aid in structuring clinical guidelines, assessments, conferences, and laboratory presentations on providing holistic care and communication (William, 2016). As nursing embraces a holistic paradigm, educational programs must strive within course work to include teachings inclusive of mind, body, and spirit (William, 2016). Nurses are called to become introspective and reflective of their practice (Adams, 2017). By fostering a holistic approach, nurses will have an increased ability to process the feelings, thoughts, and emotions they may have toward their patients (Sundean et al., 2021).

#### Watson's Theory of Human Caring

Watson's theory of human caring focuses on the human and nursing paradigm (Yeter et al., 2015). The theory postulates that nurses promote health, prevent illness, care for the sick, and restore health. Nursing focuses on health promotion, as well as the treatment of diseases. This aligned with the purpose of the current project, which was to develop a clinical guideline for assessing a disorder that affects over 1% of the world's population (see Marzani & Neff, 2021). According to Watson's theory (Yeter et al., 2015) caring is central to nursing practice and promotes health better than a simple medical cure. No known assessment tool is used for the treatment (Kredo et al., 2016) of insomnia in patients with BD to guide the medical care in determining a quality treatment for insomnia. With the development of a clinical guideline for the treatment of insomnia in bipolar patients, the treatment will be holistic and capable of delivering positive outcomes. Watson's theory referred to human beings as valued persons in and of

themselves to be cared for, respected, nurtured, understood, and assisted; in general, a person's philosophical view should be viewed as a fully functional integrated self (Yeter et al., 2015). This theory aligned with the purpose of this project. The theory emphasized 10 caring needs (carative factors) critical to the caring human experience that need to be addressed by nurses with their patients when in a caring role (Yeter et al., 2015). The last five carative factors formed the basis of this project: (a) using problem solving for decision making, (b) promoting teaching and learning, (c) promoting a supportive environment, (d) assisting with the gratification of human needs, and (f) allowing for existential phenomenological forces (see Yeter et al., 2015). Watson's theory of human caring aims to create balance and harmony between a person's health and illness experiences (Yeter et al., 2015). Therefore, applying Watson's theory of human caring to the nursing care of insomnia was appropriate.

#### **Relevance to Nursing Practice**

The development of the IAGBD was intended to provide a guide to apply evidence-based nursing practice to improve patient outcomes. Because BDs have negative impacts on the lives of affected individuals, it is crucial to address this public health problem and embark on quality improvement strategies that will increase patients' positive outcomes and decrease the financial health care burden (Marzani & Neff, 2021). Nursing professionals caring for individuals with BD can use the IAGBD to provide quality care that brings about quality improvement (see Harvey et al., 2009). This assessment guideline is not only for nurses' use; other healthcare professionals involved in the care of affected patients can also use the IAGBD. Nurses can collaborate with other

health care providers to initiate or amend treatments to address patients' needs through the assessment guideline. APRNs can use this IAGBD to generate effective treatments to meet patients' needs. The IAGBD may be helpful to psychiatrists, medical practitioners, and other APRNs for assessment and treatment.

## **Local Background and Context**

A series of questionnaires focusing on each domain of the clinical practice guideline (CPG) from the American College of Physicians (2016) was used as a guide for the development of IAGBD. The American College of Physicians (ACP, 2016) submitted some domains on physical health. Questions on the following areas of the patient's physical health were recommended: activities of daily living; dependence on medicinal substances and medical aids; use of caffeinated beverages such as coffee, soda, alcohol; energy level; dizziness or fatigue; mobility; pain and discomfort level; sleep and rest cycle; and work capacity (ACP, 2016). Questions related to the psychosocial domain include the following: bodily image and appearance, negative feelings, positive feelings, self-esteem, spirituality, religion, personal beliefs, thinking, learning, memory, and concentration (ACP, 2016). Questions regarding social relationships focus on personal relationships, social support, and sexual activity (ACP, 2016). Lastly, questions centered on the patient's environment are concentrated on financial resources, freedom, physical safety and security, health and social care such as accessibility and quality, home environment, opportunities for acquiring new information and skills, participation in and opportunities for recreation, leisure activities, physical environment (pollution, noise, traffic, climate), and transport (ACP, 2016).

The IAGBD is intended to equip all healthcare providers (nurses, doctors, APRNs, therapists, clinicians, dieticians, and other providers involved in the care of bipolar patients) with an evidence-based approach that will enable them to perform a thorough assessment of bipolar patients and make informed clinical decisions to deliver safe, effective, and efficient care to patients who have insomnia (see Garland et al., 2018). In a local context, there was a gap in practice observed in an outpatient care setting of a behavioral hospital that treated patients with BD. This gap showed that the standard method of this local organization was for case managers to conduct monthly phone calls to patients with mental health disorders such as depression, anxiety, and BD and administer the Generalized Anxiety Disorder 7-item and Patient Health Questionnaire - 9 depression scale to evaluate treatment response to antidepressants. The gap in practice was that there was no assessment of insomnia in patients diagnosed with BD. Insomnia is prevalent in bipolar patients and correlates with adverse developmental outcomes such as impaired emotional and behavioral regulation (Sevilla-Cermeno et al., 2020). The presence of insomnia has been linked to more severe psychopathology and worse general functioning in mental disorders in bipolar patients (Sevilla-Cermeno et al., 2020).

Reduced sleep has also been associated with impaired cognitive functioning, leading to impaired comprehension (Sevilla-Cermeno et al., 2020). If efficiently used, IAGBD may assist the clinician in assessing patients and offering better treatment in the local context and in other mental health facilities. Studies have shown that BD is a severe, chronic, and recurring condition in which sleep deprivation is a common

symptom regardless of the phase of the illness (Talbot et al., 2012). Sleeplessness is the most recognized symptom of mania and is also one of the most significant diagnostic criteria (Steinan et al., 2016). Evidence has shown that improving sleep is an important therapeutic target in BD as it often heralds the restabilization of the mental state (Steinan et al., 2016).

Sleep problems are associated with BD, but the clinical guideline for treating this debilitating symptom had not been developed. Sleep deprivation is often the last symptom to resolve as other affective episodes resolve (Steinan et al., 2016). A guideline for treatment of sleep deprivation needed to be developed to serve as an evidence-based practice for assessing and treating insomnia in this patient population.

#### **Role of the DNP Student**

I searched the literature to obtain reliable information to develop clinical guidelines for assessing insomnia in bipolar patients (see Beeber et al., 2019). A doctorally prepared student should be able to translate research findings into clinical practice to improve quality care and enhance positive patient outcomes (Beeber et al., 2019). In the development of the IAGBD, the first step was recognizing a need to create the IAGBD. Evidence showed that there was no gold standard for assessing insomnia in bipolar patients, which precipitated the need to develop an evidence-based approach that would be used for quality assessment (Gold & Sylvia, 2016; Katie et al., 2017). My role as the DNP student was to develop an assessment guideline for BD to serve as an evidence-based gold standard when assessing patients for insomnia.

