OVERVIEW OF DEPRESSION DIAGNOSIS AND RELATED THERAPY

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Abstract

Background: Depression is a common and serious mental health condition characterized by persistent feelings of sadness, hopelessness, and a loss of interest or pleasure in activities. It can affect how a person thinks, feels, and handles daily activities and may lead to emotional and physical problems. Managing depression through a multidisciplinary approach necessitates the cooperation of diverse healthcare professionals specializing in fields such as Psychiatry/Psychology, General Medicine, Clinical Social Work, and Nursing to deliver optimal patient care. There is a multiple scale for diagnosing depression and assessing its severity. Treatment of depression usually involves a combination of clinical assessment, therapy, and sometimes medication.

Aim: A comprehensive review of depression and how to deal with it

Methods: Comprehensive research of depression diagnosis and therapy and related nursing departments. The PUBMED and Google Scholar search engines were the main databases used for the search process, with articles collected from 2003 to 2022.

Conclusion: depression stands as a widespread and debilitating mental health condition with a significant global impact, affecting millions and posing substantial societal costs. Tailored interventions, influenced by factors like gender and age, are crucial for effective management. The need for comprehensive mental health evaluations, particularly in conditions like early-onset type 2 diabetes, highlights the importance of holistic care. Embracing a multidisciplinary approach enhances

patient outcomes, fostering collaboration among various professionals and optimizing treatment efficacy, especially in elderly populations. Continued efforts in advancing diagnostics, treatments, and preventive measures are essential to alleviate the profound burden of depression worldwide.

Keywords: Depression, signs and symptoms, diagnoses, behavioral therapy, role, and responsibilities.

INTRODUCTION:

Depression, a widely prevalent and highly incapacitating mental disorder that has a profound impact on individuals on a global scale, is estimated to affect approximately 350 million people worldwide, positioning it as one of the foremost causes of disability within all adult populations. Depression could have a recurrent nature and frequent comorbidity with other mental health conditions and is also closely linked to substantial costs. The prevalence of depression exhibits variability across different regions and income brackets, with a mean global prevalence rate of 3.2% among the general population. Various factors such as gender, age, and societal dynamics play pivotal roles in influencing the rates of depression, underscoring the imperative necessity for tailored interventions. The repercussions of depression extend far beyond the individual sufferer, encompassing impacts on mental and physical well-being, social welfare, and economic stability. Ongoing endeavors are focused on advancing diagnostic methodologies, treatment modalities, and preventive measures to effectively tackle the considerable burden posed by depression on a worldwide scale [1]. Also, it has been observed that there is a growing prevalence of depressive symptoms among individuals diagnosed with early-onset type 2 diabetes. This highlights the critical need for healthcare practitioners to conduct comprehensive mental health evaluations as part of the overall clinical care plan to optimize treatment outcomes and ensure holistic patient well-being management. In addition, a multidisciplinary approach is a comprehensive and interdisciplinary strategy for managing depression, providing notable advantages. This strategy necessitates the cooperation and coordination of a diverse range of professionals to effectively cater to patients' intricate needs. The integration of this approach enriches the quality of patient care through the amalgamation of knowledge and skills from various domains, including mental health experts, primary care practitioners, and individuals involved in patient care decision-making processes. Research findings indicate that care models emphasizing collaboration, with the involvement of a multidisciplinary team, result in superior clinical outcomes, enhanced quality of life for patients, and cost-effectiveness in managing depression. Moreover, it has been demonstrated that collaborative multi-professional interventions between Psychiatrists, Psychologists, Family Doctors, Clinical Social Workers, and Nurses conducted in outpatient settings exhibit greater efficacy in the treatment of depression among elderly individuals when compared to standard care approaches. This underscores the significance of adopting a multidisciplinary approach in addressing mental health concerns across diverse age demographics [2].