I endeavored to ensure that clinicians treating patients with insomnia would have a useable and quality guideline for assessment to inform their clinical decision making. The evidence used to support the development of IAGBD were solely derived from the published literature. The Walden Institutional Review Board (IRB) approved this project to use the evidence from the published literature to develop the clinical guideline for assessing and treating insomnia in bipolar patients, and the approval number was 11-30-21-0735710. The accuracy, reliability, applicability, and usability of the IAGBD is based on the quality of the evidence from the published literature. Each piece of evidence used in the development of IAGBD was pulled from scholarly and peer reviewed articles, journals and theses to add quality and reliability to an evidence-based gold standard for assessing insomnia in bipolar patients (see Brown University, 2019)

#### **Summary**

Peplau's nursing theoretical framework guided the development of the IAGBD.

The theory helped me validate the tool's usability and reliability. The assessment tool may be relevant to nursing practice because it offers information for the nursing profession and other disciplines to enhance patient outcomes. It was vital to apply quality evidence when developing the IAGBD to improve usability and applicability in practice.

#### Section 3: Collection and Analysis of Evidence

Evidence showed that CPGs are the most efficient way to bridge the gap between best practice, policy, local contexts, and patients' choices (Shannon & Maughan, 2020). CPGs include recommendations developed following an evaluation of the scientific literature (Verville et al., 2021). CPGs optimize patient care by allowing health care providers and patients to select the best evidence-based care consistent with patients' needs and preferences (Verville et al., 2021). CPGs have been supported as vital components of quality medical practice (Shannon & Maughan, 2020). CPG was defined by the Institute of Medicine (IOM) as statements that consist of "recommendations intended to optimaize patient care that are informed by a systematic review of evidence and an assessment of the benefits and harm of alternative care options" (IOM, 2011 cited in Kredo et al., 2016, p. 122). Several scholars have agreed that CPG can enhance quality care if the clinicians follow the recommendations (Kredo et al., 2016). The current project was conducted to develop an insomnia assessment guideline to serve as an evidencebased approach for assessing patients diagnosed with BD. The inclusion of best-practice literature in these clinical pathways may increase the understanding of the role of insomnia in BDs.

#### **Practice-Focused Question**

The practice-focused question for this project was aimed at bridging the gap of a lack of IAGBD (Gold & Sylvia, 2016). The project practice-focused question was the following: What is the best clinical guideline to assess insomnia for patients with BD that can be incorporated into the psychiatric, nursing, and counseling practice? Gathering data

had the potential to add to the knowledge base on the relationship between insomnia and bipolar episodes and improve the practice of mental health patient care.

The development of an insomnia assessment guideline may assist clinicians in asking questions pertinent to the mental health disorder and its impact on various domains (physical health, social relationships, psychosocial situation, and environment). The expected outcome was the effective use of the IAGBD for patients seeking treatment to improve their health. The data obtained from the assessment may impact the development of therapeutic options to enhance safety, effectiveness, patient centeredness, timeliness, efficiency, and equity (see Gold & Sylvia, 2016). The recommendations in the IAGBD were intended to enhance quality care influenced by a systematic review of evidence translated into practice to improve outcomes (see Verville et al., 2021). The target population for the guideline was patients diagnosed with BD who seek care in the primary care setting.

#### **Sources of Evidence**

Insomnia affects 25 million people in the United States annually and leads to an estimated \$100 billion in health care burden (Khurshid, 2018). Insomnia is also a causal factor in other medical and psychiatric disorders, cognitive impairments, accidents, absenteeism, and reduced quality of life (Marzani & Neff, 2021). Insomnia is a symptom seen in up to one third of the United States population. In contrast, BD is seen in up to 20% of the population (Khurshid, 2018). Studies have shown that not treating insomnia is more than the cost of treating it (Khurshid, 2018).

This project focused on developing an insomnia assessment guideline for patients diagnosed with BD to serve as an evidence-based approach for better intervention, assessment, and treatment. The diagnostic criteria of insomnia have been updated in the International Classification of Sleep Disorders, Third Edition and the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (Khurshid, 2018). Insomnia is a disorder that needs independent clinical attention, and little or no attention has been paid to the tool of assessing and treating this disorder (Verville et al., 2021). Viewing insomnia mainly as a symptom of another disease prompted many clinicians to direct the bulk of their treatment efforts at the so-called primary condition and neglect the best way to treat insomnia (Shannon & Maughan, 2020). The current project was conducted to bridge that gap and develop a clinical guideline for insomnia assessment in BD (see Shannon & Maughan, 2020). Evidence has shown that treating insomnia leads to better outcomes and improved coexisting psychiatric disorders (Pruiksma et al., 2021). The clinician should target both conditions to achieve optimal treatment outcomes in people with comorbid psychiatric illness and insomnia (Pruiksma et al., 2021). Insomnia is a diagnostic criterion of BD. More than 90% of patients who present to sleep disorder clinics have a higher prevalence of BD (Khurshid, 2018). Clinicians should evaluate their psychiatric patients for sleep problems with IAGBD. This assessment tool may contribute to treatment pathways that will enhance safety, patient centeredness, effectiveness, efficiency, timeliness, and equity (see Verville et al., 2021).

The sources of evidence used to support the development of IAGBD were derived solely from the published literature. Data and required resources for developing the

IAGBD were obtained from Walden University's online library, where databases for scholarly and peer-reviewed articles were accessed. The MEDLINE, PubMed, and CINAHL databases were used to identify the most appropriate peer-reviewed literature. Peer-reviewed journals, research articles, books, and dissertations or theses that discussed the development of clinical guidelines were reviewed. I performed an advanced search using keywords such as bipolar and insomnia, mental health and insomnia, insomnia, bipolar disorder, clinical practice guidelines, practice guideline and mental health, treatment of insomnia, bipolar treatment, bipolar and insomnia, clinical practice guideline for bipolar, clinical guideline for insomnia, statistics of insomnia, and statistics on bipolar. Boolean phrase words such as "NOT," "AND," and "OR" were used to narrow the search. The following were the keyword combinations performed with each of the databases: (a) Insomnia AND mental health disorders OR mental health illness OR psychiatric disorders, (b) clinical guideline AND mental health or mental illness or mental disorders AND bipolar, (c) Epworth Sleepiness Scale (ESS) AND bipolar OR mental disorders, (d) Insomnia Severity Index (ISI) OR insomnia index AND bipolar disorder or mental illness, and (e) Berlin Questionnaire AND insomnia or bipolar. The selection criteria included (a) published articles not before 2011, (b) related to BD, (c) related to insomnia, (d) discussed clinical practice guideline measurement, (e) discussed the development of clinical guidelines on certain mental health diagnosis, and (f) published in English. Articles that were not published in English, unrelated articles, and those that offered opinions were not selected.