SIGN AND SYMPTOMS OF DEPRESSION:

Depression is not a one-size-fits-all condition; it encompasses various types and subtypes, each with unique characteristics and presentations [Table1] [3]. Common signs and symptoms of depression, often seen in individuals with this mental health condition, consist of a range of emotional and behavioral expressions. These can involve deep feelings of sorrow, emptiness, or increased irritability, as well as noticeable changes in mood, a significant drop in energy levels, disturbances in sleep patterns, and a clear decrease in interest or pleasure from participating in different activities. Furthermore, people dealing with depression might also show other signs like persistent fatigue, a constant feeling of hopelessness, increased irritability, involvement in substance abuse, engaging in risky activities, and showing inadequate impulse regulation, especially within the male. In Type-1 Diabetes Mellitus patients, depression symptoms may appear as long-lasting feelings of sadness, perceptions of worthlessness, and gloomy thoughts about the future. The core symptoms of depression typically revolve around feelings of extreme fatigue or a deep sense of low energy,

ongoing feelings of sadness or hopelessness, and a clear lack of interest or enjoyment in participating in one's environment or activities. It is crucial to understand that the severity of these symptoms may differ greatly from person to person, as some individuals may only have mild signs of depression. Conversely, others might face moderate to severe symptoms that notably impact their daily life and overall well-being. [4]. Furthermore, even with a variety of cultural norms and practices, it is clear that signs of depressive symptoms like self-harm, suicide attempts, and psychiatric admissions remain consistent across different cultural settings. This suggests a robust link between dissociation, trauma, and depressive symptoms, regardless of the cultural environment individuals are in. These compelling insights underscore the critical necessity of considering the nuanced nuances of cultural diversity when it comes to interpreting and managing depressive symptoms on a global scale.

Type of Depression	Characteristic
Major Depression Disorder (MDD) / unipolar depression	Persistent sadness, hopelessness, and loss of interest or pleasure in activities.
Persistent Depression Disorder (PDD) / Dysthymia	long-term depressive symptoms lasting for at least two years.
Bipolar disorder	Involves periods of depression alternating with periods of mania or hypomania.
Seasonal Affective Disorder (SAD):	Recurrent depressive episodes occur seasonally, typically in the fall or winter when there is less natural sunlight. Symptoms may include fatigue, oversleeping, weight gain, and carbohydrate cravings.
Postpartum Depression (PPD):	Occurs after childbirth, typically within the first few weeks to months. Symptoms may include mood swings, crying spells, irritability, and anxiety.
Psychotic Depression:	Depressive symptoms accompanied by psychosis, such as hallucinations or delusions
Premenstrual Dysphoric Disorder (PMDD):	Mood disturbances, irritability, and other symptoms occur in the luteal phase of the menstrual cycle.
Atypical Depression:	Mood reactivity (improved mood in response to positive events), increased appetite or weight gain, excessive sleepiness, and sensitivity to rejection.
Situational Depression / Reactive depression:	it occurs in response to specific life events or stressors, such as losing a relative, relationship issues, financial problems, or job loss.
Treatment-Resistant Depression:	When it does not respond adequately to standard treatments, such as medication or psychotherapy.
Endogenous Depression:	Arise from internal factors, such as biological or genetic predispositions.
Neurotic Depression:	Associated with neurotic personality traits, such as excessive worry, anxiety, and emotional instability.
Anankastic Depression:	Accompanied by obsessive-compulsive traits, such as intrusive thoughts, compulsive behaviors, and perfectionism.
Agitated Depression:	Characterized by restlessness, irritability, and psychomotor agitation, in addition to typical depressive symptoms
Morning Depression:	Pronounced in the morning, possibly due to disruptions in circadian rhythms or sleep patterns.
Masked Depression	When depressive symptoms are not readily apparent or are masked, such as physical complaints or substance abuse.
Organic Depression	When underlying organic causes such as neurological disorders, endocrine disorders, or brain injury.
Depression in Somatic Diseases	When combined with medical conditions, such as chronic pain, cancer, diabetes, or cardiovascular disease, either as a direct consequence of the illness.

Table (1): Type of Depression

HOW TO DIAGNOSE DEPRESSION?