#### **Analysis and Synthesis**

This project was conducted to develop a guideline for assessing insomnia in patients diagnosed with BD. Studies have shown that clinicians focus more on primary diagnoses but neglect the secondary diagnosis in patients (Verville et al., 2021). Insomnia has been considered secondary for a long time, and little attention was devoted to its aggressive treatment (Bruni et al., 2018). This guideline focused only on patients with a bipolar diagnosis because insomnia is the number one problem in bipolar patients (see Bruni et al., 2018). I developed the IAGBD as an evidence-based approach to assess insomnia in patients with BD. It is crucial to know that IAGBD was not developed for one particular facility, community, or organization. BD affects about 45 million people worldwide (World Health Organization, 2019). John Hopkins Medicine (2022) submitted that BD affects approximately 2.6% of Americans age 18 and older in a given year. The average age at onset for a first manic episode is the early 20s. Most people who commit suicide have a diagnosable BD (John Hopkins Medicine, 2022). Clinicians and mental health providers may find the IAGBD helpful in assessing insomnia in bipolar patients in their facilities.

#### **Ethics**

There were no human subjects. The sources of evidence used to support the development of this project were solely derived from the published literature. The proposal was submitted to the Walden Institutional Review Board for approval before developing IAGBD, and the approval number was 11-30-21-0735710.

# **Summary**

The development of the IAGBD was an innovation in nursing practice with bipolar patients. This new assessment guideline may impact safety, efficiency, effectiveness, patient centeredness, timeliness, and equity. The IAGBD may enable clinicians and nurses to make sound judgments, determine correct diagnoses, prescribe proper medications and treatment, and make referrals to a higher level of care if the severity of the symptoms requires further evaluation. The IAGBD was developed with the most substantial evidence to support it to ensure reliability, validity, and usability.

#### Section 4: Findings and Recommendations

Insomnia is a core symptom of BD (Ihler et al., 2020). Evidence suggested that attention needs to be shifted from treating insomnia as a symptom to treating it as a disorder that requires independent clinical attention (Khurshid, 2018). Little to no effort had been devoted to treating insomnia because it was considered a secondary symptom. For example, insomnia is a core symptom of BD; however, more attention was on bipolar treatment, and insomnia treatment was handled by pharmacological and nonpharmacological interventions (Ihler et al., 2020). No one had developed a clinical guideline that served as an evidence-based approach for assessing insomnia in bipolar patients. Developing a tool that would help clinicians evaluate and treat insomnia would contribute to the body of knowledge and potentially change clinical practice. In clinical practice, guidelines are developed as a pathway that clinicians follow in providing effective and efficient care to a group of people with certain clinical conditions (Taylor, 2014). In the current project, the IAGBD was developed to serve as an assessment tool to guide clinicians, providers, physicians, psychiatrists, and other health care staff in assessing and treating insomnia in bipolar patients. Those who are not diagnosed with BD but have difficulty sleeping may also benefit from this assessment tool. This evidencebased approach is not created for the use in one particular facility. All mental health facilities in which bipolar patients are assessed and treated may benefit from the IAGBD.

The practice-focused question for this project aimed at bridging the gap of the lack of an evidence-based approach to assess insomnia in bipolar patients (Gold & Sylvia, 2016). The practice-focused question was the following: What are the best

clinical practice guidelines to assess insomnia for patients with BD that can be incorporated into the psychiatric, nursing, and counseling practice? If utilized, the IAGBD has the potential to add to the knowledge base on the relationship between insomnia and bipolar episodes and improve the practice of mental health patient care.

#### **Findings and Implications**

The gap in practice was that there had been no guideline developed to assess insomnia in bipolar patients. Insomnia is a common sleep disorder that can be missed during assessment by the physicians, clinicians, or assessors unless a guideline guides them during assessment (Bhaskar et al., 2016). This lack of insomnia assessment was the motivation behind this project. An extensive literature review was performed to develop the first draft of an assessment guideline to serve as an evidence-based approach for providers, clinicians, and other healthcare staff to make an informed decision. Data and required resources for developing the IAGBD were obtained from Walden University's online library, where databases for scholarly and peer-reviewed articles were accessed. The MEDLINE, PubMed, and CINAHL databases were used to identify the most appropriate peer-reviewed literature. Peer-reviewed journals, research articles, books, and dissertations or theses that discussed the development of clinical guidelines were reviewed. The advanced search was performed using keywords such as bipolar and insomnia, mental health and insomnia, insomnia, bipolar disorder, clinical practice guidelines, practice guideline and mental health, treatment of insomnia, bipolar treatment, bipolar and insomnia, clinical practice guideline for bipolar, clinical

guideline for insomnia, statistics of insomnia, and statistics on bipolar. Boolean phrase words such as "NOT," "AND," and "OR" were used to narrow the search.

The sources of evidence were derived solely from the credible published literature. The evidence-based guideline provides recommendations to help clinicians deliver the best healthcare possible (Brown University, 2019). No standardized measurement tool for providers or clinicians to assess insomnia in bipolar patients was found upon review of the literature. The current assessment tools for insomnia, such as the Epworth Sleepiness Scale (ESS), Insomnia Severity Index, and Global Sleep Assessment Questionnaires, are not suitable for assessing insomnia in BD because these assessment tools are geared toward assessing patients with medical issues. The ESS is used to assess excessive daytime sleepiness and comorbid sleep disorders (Hurlston et al., 2019). The ESS is an 8-item questionnaire developed to estimate sleep propensity, or the likelihood of falling asleep during the day (Hurlston et al., 2019). As the clinical utility of the ESS has evolved, it is now commonly used to screen for and distinguish between individuals with insomnia compared to those with obstructive sleep apnea. The ESS is self-administered and estimates a patient's likelihood of falling asleep in various situations (Hurlston et al., 2019).

#### **Insomnia Assessment Guideline**

The IAGBD was developed in this project as a step-by-step process for assessing insomnia in bipolar patients. The clinicians follow a series of questions in the guideline to obtain the necessary information for evaluating and treating insomnia in bipolar patients. The IAGBD consists of different domains such as physical health, psychological health,

social relationships, and environment. The parts identified in the IAGBD are the areas that clinicians can use to gather information from patients to plan their care. Each domain on the IAGBD has targeted questions that clinicians ask to obtain patients' responses regarding the severity of their symptoms. The IAGBD is not for patients' personal use. The domain on physical health contains questions about the following areas of the patient's physical health: activities of daily living, dependence on medicinal substances and medical aids, energy and fatigue, mobility, pain and discomfort, sleep and rest, and work capacity (see Appendix). Further psychometric analysis will be needed to conduct a factor analysis to determine how the items in this assessment tool would organize the questions according to the domains used to create this guideline.

## **Application of Peplau's Theory**

For the IAGBD to achieve its goals, the clinicians must effectively and appropriately incorporate Peplau's interpersonal relations theory to establish effective relationships with patients. By incorporating Peplau's approach, clinicians can engage in therapeutic relationships with patients diagnosed with BD, which can assist them in holistically caring for patients as individuals in need of mental health services. Peplau's theory emphasizes that for nurse–patient relationships to be considered successful, effective, and efficient, they must pass through three phases: (a) orientation, (b) working, and (c) termination (Hagerty et al., 2017). Patients realize they need help during the orientation phase and are prepared to adjust to their current environment. When using the IAGBD, clinicians should see patients as people with unique needs and priorities.

Incorporating this phase of Peplau's theory will enable the clinicians to prepare the patients' minds for sharing necessary information.

The working phase occurs where clinicians carry out an assessment using the IAGBD as an evidence-based approach (see Hagerty et al., 2017). During the working phase, clinicians should build a therapeutic relationship with the patients to propel them to share information freely. Using the IAGBD as a tool will guide the clinicians in asking for the necessary information that enhances proper assessment and treatment. The clinician must embrace nondirective listening to facilitate patients' awareness of their feelings regarding their changing health (see Hagerty et al., 2017). Using this therapeutic form of communication, clinicians will provide reflective and nonjudgmental feedback to patients for the sake of helping them clarify their thoughts (see Hagerty et al., 2017). Incorporating the final stage will help the clinician to determine the appropriate intervention for the patients without any bias or prejudice.

## **Strengths and Limitations of the Project**

If fully developed and validated, the IAGBD may improve the assessment of insomnia in patients diagnosed with BD, which may inform therapeutic alternatives and improve health outcomes. One of the limitations of the IAGBD was that it was centered on assessing insomnia in patients with BD, whereas other mental disorders suffer from insomnia. The process for validating the assessment tool will need the involvement of a psychometrician as the guideline is piloted. Another step will be creating a therapeutic plan to implement as part of the comprehensive guideline.

#### Recommendations

The principal purpose of the IAGBD is to serve as an evidence-based approach for clinicians, physicians, providers, and other clinical staff involved in the care of bipolar patients. The next step should be using this instrument in a pilot study with the consultation of a psychometrician. This is a long-term process necessary to support the quality development of a clinical practice guideline. Once this more extensive clinical practice guideline is developed, it may improve effectiveness and quality of care, decrease variations in clinical practice, decrease costly and preventable mistakes and adverse events, and improve the quality of care received by bipolar patients (see Chen et al., 2021). The Institute of Medicine (2011) defined clinical guidelines as systematically developed statements that guide practitioners' and patients' decisions about appropriate treatment for specific clinical circumstances. Lepkowski et al. (2020) submitted that the evolving field of research has refined the definition of clinical guidance as a convenient way of packaging evidence and presenting recommendations to healthcare decision makers.

### **Summary**

The IAGBD was developed to assist clinicians and providers in understanding more about the significance of insomnia in the care of bipolar patients. The IAGBD is an assessment tool that enables the clinician to perform an accurate evaluation on patients with BD to help them resolve the problem of sleeplessness. Clinicians may use the IAGBD to improve sleep quality in patients with BD by encouraging proven beneficial interventions and discouraging ineffective or potentially harmful interventions (see Mayo

Clinic, 2017). The assessment may assist clinicians in determining whether the patient needs pharmacological or nonpharmacological interventions or whether the patient's clinical situation requires referral to a higher level of care or a sleep study.

#### Section 5: Dissemination Plan

Evidence-based dissemination is a critical pathway to practically, efficiently, and effectively make the research or project findings available for end users, thereby enhancing quality treatment and improving patient outcomes (Curtis et al., 2017).

Translating research evidence to clinical practice is essential for safe, transparent, effective, and efficient healthcare provision and meeting the expectations of patients, families, and society (Schipper et al., 2016). Translating the best research evidence can enhance transparent and sustainable healthcare service, and the translation of evidence can bring about cultural, behavioral, and practice change, thereby reducing the research-practice gap (Curtis et al., 2017). It is crucial to make IAGBD available for end users to assist them in assessing and treating insomnia in bipolar patients.

The IAGBD was designed to assist clinicians in effectively and efficiently assessing bipolar patients with sleep disorders. Insomnia contributes to decreased mental and physical health (American Academy of Sleep Medicine [AASM], 2021). Individuals with insomnia are at an increased risk for suicide, auditory and visual hallucinations, mood swings, racing thoughts, and unstable and depressed moods (AASM, 2021). The adverse effects of insomnia have been found not only in bipolar patients but also in people who do not have any mental health diagnosis (AASM, 2021). Kaur et al. (2021) submitted that insomnia is the most common sleep disorder in the United States, affecting about one third of the general population. Insomnia is characterized by difficulty initiating sleep, maintaining sleep continuity, or poor sleep quality (Kaur et al., 2021). Studies have also shown that insomnia adversely affects a person' health, quality of life,

and academic performance for those in school (Ong et al., 2020). Insomnia also causes irritability, increases the risk of motor vehicle accidents, increases daytime sleepiness, and decreases productivity at work (Ong et al., 2020). Insomnia is attributed to medical problems such as decreased immune functioning, cardiovascular diseases, chronic pain syndrome, depression, anxiety, diabetes, obesity, and asthma (Ong et al., 2020).

The end users of the IAGBD are clinicians, providers, psychiatrists, nurses, and other healthcare workers whose scope of practice allows them to assess bipolar patients. The end user would be suitable for disseminating IAGBD to health care facilities where bipolar patients receive care. The first step of dissemination is the team presentation of the guideline to the organization members through education and the piloting of the guidelines. The assessment tool will need to be validated by a psychometrician before dissemination to a broader audience of mental health professionals.

Later dissemination can take the form of a professional presentation by team members in their professional meetings and publication of the results. Healthcare organizations may introduce the IAGBD to their medical or clinical director for review and transfer to their clinicians to use and guide their clinical practices. The end users of IAGBD can employ the recommendations in their courses, settings, or organizations to enhance care delivery and attain positive outcomes.

### **Analysis of Self**

The development of the IAGBD was a rigorous exercise. This DNP project allowed me to see my role as a leader, project manager, practitioner, and scholar.

Through the development of this project, I realized that there is no problem that cannot be

solved. I hope that all current healthcare problems confronting the United States will be solved one day. Local, state, and federal health care challenges may be resolved through a collaborative effort, forming a solid team, and bringing experts together to deliberate on current issues. My passion, which was triggered by the development of the IAGBD, will help me step out into global society to solve health issues, especially in the mental health field.

The gap in the lack of insomnia assessment tools for bipolar patients found in the literature led to this project. The IAGBD was developed to serve as an assessment tool for clinicians, providers, and physicians for better evaluation and treatment of insomnia in bipolar patients. If the IAGBD is implemented and disseminated, it may assist clinicians in performing assessments and enhancing treatments. The IAGBD may also alleviate the suffering of bipolar patients by promoting an accurate diagnosis and patient-centered care.

Were it not for the DNP project, I would not have been able to see myself as a scholar with the potential to search the literature and find a gap that leads to developing an important tool that brings safe, effective, efficient, and patient-centered care to patients with BD. The development of the IAGBD has helped me learn more about effective communication, leadership, management, reporting, collaboration, commitment, and a thorough literature search. The knowledge gained through this project will stay with me as a scholar and practitioner throughout my life. This project would not have been completed without the wisdom of my chairperson, Dr. Mary Catherine Garner, whose compendium of knowledge guided the project to the finish line.