Approaching depression involves a comprehensive, multi-faceted approach, starting with medical evaluation to rule out underlying medical conditions that may be contributing to depression, followed by diagnosis and assessing depression using a validated scale including but not limited to Patient Health Questionnaire-9 (PHQ-9), Manual of Mental Disorders (DSM-5), Mental Health Screening Tool for Depressive Disorders (MHS:D), Depression Inventory Development (DID) project scale, Beck Depression Scale (BDI), Hamilton Rating Scale for Depression (HAM-D), and Montgomery-Asberg Depression Rating Scale (MARDS), [5-7]. Depression diagnosis commonly relies on specific criteria according to the used scale. These symptoms play a crucial role in distinguishing between various levels of depression severity, such as moderate and severe depression, thereby assisting in the decision-making process related to treatment modalities. However, it is worth noting that these methods may exhibit a deficiency in objectivity and a lack of physiological underpinnings. For that

matter, Depression diagnosis encompasses a range of methodologies that can be used, such as speech analysis, EEG signals, and the integration of multimodal approaches. Within this spectrum, the analysis of speech holds a pivotal position in the identification of depression, as it involves the extraction of paralinguistic characteristics from speech signals that serve as indicators of the emotional condition of the speaker. On the other hand, EEG signals offer an objective foundation for diagnosing depression, showcasing a novel approach that combines a hybrid neural network model incorporating 1D-CNN and GRU components, complemented by an attention mechanism aimed at enhancing the precision of the diagnostic process. Furthermore, integrating advanced deep learning methodologies like CNN can be instrumental in detecting depressive states from multi-channel EEG time-series data, allowing for preserving spatial, spectral, and temporal patterns to augment the overall efficacy of classification endeavors. [8]. Moreover, an innovative architectural design comprising multiple parallel graph attention networks has been introduced specifically tailored for few-shot learning using tabular data. This novel approach has demonstrated remarkable success in the domain of depression classification, exhibiting superior levels of both sensitivity and specificity in accurately identifying and categorizing individuals suffering from depression.[9,10].

BEHAVIORAL THERAPY OF DEPRESSION

Behavior therapy, a type of psychotherapy that falls under the umbrella of psychological interventions, is centered on the application of learning theories to bring about changes in maladaptive behaviors and alleviate symptoms associated with depression. A body of research has indicated that the efficacy of behavior therapy in addressing these issues is on par with that of Cognitive Behavioral Therapy (CBT) and pharmacological interventions commonly used in the management of depressive and anxious conditions. It is worth noting that the mechanisms underlying Cognitive Behavioral Therapy (CBT), as delineated by Beck and his colleagues in a seminal work published in 1979, have not received as much scholarly scrutiny as the outcomes associated with implementing this therapeutic modality. [11]. Under conditions of heightened stress, certain individuals may exhibit a propensity towards a pessimistic outlook and a perceived difficulty in problem-solving. CBT emerges as a promising intervention to cultivate a more nuanced and balanced cognitive framework that enhances one's capacity to navigate and manage stressors effectively. The theoretical underpinnings of CBT can be delineated back to the assimilation of fundamental principles of learning theory, encompassing classical and operant conditioning paradigms, into the realm of addressing clinical dilemmas and psychological distress. The inception of the "first-wave" behavioral therapy materialized during the 1950s, marking a pivotal juncture in the evolution of therapeutic approaches geared towards behavioral modification and cognitive restructuring [12]. In addition, various forms of Cognitive Behavioral Therapy (CBT) can encompass a range of therapeutic approaches (Figure 1) such as Interpersonal Psychotherapy (IPT), Cognitive Psychotherapy (CPT), Dialectical Behavior Therapy (DBT), Rational Emotive Behavior Therapy (REBT), and Cognitive-Behavioral Therapy (CBT) itself. These modalities are efficacious in treating various mental health conditions [13].

Figure (1): Cognitive Behavioral Therapy Type
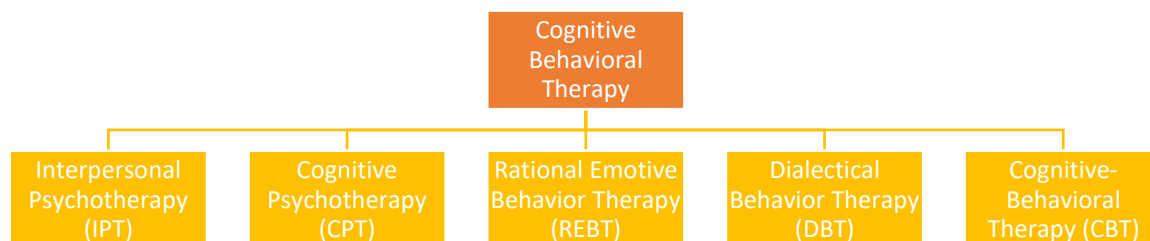
Interpersonal Psychotherapy (IPT):