## **Summary**

The IAGBD is an assessment tool developed to assist clinicians, providers, and mental health staff in carrying out a quality assessment on bipolar patients to alleviate their problem of sleeplessness. Because insomnia is capable of causing physical and mental complications such as cardiovascular diseases, diabetes, suicidal ideation, suicide attempt, suicide, and hallucinations (Ong et al., 2020), the IAGBD as a tool of assessment is recommended for all health care organizations or facilities in which care is provided for bipolar patients. The AASM (2021) submitted that the aggregate total of direct and indirect insomnia healthcare costs in a year was estimated to be as high as \$100 billion US dollars. The IAGBD is a tool that may reduce this cost if appropriately disseminated and adopted. Further work to trial the tool and to explore psychometric properties is indicated. A CPG that guides assessment and treatment can lead to improved patient quality of life as well as a reduction in health care costs and which would be a positive social change.

#### References

- Abad, V. C., & Guilleminault, C. (2018). Insomnia in elderly patients: Recommendations for pharmacological management. *Drugs Aging*, *35*(9), 791–817. https://doi.org/10.1007/s40266-018-0569-8. PMID: 30058034
- Adams, L. Y. (2017). *Peplau's contributions to psychiatric and nursing knowledge*. <a href="https://jmhan.org/index.php/JMHAN/article/view/3">https://jmhan.org/index.php/JMHAN/article/view/3</a>
- Akl, E. A., Kennedy, C., Konda, K., Caceres, C. F., Horvath, T., Ayala, G., Doupe, A., Gerbase, A., Wiysonge, C. S., Segura, E. R., Schiinemann, H. J., & Lo, Y.-R.
  (2012). Using GRADE methodology for the development of public health guidelines for the prevention and treatment of HIV and other STIs among men who have sex with men and transgender people. *BMC Public Health*, 12(1), 386. <a href="https://doi-org/10.1186/1471-2458-12-386">https://doi-org/10.1186/1471-2458-12-386</a>
- American Academy of Sleep Medicine,(2021) SLEEP is the annual meeting of the Associated Professional Sleep Societies, LLC (APSS) <a href="https://aasm.org/state-of-sleep-medicine-report-2021-q4/">https://aasm.org/state-of-sleep-medicine-report-2021-q4/</a>
- American College of Physicians. (2016). *Management of chronic insomnia disorder in adults: A clinical practice guideline from the American College of Physicians*. <a href="https://www.acpjournals.org/doi/10.7326/p16-9016">https://www.acpjournals.org/doi/10.7326/p16-9016</a>
- American Psychological Association, (2019) Recognizing the signs of bipolar disorder. https://www.apa.org/topics/bipolar-disorder/recognizing
- Brown University. (2019) Association between worsening sleep and worsening psychiatric symptoms found. (2019). *Brown University Child & Adolescent*

- Psychopharmacology Update, 21(8), 1-3. https://doi.org/10.1002/cpu.30414
- Beeber, A. S., Palmer, C., Waldrop, J., Lynn, M. R., & Jones, C. B. (2019). The role of doctor of nursing practice-prepared nurses in practice settings. *Nursing Outlook*, 67(4), 354–364. https://doi-org./10.1016/j.outlook.2019.02.006
- Bhaskar, S., Hemavathy, D., & Prasad, S. (2016). Prevalence of chronic insomnia in adult patients and its correlation with medical comorbidities. *Journal of Family Medicine and Primary Care*, 5(4), 780–784. <a href="https://doi.org/10.4103/2249-4863.201153">https://doi.org/10.4103/2249-4863.201153</a>
- Bruni, O., Angriman, M., Calisti, F., Comandini, A., Esposito, G., Cortese, S., & Ferri, R. (2018). Practitioner review: Treatment of chronic insomnia in children and adolescents with neurodevelopmental disabilities. *Journal of Child Psychology & Psychiatry*, *59*(5), 489–508. <a href="https://doi.org/10.1111/jcpp.12812">https://doi.org/10.1111/jcpp.12812</a>
- Cabrera, P. A., & Pardo, R. (2019). Review of evidence based clinical practice guidelines developed in Latin America and Caribbean during the last decade: An analysis of the methods for grading quality of evidence and topic prioritization. *Globalization & Health*, 1, 1. https://doi.org/10.1186/s12992-019-0455-
- Chen, Y., Guyatt, G. H., Munn, Z., Florez, I. D., Marusic, A., Norris, S. L., Kredo, T., & Qaseem, A. (2021). Clinical practice guidelines registry: Toward reducing duplication, improving collaboration, and increasing transparency. *Annals of Internal Medicine*, 174(5), 705–707. <a href="https://doi.org/10.7326/M20-7884">https://doi.org/10.7326/M20-7884</a>
- Curtis, K., Fry, M., Shaban, R. Z., & Considine, J. (2017). Translating research findings to clinical nursing practice. *Journal of clinical nursing*, 26(5–6), 862–872.

## https://doi.org/10.1111/jocn.13586

- Davoud, A., & Abazari, M. (2020). The relationship between quality of life and physical activity, worry, depression, and insomnia in pregnant women. *Iranian Journal of Psychiatry*, 15(2), 159–168.
- Dopke, C. A, Lehner RK, & Wells AM. (2004). Cognitive-behavioral group therapy for insomnia in individuals with serious mental illness: a preliminary evaluation.

  \*Psychiatric Rehabilitation Journal, 27(3), 235–242. <a href="https://doi-org/10.2975/27.2004.235.242">https://doi-org/10.2975/27.2004.235.242</a>
- Ekholm, B., Spulber, S., & Adler, M. (2020). A randomized controlled study of weighted chain blankets for insomnia in psychiatric disorders. *Journal of clinical sleep medicine : JCSM : official publication of the American Academy of Sleep Medicine*, 16(9), 1567–1577. https://doi.org/10.5664/jcsm.8636
- Evers, K., Maljaars, J., Carrington, S. J., Carter, A. S., Happé, F., Steyaert, J., Leekam, S. R., & Noens, I. (2021). How well are DSM-5 diagnostic criteria for ASD represented in standardized diagnostic instruments? *European Child & Adolescent Psychiatry*, 30(1), 75–87. <a href="https://doi.org/10.1007/s00787-020-01481-z">https://doi.org/10.1007/s00787-020-01481-z</a>
- Formulation of research question Stepwise approach. (2019). *Journal of Indian Association of Pediatric Surgeons*, 24(1), 15–20. <a href="https://doi-org/10.4103/jiaps.JIAPS\_76\_18">https://doi-org/10.4103/jiaps.JIAPS\_76\_18</a>
- Garland, S. N., Vargas, I., Grandner, M. A., & Perlis, M. L. (2018). Treating insomnia in patients with comorbid psychiatric disorders: A focused review. *Canadian Psychology*, *59*(2), 176–186. https://doi.org/10.1037/cap0000141