Interpersonal Psychotherapy (IPT) is a meticulously structured and temporally constrained therapeutic approach that focuses on the intricate interplay between emotional states and interpersonal connections within an individual's life. The primary objective of IPT is to facilitate individuals in effectively maneuvering through challenging life circumstances and pivotal crises by capitalizing on existing social networks and bolstering their capacity to regulate and express emotions within the realm of social exchanges [14]. Furthermore, it is worth noting that Interpersonal Psychotherapy (IPT) has undergone modifications to cater to the needs of individuals who have posttraumatic stress disorder (PTSD), exhibiting encouraging outcomes that can be likened to those achieved through exposure-based interventions. In a holistic perspective, the emphasis placed by IPT on nurturing interpersonal relationships and facilitating problem-solving strategies renders it a highly beneficial therapeutic modality capable of addressing a diverse array of mental health disorders, thereby contributing significantly to its well-documented effectiveness and successful application spanning forty years. Besides, this comprehensive examination of the existing body of academic works presents compelling findings that support the assertion that Interpersonal Psychotherapy (IPT) proves to be a highly productive and beneficial intervention strategy aimed at mitigating and addressing psychological distress experienced by women throughout their pregnancy as well as in the postpartum phase [15]. Furthermore, in the comparison between IPT and cognitive-behavioral therapy (CBT) for individuals with eating disorders, it was found that IPT demonstrated less favorable results in terms of outcomes for patients diagnosed with bulimia nervosa in comparison to CBT. However, it is worth noting that IPT did prove to be effective in treating individuals with binge eating disorder as well as those diagnosed with anorexia nervosa. Also, Cultural variances play a vital role in shaping the impact of interpersonal psychotherapy (IPT) on individuals. Adapting therapeutic approaches, such as Dialectic Behavior Therapy (DBT), is crucial to aligning with diverse socio-cultural settings to improve client outcomes.

Research indicates that the utilization of interpersonal emotion regulation (ER) techniques that are in harmony with specific cultural inclinations, such as employing social modeling and adopting different perspectives, has the potential to bring about significant advantages for East Asian populations by assisting in the reduction of negative emotional responses in challenging and stressful circumstances. [16].

Cognitive Psychotherapy (CPT) :
Cognitive Psychotherapy (CPT) is a fundamental component in the therapeutic interventions for individuals suffering from depression, as it is designed to target and challenge erroneous self-perceptions that underlie and perpetuate negative emotional states and maladaptive behaviors. More specifically, the Cognitive Behavioral Analysis System of Psychotherapy (CBASP) represents a specialized treatment modality tailored for individuals with chronic depressive symptoms, drawing from a multidimensional framework that integrates principles from behavioral, cognitive-emotional, interpersonal, and psychodynamic orientations to effectively address the impact of early adverse relational experiences on one's psychological well-being. Furthermore, the application of Mindfulness-based Cognitive Therapy (MBCT) is recognized as a valuable strategy for preventing relapse in depression, as it combines structured mindfulness practices with elements of cognitive-social therapy to enhance individuals' self-awareness, emotional regulation skills, and adaptive coping mechanisms, thereby reducing the susceptibility to recurrent depressive episodes. [17]. Also, it is worth noting that a research investigation brought attention to the efficacy of placing greater emphasis on addressing maladaptive beliefs within the context of cognitive therapy for individuals diagnosed with major depressive disorder alongside co-occurring personality disorders. This study demonstrated notable enhancements in both depressive symptoms and symptoms of personality disorders through the implementation of early interventions specifically targeting cognitive distortions related to beliefs within the cognitive therapy framework.[18].

Rational Emotive Behavior Therapy (REBT):
Rational Emotive Behavior Therapy (REBT) distinguishes itself among other forms of psychotherapy due to its unique approach towards the treatment of depression, placing a significant emphasis on the pivotal role played by irrational beliefs in triggering emotional disturbances. Within the framework of REBT, the ABC model is employed, wherein activating events undergo a process of interpretation that can either be rational or irrational, consequently leading to the manifestation of emotions and behaviors that are either functional or dysfunctional. Specifically, in the context of depression, it is observed that negative occurrences tend to be frequently subjected to irrational appraisal, subsequently giving rise to dysfunctional emotional responses such as feelings of depression. As a therapeutic modality, REBT places a primary focus on the identification, challenging, and subsequent transformation of these irrational beliefs with the ultimate goal of facilitating emotional distress. This distinctive feature distinguishes it from other therapeutic approaches that may not explicitly address these cognitive distortions. Moreover, the integrative nature of REBT, which combines elements of cognitive restructuring, expressive techniques, and behavioral strategies, contributes to its efficacy in dealing with a wide array of mental health concerns, encompassing but not limited to depression and issues related to addiction [19].

Dialectical Behavior Therapy (DBT):
Dialectical Behavior Therapy (DBT) is a therapeutic approach that holds a noteworthy and pivotal stance in the realm of ameliorating depression, as it strategically hones in on a multitude of facets of psychological wellness. Numerous studies and scholarly investigations have underscored the efficacy and potency of DBT in assuaging depressive manifestations among individuals grappling with treatment-resistant depression (TRD), chiefly through its deliberate emphasis on psychological rigidity and the intricate dynamics of interpersonal relationships. [20]. Furthermore, recent research findings have provided evidence indicating that DBT possesses the capability to mitigate symptoms of depression that are commonly linked to various psychological conditions such as bipolar disorder as well as borderline personality disorder (BPD) [21]. On the contrary, Radically Open Dialectical Behavior Therapy (RO DBT) is a therapeutic approach that is specifically designed to target individuals with treatment-resistant depression through a focus on issues related to psychological rigidity and interpersonal interactions, which have been identified as factors linked to a reduction in depressive symptoms. The core principle of RO DBT lies in its emphasis on improving social signaling and the quality of social connections to decrease the prevalence of coping mechanisms characterized by excessive control, ultimately resulting in notable enhancements in depression severity ratings and, in certain instances, complete cessation of symptoms. The various strategies employed within RO DBT are intended to alleviate depressive symptoms by directly confronting and addressing maladaptive coping strategies while simultaneously fostering the development of healthier and more fulfilling interpersonal bonds.[22]. Moreover, Mindfulness and acceptance-based practices are of utmost importance in the framework of dialectical behavior therapy (DBT) when addressing depression, a crucial aspect that cannot be overlooked. Within DBT, mindfulness elements are deliberately incorporated to enhance self-reported mindfulness levels, with a specific emphasis on fostering non-judgmental awareness among individuals, ultimately significantly enhancing attentional capacities and overall clinical outcomes.
Recent research studies have unequivocally demonstrated the profound impact of integrating mindfulness teachings into the DBT framework, showing a notable positive influence on depressive symptoms, particularly those commonly observed in individuals diagnosed with borderline personality disorder. Moreover, it has been revealed that DBT interventions effectively elevate mindfulness levels among female students grappling with depression, notably in key areas such as observation skills, alertness, descriptive abilities, non-reactivity tendencies, and cultivating a non-judgmental mindset. The comprehensive findings underscore the pivotal role played by mindfulness and acceptance-based practices within the DBT approach, not solely in bolstering mindfulness per se but also in significantly alleviating depressive symptoms and fostering a more robust therapeutic alliance between patients and their respective therapists. [23].

Cognitive-behavioral therapy (CBT) :

Cognitive Behavioral Therapy (CBT), a widely recognized therapeutic approach, has been validated through empirical research to show considerable efficacy in the treatment of depression when compared with alternative therapeutic modalities. Various studies have suggested that the traditional method of face-to-face CBT surpasses its digital counterpart in terms of clinical effectiveness by notably ameliorating depressive symptoms and enhancing treatment adherence among individuals undergoing therapy. Furthermore, an innovative self-regulation model of CBT has been meticulously crafted, specifically targeting challenging cases that have shown resistance to conventional CBT interventions, yielding favorable therapeutic outcomes among clients who previously experienced limited benefits from standard CBT protocols. In addition to these findings, a comparative analysis conducted to evaluate the efficacy of blended CBT against face-to-face CBT in managing major depressive disorder revealed strikingly similar clinical effectiveness between the two methodologies, underscoring the practicality and promise of blended CBT in generating treatment outcomes that are on par with those achieved through the utilization of traditional CBT techniques. It is also worth noting that both complex and ultra-complex iterations of CBT have exhibited significant efficacy in mitigating symptoms of depression, with the latter being particularly advantageous for individuals grappling with concurrent mental health conditions [24]. It encompasses a variety of methodologies that are customized to cater to specific facets of the disorder. One fundamental strategy entails utilizing cognitive restructuring and exposure/response prevention techniques to mitigate the overestimation of risk, the underestimation of coping capabilities, and the tendency to avoid feared situations. Furthermore, an elaborate model of self-regulation in the context of depression has been formulated, with a particular emphasis on addressing self-identity disturbances, diminished motivation, persistent rumination, and passive life objectives, all to enhance self-regulation competencies and reshape self-identity, especially in cases that are challenging to treat [25].