- Gold, A. K., & Sylvia, L.G. (2016). The role of sleep in bipolar disorder.

  https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4935164/
- Gupta, S., Epari, V., & Pradhan, S. (2018). Association of internet addiction with insomnia, depression, anxiety, and stress among university students A cross-sectional study. *Indian Journal of Community Health*, 30(4), 342–347.
- Harvard Medical School. (2022).Insomnia costing U.S workforce \$63.2 billion a year, researchers estimate. <a href="https://hms.harvard.edu/news/insomnia-costing-us-workforce-632-billion-year-researchers-estimate">https://hms.harvard.edu/news/insomnia-costing-us-workforce-632-billion-year-researchers-estimate</a>
- Harvey, A. G., Talbot, L. S., & Gershon, A. (2009). Sleep disturbance in bipolar disorder across the lifespan. *Clinical Psychology : A Publication of the Division of Clinical Psychology of the American Psychological Association*, *16*(2), 256–277. https://doi.org/10.1111/j.1468-2850.2009.01164.x
- Hagerty, T. A., Samuels, W., Norcini-Pala, A., & Gigliotti, E. (2017). Peplau's theory of interpersonal relations: An alternate factor structure for patient experience data?
   Nursing Science Quarterly, 30(2), 160–167.
   <a href="https://doi.org/10.1177/0894318417693286">https://doi.org/10.1177/0894318417693286</a>
- Hensch, T., Wozniak, D., & Spada, J. (2019). Vulnerability to bipolar disorder is linked to sleep and sleepiness. *Transl Psychiatry*, 9, 294. <a href="https://doi.org/10.1038/s41398-019-0632-1">https://doi.org/10.1038/s41398-019-0632-1</a>
- Hurlston, A., Foster, S. N., Creamer, J., Brock, M. S., Matsangas, P., Moore, B. A., & Mysliwiec, V. (2019). The Epworth Sleepiness Scale in service members with sleep disorders. *Military Medicine*, *184*(11–14), e701–e707.

## https://doi.org/10.1093/milmed/usz066

- Ihler, H. M., Meyrel, M., Hennion, V., Maruani, J., Gross, G., Geoffroy, P. A.,
  Lagerberg, T. V., Melle, I., Bellivier, F., Scott, J., & Etain, B. (2020).
  Misperception of sleep in bipolar disorder: an exploratory study using
  questionnaire versus actigraphy. *International Journal of Bipolar Disorders*, 8(1),
  34. <a href="https://doi.org/10.1186/s40345-020-00198-x">https://doi.org/10.1186/s40345-020-00198-x</a>
- Institute of Medicine (2011) Committee on standards for developing trustworthy clinical practice guidelines; https://pubmed.ncbi.nlm.nih.gov/24983061/
- Jansson, M., & Linton, S.J. (2006). The role of anxiety and depression in the development of insomnia; cross-sectional and prospective analyses. *Psychology & Health*, 21(3), 383–397.
- Jennifer K.C., Soehner, A.M., Klein, A.B., Harvey, A.G. (2017). The association between insomnia-related sleep disruptions and cognitive dysfunction during the interepisode phase of bipolar disorder.
  - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5527335/
- John Hopkins Medicine. (2022). <a href="https://www.hopkinsmedicine.org/health/wellness-and-prevention/mental-health-disorder-statistics">https://www.hopkinsmedicine.org/health/wellness-and-prevention/mental-health-disorder-statistics</a>
- Kadesjo Banck, J., & Bernhardsson, S. (2020). Experiences from implementation of internet-delivered cognitive behavior therapy for insomnia in psychiatric health care: a qualitative study applying the NASSS framework. *BMC Health Services Research*, 20(1), 1–14. <a href="https://doi-org/10.1186/s12913-020-05596-6">https://doi-org/10.1186/s12913-020-05596-6</a>
- Kanady, J. C., Soehner, A. M., Klein, A. B., & Harvey, A. G. (2017). The association

- between insomnia-related sleep disruptions and cognitive dysfunction during the inter-episode phase of bipolar disorder. *Journal of Psychiatric Research*, 88, 80–88. <a href="https://doi.org/10.1016/j.jpsychires.2017.01.001">https://doi.org/10.1016/j.jpsychires.2017.01.001</a>
- Kaur H, Spurling BC, Bollu PC. Chronic Insomnia. [Updated 2021 Jul 17]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-.
  <a href="https://www.ncbi.nlm.nih.gov/books/NBK526136/">https://www.ncbi.nlm.nih.gov/books/NBK526136/</a>
- Khubchandani, J., & Price, J. H. (2020). Short sleep duration in working American adults, 2010-2018. *Journal of Community Health*, 45(2), 219–227. <a href="https://doiorg./10.1007/s10900-019-00731-9">https://doiorg./10.1007/s10900-019-00731-9</a>
- Khurshid, A., & Khurshid (2018). *Comorbid insomnia and psychiatric disorders*. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5906087/
- Koffel, E., Bramoweth, A. D., & Ulmer, C. S. (2018). Increasing access to and utilization of cognitive-behavioral therapy for insomnia (CBT-I): A narrative review.

  \*\*Journal of General Internal Medicine, 33(6), 955-962. DOI: http://dx.doi.org.ezp.waldenulibrary.org/10.1007/s11606-018-4390-1
- Kong, Y., Wei, X., Duan, L., Wang, W., Zhong, Z., Ming, Z., & Zeng, R. (2015). Rating the quality of evidence: The GRADE system in systematic reviews/meta-analyses of AKI. Renal Failure, 37(7), 1089–1093.
  <a href="https://doi.org/10.3109/0886022X.2015.1056065">https://doi.org/10.3109/0886022X.2015.1056065</a>
- Kredo, T., Bernhardsson, S., Machingaidze, S., Young, T., Louw, Q., Ochodo, E., & Grimmer, K. (2016). Guide to clinical practice guidelines: the current state of play. *International Journal for Quality in Health Care: Journal of the*

- International Society for Quality in Health Care, 28(1), 122–128. https://doi.org/10.1093/intqhc/mzv115
- Kurtz, C. P., & Schmidt, N. A. (2016). Conceptualizing cognitive-behavioral therapy as a supportive-educative nursing system for patients with insomnia. *Self-Care*, *Dependent-Care & Nursing*, 22(1), 14–21.
- Cour Karottki, N. F., Coello, K., Stanislaus, S. et al. Sleep and physical activity in patients with newly diagnosed bipolar disorder in remission, their first-degree unaffected relatives and healthy controls. *Int J Bipolar Disord* **8**, 16 (2020). <a href="https://doi.org/10.1186/s40345-020-00181-6">https://doi.org/10.1186/s40345-020-00181-6</a>
- Lepkowski, A. M., Shannon, R. A., & Maughan, E. D. (2020). Validation of a model for developing evidence-based clinical practice guidelines for school nursing. *Journal of School Nursing*, *36*(6), 410-414. <a href="https://doi.org/10.1177/1059840519881771">https://doi.org/10.1177/1059840519881771</a>
- Letoumeau, Dimitri, Chantal Cara, and Johanne Goudreau. 2017. "Humanizing nursing care: An analysis of caring theories through the lens of humanism." International Journal for human caring 21 (1): 32-40. <a href="https://search-ebscohost-com./login.aspx?direct=true&db=rzh&AN=125469869&site=ehost-live&scope=site">https://search-ebscohost-com./login.aspx?direct=true&db=rzh&AN=125469869&site=ehost-live&scope=site</a>.
- Lewis, K.S., Gordon-Smith, K., Di Florio, A., Craddock, N., Jones, L.,& Jones, I.(2017). Sleep loss as a trigger of mood episodes in bipolar disorder: individual differences based on the diagnostic subtype and gender. The British Journal of psychiatry, 211(3),169-174
- Lydiksen, N., Greve, J., Jakobsen, M., & Kristensen, S. R. (2021). Using national clinical

- guidelines to reduce practice variation the case of Denmark. *Health Policy*, 125(6), 793-798. <a href="https://doi-org/10.1016/j.healthpol.2021.03.002">https://doi-org/10.1016/j.healthpol.2021.03.002</a>
- Marzani G, Price Neff A. Bipolar Disorders: Evaluation and Treatment. Am Fam Physician. 2021 Feb 15;103(4):227-239. PMID: 33587568. https://pubmed.ncbi.nlm.nih.gov/33587568/
- Mayo Clinic (2017) Clinical practice guidelines: A primer on development and dissemination: <a href="https://www.mayoclinicproceedings.org/article/S0025-6196(17)30025-3/pdf">https://www.mayoclinicproceedings.org/article/S0025-6196(17)30025-3/pdf</a>
- Michael J. S., Daniel J. B., Andrew D. S., David N. N., (2017) Clinical practice guideline for the pharmacologic treatment of chronic insomnia in adults: An American academy of sleep medicine clinical practice guideline

  https://doi.org/10.5664/jcsm.6470
- Ong, W. J., Tan, X. W., Shahwan, S., Satghare, P., Cetty, L., Ng, B. T., Tang, C., Verma, S., Chong, S. A., & Subramaniam, M. (2020). Association between sleep quantity and domains of quality of life amongst patients with first episode psychosis.
  Health & Quality of Life Outcomes, 18(1), 1-9. <a href="https://doi.org/10.1186/s12955-020-01367-3">https://doi.org/10.1186/s12955-020-01367-3</a>
- Pruiksma, K. E., Slavish, D. C., Taylor, D. J., Dietch, J. R., Tyler, H., Dolan, M., Bryan,
  A. O., & Bryan, C. J. (2021). Nightmares and insomnia in the US national guard:
  Mental and physical health correlates. *International Journal of Behavioral*Medicine, 28(2), 238-249. <a href="https://doi-org/10.1007/s12529-020-09889-2">https://doi-org/10.1007/s12529-020-09889-2</a>

- Pullen, S. J., Horgan, L., Romanelli, L. H., Radin, A., Gardner, K., Edwards, C., Crapo, T., Bolen, B., Huck, B., Wells, K., & Lochman, J. (2021). The effectiveness of training rural mental health clinicians to treat disruptive behavior disorders. *Journal of Rural Mental Health*, 45(4), 288–296. https://doi.org/10.1037/rmh0000173
- Robotham, D. (2011). Sleep and mental health: your guide to today's mental health issues. *Mental Health Today*, 21-23. https://pubmed.ncbi.nlm.nih.gov/21568026/
- Salisbury-Afshar E.(2018). Management of insomnia disorder in adults. Am fam physician. 2018 Sep 1;98(5):319-322. PMID: 30216028. https://pubmed.ncbi.nlm.nih.gov/30216028/
- Schipper, K., Bakker, M., De Wit, M., Ket, J. C., & Abma, T. A. (2016). Strategies for disseminating recommendations or guidelines to patients: a systematic review.

  \*\*Implementation science: IS, 11(1), 82. <a href="https://doi.org/10.1186/s13012-016-0447-">https://doi.org/10.1186/s13012-016-0447-</a>

  \*\*X
- Sevilla-Cermeno, L., Rautio, D., Andren, P., Hillborg, M., Silverberg-Morse, M., Lahera, G., Mataix-Cols, D., & Fernandez de la Cruz, L.(2020). Prevalence and impact of insomnia in children and adolescents with body dysmorphic disorder undergoing multimodal specialist treatment. European child & adolescent psychiatry, 29(9),1289-1299. https://pubmed.ncbi.nlm.nih.gov/31760510/
- Shannon, R. A. & Maughan, E. D. (2020). A model for developing evidence-based clinical practice guidelines for school nursing. Journal of school nursing, 36(6), 415-422. <a href="https://doi-org/10.1177/1059840519880938">https://doi-org/10.1177/1059840519880938</a>
- Steinan, M. K., Scott, J., Lagerberg, T. V., Melle, I., Andreassen, O. A., Vaaler, A. E., &

- Morken, G. (2016). Sleep problems in bipolar disorders: more than just insomnia. *Acta Psychiatrica Scandinavica*, 133(5), 368-377. <a href="https://doi-org./10.1111/acps.12523">https://doi-org./10.1111/acps.12523</a>
- Sundean, L. J., Fawcett, J., & Prybil, L. D. (2021). Board culture and the role of interpersonal relations. *Nursing Economic\$*, 39(4), 161-170. https://pubmed.ncbi.nlm.nih.gov/9416116/
- Talbot LS, Stone S, Gruber J, Hairston IS, Eidelman P, Harvey AG, Talbot, L. S., Stone, S., Gruber, J., Hairston, I. S., Eidelman, P., & Harvey, A. G. (2012). A test of the bidirectional association between sleep and mood in bipolar disorder and insomnia. *Journal of Abnormal Psychology*, 121(1), 39-50.
  <a href="https://doi.org/10.1037/a0024946">https://doi.org/10.1037/a0024946</a>
- Talih F, Gebara NY, Andary FS, Mondello S, Kobeissy F, Ferri R. Delayed sleep phase syndrome and bipolar disorder: Pathogenesis and available common biomarkers. Sleep Med Rev. 2018 Oct;41:133-140. doi: 10.1016/j.smrv.2018.02.002. Epub 2018 Feb 13. PMID: 29534856
- Talih, F. (2018). Insomnia in hospitalized psychiatric patients: prevalence and associated factors. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5903832/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5903832/</a>
  <a href="https://doi.org/10.3109/0886022X.2015.1056065">https://doi.org/10.3109/0886022X.2015.1056065</a>
- Taylor, C. (2014). The use of clinical practice guidelines in determining standard of care.