NURSES RESPONSIBILITIES TOWARD PATIENT WITH DEPRESSION:

Nurses have a pivotal and indispensable role in the management of depression through various key tasks such as identification of symptoms, provision of care, and encouragement of adherence to treatment regimens. Their responsibilities encompass screening patients to detect signs of depression, evaluating the risk of suicidal behavior, delivering psychoeducational support, supervising adherence to medication plans, and implementing behavioral activation strategies. Moreover, nurses are required to possess a deep understanding of the manifestations and predisposing factors of depression, particularly within distinct demographic groups like postpartum females and individuals with diabetes. It is through their multifaceted interventions, including the management of patient care, monitoring of medication usage, and provision of educational resources on depression, that nurses can exert a substantial influence on the efficacy of antidepressant therapy and ultimately enhance patient outcomes. An imperative aspect of preparing nurses for this critical role in mental health care involves comprehensive training programs that equip them with the necessary competencies to effectively assist individuals grappling with depression, thus contributing to an improvement in their overall quality of life [26]. Besides, The nursing interventions provided by Knowledge, Attitude, and Practice (KAP) professionals have been shown to have a substantial and noteworthy impact on the improvement of mood and enhancement of quality of life in individuals diagnosed with major depression. This improvement is achieved through a multifaceted approach encompassing cognitive interventions to reshape negative thought patterns. These belief-forming interventions challenge maladaptive beliefs and behavioral interventions that promote healthy coping mechanisms and adaptive functioning in daily life. These interventions collectively work together to address the complex interplay of psychological, emotional, and behavioral factors that contribute to the experience of major depression in patients[27].

WHEN TO TRANSFER A PATIENT WITH DEPRESSION TO PSYCHIATRIST?

Patients suffering from depression ought to be referred to a qualified psychiatrist upon the occurrence of particular circumstances, including but not limited to instances of resistance to standard treatment

protocols or the emergence of risks that necessitate specialized intervention. The utilization of psychoanalytic psychotherapy, particularly when incorporating transference work, has demonstrated notable efficacy in ameliorating depressive symptoms among adolescent individuals diagnosed with Major Depressive Disorder.[28]. Furthermore, it has been observed that short-term psychoanalytic psychotherapy exhibits efficacy in mitigating sleep disturbances among adolescents suffering from depression. This phenomenon remains consistent irrespective of whether transference work is integrated into the therapeutic approach.[29]. In addition, Shared decision-making (SDM), which involves active involvement and collaboration between patients and psychiatrists in the treatment decision process, has been shown to impact patient outcomes positively. When patients are empowered to participate in the decision-making process regarding their treatment, it can improve compliance with treatment plans, leading to better overall health and well-being. Additionally, research indicates that SDM can contribute to a reduction in hospitalization rates among psychiatric patients, as patients are more likely to adhere to their treatment plans when actively involved in the decision-making process. Furthermore, fostering a therapeutic alliance through shared decision-making has enhanced the quality of care provided, as patients feel more supported and engaged in their treatment journey.[30].

Conclusion:

Depression stands as a widespread and debilitating mental health condition with a significant global impact, affecting millions and posing substantial societal costs. Tailored interventions, influenced by factors like gender and age, are crucial for effective management. The need for comprehensive mental health evaluations, particularly in conditions like early-onset type 2 diabetes, highlights the importance of holistic care. Embracing a multidisciplinary approach enhances patient outcomes, fostering collaboration among various professionals and optimizing treatment efficacy, especially in elderly populations. Continued efforts in advancing diagnostics, treatments, and preventive measures are essential to alleviate the profound burden of depression worldwide.

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