  \*Journal of Legal Medicine, 35(2), 273-290.

  https://doi.org/10.1080/01947648.2014.913460
- Travaglini, L. E., Cosgrave, J., & Klingaman, E. A. (2019). Pain and sleep problems

- predict quality of life for Veterans with serious mental illness. *Psychiatric Rehabilitation Journal*, 42(3), 229-237. https://doi-org./10.1037/prj0000358
- Verville, L., Cote, P., Grondin, D., Mior, S., Moodley, K., Kay, R., & Taylor-Vaisey, A. (2021). Using technology-based educational interventions to improve knowledge about clinical practice guidelines: A systematic review of the literature. Journal of chiropractic education (Allen Press Publishing Services Inc.), 35(1), 149-157. <a href="https://doi-org./10.7899/JCE-19-17">https://doi-org./10.7899/JCE-19-17</a>
- Watkins, S. (2020). Effective decision-making: applying the theories to nursing practice.

  \*British Journal of Nursing, 29(2), 98-101. <a href="https://doi-org./10.12968/bjon.2020.29.2.98">https://doi-org./10.12968/bjon.2020.29.2.98</a>
- William H. D. (2016) Incorporating Peplau's theory of interpersonal relations to promote holistic communication between older adults and nursing student.

  <a href="https://stikba.ac.id/medias/journal/0898010115577975.pdf">https://stikba.ac.id/medias/journal/0898010115577975.pdf</a>
- World Health Organization (WHO, 2019). Mental disorders. https://www.who.int/news-room/fact-sheets/detail/mental-disorders
- Yeter, D., Hulya, O., & Ayhan, A. (2015) Implementation of Watson's Theory of Human Caring: A Case Study.

  <a href="https://www.internationaljournalofcaringsciences.org/docs/4-Lash%20-%20Original.pdf">https://www.internationaljournalofcaringsciences.org/docs/4-Lash%20-%20Original.pdf</a>
- Younas, A., & Quennell, S. (2019). Usefulness of nursing theory-guided practice: an integrative review. *Scandinavian Journal of Caring Sciences*, *33*(3), 540-555. https://doi-org./10.1111/scs.12670

- Yuan Zhang, Elie A. A., Schunemann, H. J. (2018) Using systematic reviews in guideline development: the GRADE approach. <a href="https://pubmed.ncbi.nlm.nih.gov/30006970/">https://pubmed.ncbi.nlm.nih.gov/30006970/</a>
- Yuichiro Abe, & de Kernier, N. (2013). Sleep disturbances from the viewpoint of suicidality: Implications for future psychosocial interventions for youngsters.

  \*International Medical Journal, 20(5), 544-551.
- Zhang, X., Zhao, C., Niu. Z., Xu, S., & Wang, D. (2021). Job insecurity and safety behavior: The mediating role of insomnia and work engagement *International Journal of Environmental Research and Public Health*, 18(2). https://doi.org/10.3390/ijerph18020581

# Appendix: Insomnia Assessment Guideline for Bipolar Disorder (IAGBD)

Name:	
DOB:	
Date:	
Diagnosis:	-
Clinician's Name:	

**Instruction:** IAGBD was developed for clinicians, providers, and physicians' use. Bipolar patients cannot use this tool because it was not designed for patients' use. The provider should provide an environment that is conducive to conducting this assessment that is free of bias.

The scale below is recommended as a guide for practitioners to conduct an assessment for insomnia in patients with bipolar disease to assist in making quality decisions for patient care.

**Therapy guide**: Clinicians should use their skills to determine the appropriate treatment following a review of reported frequency of these signs and symptoms associated with insomnia in patients with bipolar disease.

**Red Flag:** When a patient answers YES to questions 1, 2, 3, or 4 and/or expresses suicidal ideation, feeling threatened by harm or feeling unsafe, follow the organization's policy/protocol to address this immediately then continue with the following questions to assess insomnia.

Questions	NO	YES	YES	YES
		RARELY	SOMETIMES	OFTEN/ALWAYS
Any thoughts of harming yourself or others	0	1	2	3
Any hallucinations (hearing voices or hearing things)	0	1	2	3
3. Do you feel unsafe where you are?	0	1	2	3
Does anyone threaten to harm you	0	1	2	3

Use the following questions to gain information about the patient's sleep in the past week including days and nights and record answer.

Questions	NO	YES RARELY	YES SOMETIMES	YES OFTEN/ALWAYS
Do you have any anxiety or depression going on?	0	1	2	3
Do you feel you have a sleeping problem?	0	1	2	3
3. Do you drink coffee?	0	1	2	3
Do you have any anxiety or worries about what might happen during sleep?	0	1	2	3
Do you have general nervousness and stress?	0	1	2	3
Does poor sleeping cause you to feel stress?	0	1	2	3
7. Does stress cause poor sleeping?	0	1	2	3
Do you have any racing thoughts or mood swings?	0	1	2	3
Do you take medication to help you sleep?	0	1	2	3
10. Is your appetite poor?	0	1	2	3
11. Do you have difficulty thinking clearly and making decisions?	0	1	2	3
12. Do you experience tiredness or fatigue?	0	1	2	3
13. Do you nap when you did not want to?	0	1	2	3

14. Do you experience agitation, irritability, or paranoia behaviors?	0	1	2	3
15. Do you have relationship problems?	0	1	2	3
16. Do have difficulty to handle personal problems?	0	1	2	3
17. Are you unsure about dealing with day-to-day problems?	0	1	2	3
18. Do you experience sensitivity to light, sound, or noise?	0	1	2	3
19. Do you hate people?	0	1	2	3
20. Do you experience irritation with people even when they were polite?	0	1	2	3
21. Do you find it difficult to control your emotions?	0	1	2	3
22. Do you have difficulty controlling your speech?	0	1	2	3
23. Do you have a lack of energy because of poor sleep?	0	1	2	3
24. Does poor sleep interfere with your relationships?	0	1	2	3
25. Are you dissatisfied with your sex life?	0	1	2	3
26. Do you feel worried when it is time to sleep?	0	1	2	3

27. Do you have terrible dreams or nightmares?	0	1	2	3
28. Do you limit your social interactions with others?	0	1	2	3
29. Do you have any illness that interferes with your sleep?	0	1	2	3
30. Do you have pain or headaches?	0	1	2	3
Score per column	0	1-30	2-60	3-90

# **Scoring**

Enter total score for NO	
Enter total score for YES - RARELY	
Enter total score for YES -SOMETIMES	
Enter total score for YES – OFTEN/ALWAYS	
Total Score of all four columns is	

### **Recommendations:**

- 1. This assessment should be repeated at each visit or upon patient complaint of sleep issues.
- 2. Review the risk factors and symptoms of insomnia that the patient has identified using the assessment findings to guide the clinical decisions for the quality care for the patient.
- 3. A score between 0 to 30 suggests that patient experiences risk factors and symptoms of insomnia rarely. This assessment should be repeated at next visit or upon patient complaint of sleep issues.
- 4. A score between 31-60 requires further evaluation for risk factors and symptoms associated with insomnia.
- 5. A score greater than 60 and above may require a higher level of care or sleep study.